



## PRELIMINARY ECOLOGICAL APPRAISAL REPORT

Land adj. Abergarwed Farm, Resolven, Neath

**June 2024**

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| Sent to Client | Iestyn Evans   | Director I&G Ecological Consulting Ltd | 03/06/2024 |

| Version Number | Date Issued |
|----------------|-------------|
| 1.0            | 03/06/2024  |

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## Summary

I & G Ecological Consulting Ltd were commissioned to undertake a preliminary ecological appraisal of an area of land approximately 0.42 hectare in size, in the village of Abergarwed, near Resolven, Neath Port Talbot (see Fig. 1).

The land within the site boundary consists predominantly of Previously Developed Land, with an area of hardstanding. Other than the existing hard standing, the majority of the site consists of gravel substrate, on which typical species of “brownfield” plants are growing. Boundary features include old stone walls and wire fencing. The site also includes a section of access track which leads to the site from the B4242.

This ecology report is in support of a planning application for a commercial shed to house scaffolding and associated equipment for AWS Scaffolding Ltd.

A desk study was undertaken in June 2024, with the purpose of determining any existing ecological information pertaining to the proposed management site, as well as surrounding habitats. A Phase 1 Habitat Survey was undertaken in June 2024, with the aim of identifying the habitats present on site and relating them to any relevant legislation.

This report presents the findings of both a desk study and a site appraisal undertaken in June 2024. The report aims to identify any ecological constraints present in relation to the proposed development, such as the presence of protected species and habitats, whilst providing recommendations for further surveys and mitigation measures where required.

## 1. INTRODUCTION

### 1.1 Background

I & G Ecological Consulting Ltd were commissioned to undertake an updated preliminary ecological appraisal of an area of land, approximately 0.42 hectare in size, located on the outskirts of the village of Abergarwed, in the administrative county of Neath Port Talbot (hereafter referred to as the Site), in order to determine the ecological baseline of the site, as well as to identify any ecological constraints, necessary for informing the design of any current or subsequent planning application.

This report presents the findings of both a desk study and a site appraisal undertaken in June 2024. The report aims to identify any ecological constraints present in relation to any proposed development, such as the presence of protected species and habitats, whilst providing recommendations for further surveys and mitigation measures where required.

## 1.2 Site Details

The site is in the village of Abergarwed, near Resolven, Neath Port Talbot (see Fig. 1), located centrally at Ordinance Survey Grid Reference (OSGR) SN 53531175. The land within the site boundary consists predominantly of Previously Developed Land, with a central area of hardstanding, likely the base of a former building. Other than the existing hard standing, the majority of the site consists of gravel substrate, on which typical species of “brownfield” plants are growing. Boundary features include old stone walls and wire fencing. The site also includes a section of access track (vehicular and public footpath) which leads to the site directly from the B4242 north of the site.



Figure 1. Location of site Grid Ref: SN53531175

## 1.3 Proposed Development

The proposed development consists of a single commercial storage building with turning and parking areas. No proposed site plans have been provided at the time of survey; however, the development is detailed in other reports supporting the application. (e.g. Transport Statement/Agricultural Considerations report).

## **1.4 Relevant Planning Policy and Legislation**

**1.4.1** The Environment Wales Act (EWA) Section 6 (Welsh Government, 2016) places a duty on public authorities to 'seek to maintain and enhance biodiversity' and seek to 'promote the resilience of ecosystems'. The duty replaces the Section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty. Section 7 lists both Priority Species and Habitats of Principle Importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

**1.4.2** Furthermore, Edition 12 of Planning Policy Wales (PPW) (Welsh Government, 2023) establishes the land use planning policy for Wales, as set forth by the Welsh Government. It provides a structure for the effective formulation of Local Planning Authorities' development plans, supported by twenty-one Technical Advice Notes (TANs) organized around different topics. Specifically, TAN 5 - Nature Conservation and Planning gives guidance on how the land use planning system should support the safeguarding and enhancement of biodiversity and geological conservation.

PPW 12 aims to maintain and establish areas where:

- The role of landscapes, historic environments, habitats, biodiversity, and the unique characteristics of coastal, rural, or urban environments in contributing to natural and distinctive places are recognised, appreciated, protected, and improved.
- Further fragmentation of habitats is avoided wherever possible, and green networks, corridors, and habitat connections within developed areas are protected and improved.
- The features and characteristics of sites designated for their landscape or nature conservation significance are fully evaluated and safeguarded, while the network of sites is acknowledged as the foundation for improving the resilience of ecosystems.
- The opportunity to enhance the resilience of ecosystems is seized in all areas by addressing issues such as building on floodplains, diffuse pollution, soil compaction and sealing, ensuring the protection of peat resources, and improving coastal flood defence strategies in urban areas and coastal margins.

**1.4.3** Paragraph 3.36 of PPW outlines the utilization of the Sustainable Management of Natural Resources (SMNR) methodology by the planning system, with the following identified as its primary components:

- Improving the resilience of ecosystems and ecological networks
- Halting and reversing the loss of biodiversity

- Maintaining and enhancing green infrastructure based on seeking multiple ecosystem benefits. Strategic & Spatial Choices Planning Policy Wales | Edition 12 32
- Ensuring resilient locational choices for infrastructure and built development, taking into account water supplies, water quality and reducing, wherever possible, air and noise pollution and environmental risks, such as those posed by flood risk, coastal change, land contamination and instability;
- Taking actions to move towards a more circular economy in Wales; and
- Facilitating the move towards decarbonisation of the economy

## **2. METHODOLOGY**

### **2.1 Desk Study**

A desk study was conducted with the purpose of determining any existing ecological information pertaining to the proposed development site, as well as surrounding habitats. A biological data request was sent to Local Environmental Records Centre (LERC) Wales via Aderyn (available at: <https://aderyn.lercwales.org.uk/>) and returned on 13<sup>th</sup> June 2024 in order to obtain records of protected species within a 2km radius of the site, as well as designated sites for nature conservation.

### **2.2 Field Survey**

#### **2.2.1 Phase One Habitat Survey**

A Phase One Habitat Survey was conducted by a suitably qualified ecologist at 10:00 on 12th June 2024, using the methodology outlined in the Handbook for Phase 1 habitat survey (JNCC, 2010). Additionally, the habitats present on site were assessed for their potential to support protected species, with visual surveys used to search for physical sightings, or incidental records of such species. The surveyed site boundary is included in Figure 2 below.

Target incidental may relate to the following:

- Evidence of badger – setts, well-worn paths and runs, snagged hair, latrines, sites and foraging.
- Evidence of otter - spraint marking, slides, hovers or sites.
- Evidence of dormouse – nests or foraged hazel nuts with characteristic round gnawing holes.
- Evidence of birds – nests.
- Evidence of bats – bat droppings or urine staining adjacent to a Potential Roost Feature (PRF).
- Evidence of reptile – sloughs.
- Evidence of amphibians – spawn.



- Evidence of water vole – droppings, latrines, foraging signs and footprints.
- Suitable habitat for marsh fritillary butterfly – the presence of Devil's bit scabious (*Succisa pratensis*), the marsh fritillary's food plant.



Figure 2. Site Boundary (Red outline), Area surveyed (Light Blue) from Bing maps

Any pernicious weeds under Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (as amended) were also noted and mapped during the site survey. These species include Japanese Knotweed (*Fallopia japonica*) and Himalayan Balsam (*Impatiens glandulifera*).

### 2.2.2 Preliminary Ground Level Roost Assessment (PGLRA) of Trees

Any trees within the site were assessed for their potential to support roosting bats on the day of the survey, via the presence of any Potential Roost Features (PRF). Suitable PRFs vary by species, but in trees, may include dense Ivy, Woodpecker holes, loose bark, areas of hollow trunk, hazard beams, and other forms of cavity. Where it was not possible to fully assess the trees from the ground, using binoculars, the trees were noted for additional surveying or assigned a precautionary bat roosting potential score. Such features were assessed using the guidelines set out in Bat Surveys for Ecologists (Collins, J., 2016).

## 2.3 Limitations

A species may be perceived as absent within the surrounding area during the desk study due to lack of records returned, however this is not the case, as it may be a consequence of lack of surveying in the search buffer area.

This Preliminary Ecological Survey was carried out during optimal timings, and there were no access or other issues.

The findings presented within this report are valid for an 18-month period following the survey, in line with CIEEM (2019) guidance. Should the proposed development scope change in any way, then an updated Preliminary Ecological Appraisal will be required.

## 3. DESK STUDY

A number of protected and notable species records were returned within 1km of the centre of the proposed development site. All records will not be listed here, however the most significant, those which are considered to potentially be affected by the development of the site, will be briefly summarised. The full data are available upon request to those nominated on the request form, as some data may be classified as sensitive. The significant findings from the data search are summarised below.

### 3.1 Birds

The data search returned 197 entries of birds which are categorised as priority species within 1km of the site.

The closest record is for Kingfisher (*Alcedo atthis*) at 222m from site. Other entries include Barn Owl (*Tyto alba*), Spotted Flycatcher (*Muscicapa striata*), House Sparrow (*Passer domesticus*), Tree Sparrow (*Passer montanus*), Song Thrush (*Turdus philomelos*), Goshawk (*Accipiter gentilis*), and Hawfinch (*Coccothraustes coccothraustes*) .

### 3.2 Mammals

The data search returned records of mammals within 1km of the site, most significantly these included:-

The closest most recent (2018) is for Hedgehog (*Erinaceus europaeus*) at 336m from site.

Other recorded species (closest most recent record) include the following :

- Bats (*Pipistrelle* species, *Myotis* species, *Chiroptera* unknown, Noctule) closest record being 231m from the site (*Pipistrellus*).
- Otter (*Lutra lutra*), recorded at 1010m from the site.
- Badger (*Meles meles*), 683m from site.
- Weasel (*Mustela nivalis*), 1321m from site.

### 3.3 Invertebrates

The data search returned 42 records of invertebrates (the majority being for moths), the closest is for Knot Grass (*Acronicta rumicis*) at 321m, and a large number of records at 908m including for Green-brindled Crescent (*Allophyes oxyacanthae*), White Ermine (*Spilosoma lubricipeda*), and Small Square-spot (*Diarsia rubi*).

### 3.4 Plants

The data search returned very few entries of plants which are categorised as priority species (listed in Schedule 1 of the Wildlife and Countryside Act, 1981) within 1km of the site, comprising of: Bluebell (*Hyacinthoides non-scripta*), the closest being at 276m from the site.

### 3.5 Reptiles

The data search returned 1 record (historical) of reptiles which are categorised as priority species (listed in Schedule 5 of the Wildlife and Countryside Act, 1981, and / or Section 7 of Principal Importance under the Environment (Wales) Act 2016) within 1km of the site, being for Grass snake (*Natrix helvetica*) recorded at 900m from site.

### 3.6 Amphibians

The data search returned 9 entries (majority historical) of amphibians which are categorised as priority species (listed in Schedule 5 of the Wildlife and Countryside Act, 1981, and / or Section 7 of Principal Importance under the Environment (Wales) Act 2016) within 2km of the site, comprising of: Common Frog (*Rana temporaria*), Common Toad (*Bufo bufo*).

### 3.7 Invasive Non-native species

The data search returned 132 entries of INNS within 1km of the site. Species of note recorded include: Grey Squirrel (*Sciurus carolinensis*), Japanese Knotweed, Rhododendron (*Rhododendron ponticum*), Himalayan Honeysuckle (*Leycesteria Formosa*), Cherry Laurel (*Prunus laurocerasus*), Crocosmia (*Crocosmia Pottsii*) and Himalayan Balsam (*Impatiens glandulifera*).



### 3.8 Statutory Designated Sites

The desk study returned no records of statutory designated sites located within 1km of the site.

### 3.9 Non-statutory Designated Sites

Wildlife Site / SINC (Adopted):

NPT Ancient Semi-Natural Woodland (127m)

NPT Watercourses

St David's Graveyard (653m)

Neath Canal (75m)

Regionally Important Geo-Diversity Site:

MELIN COURT BROOK WATERFALLS AND IRON (MELIN COURT PART I) (641m)

One BEE LINES area south of the site.

Wildlife Trust Reserve:

Mellincwrt Falls (667m)

### 3.10 NRW PRIORITY AREAS

The site is within 1km of 4 Ancient semi-natural woodland sites, 6 restored woodland sites, 5 Plantation on Ancient Woodland sites and one ancient woodland site of unknown category. The closest are 2 ASNW sites approximately 500m to the west.

### 3.11 Waterbodies

The nearest waterbodies are immediately adjacent to the site; a stream with a steep sided bank forming the eastern boundary, which is a tributary of the River Neath lying approximately 130m to the east.

The restored open section of Neath Canal lies immediately north of the site, the line of the former canal runs through the site but has not been restored.

## 4. SITE APPRAISAL

The majority of the site is composed of a level and compacted gravel surface, with a central area of concrete (footprint). Vegetation is limited to peripheral areas, where gravel has been colonised by ephemeral and grassland species.

The habitats present within the survey area include bare ground, Ephemeral Short Perennial and boundary features including marginal scrub with mature trees. The Phase One Habitat

Map is provided in Appendix B, with accompanying photographs in Appendix C. Weather on the day of the survey was bright with cloud, with moderate rainfall for the days prior to the survey.

#### **4.1 J1.3 Ephemeral/short perennial (Previously Developed Land)**

- 4.1.1 Vegetation is mostly around the periphery of the site, with occasional areas beginning to be colonised by ephemeral/short perennial species. There is considerable species diversity, particularly around the entrance gate and within the first few meters of the site. Species typical of low nutrient soils can be seen including Smooth Sow Thistle, Buck's-horn plantain, Melilot sp. , White Clover and Trefoil species. Most abundant are Ox-eye daisy and Lesser Bird's-foot Trefoil.

Further within the site, there are patches of vegetation with similar species composition, with additional species including Canadian Fleabane, Willow Herbs species, Wild parsnip, Trailing Cinquefoil, Wild Strawberry and Ribwort Plantain.

The South West corner supports a small area of more established vegetation, which is transitioning to grassland.

The western boundary is formed of a stone wall to the roadside, below which is a stone covered bank. The bank is beginning to colonise with scrub species but low-nutrient species such as Wild parsnip, Wood Sage and Vetch species occur. Scrub species including European Gorse and Buddleia are regenerating after being cut/disturbed.

#### **4.2 Natural Boundary Features**

##### **4.2.1 J2.3.2 Hedges and Trees (species poor) - Tree lined riparian corridor**

A line of mature native trees forms part of the eastern boundary (at the northern end of the site). Species here include Birch, Alder, hazel, Willow, Sycamore, Rowan and Ash. The trees are situated at the top of a steep bank, outside of the site boundary. A watercourse runs at the bottom of the bank, and feeds directly into the River Neath south of the site. A light thicket of Bramble and Field Rose over post and wire fence forms the actual site boundary.

#### **4.3 Protected Species Assessments**

##### **4.3.1 Incidental Records**

Incidental species were recorded on the day of the survey: House Sparrow and Chaffinch noted using the peripheral scrub/trees in neighbouring garden. Pied Wagtail was observed

feeding on invertebrates near the site entrance. A number of Bumble Bee species were noted feeding on Bird's-foot Trefoil (Early Bumble Bee and Common Carder).

#### **4.3.2 Invasive Non-Native Species (INNS)**

As noted previously (section 3.5.1), there are a number of areas of Japanese Knotweed on and adjacent to site. There is also Buddleia throughout the site. Himalayan Balsam is present on the larger site, in the northern most end close to the canal. A single specimen of *Cotoneaster horizontalis* was noted within the stone bank on the western side of the site. See Appendix for full list.

#### **4.3.3 Preliminary Ground Level Roost Assessment**

There are a number of mature trees around the site boundaries, including a large Ash in the North West corner of the site. No potential bat roost features were found.

### **5. ECOLOGICAL ASSESSMENTS**

#### **5.1 Designated Sites**

##### **5.1.1 Statutory Designated Sites**

The desk study returned no records of statutory designated sites located within 1km of the site.

##### **5.1.2 Non-Statutory Designated Sites**

The site is adjacent to a watercourse (NPT Watercourses SINC) and the Neath Canal is immediately at the northern end of the site boundary.

Ancient semi-natural woodland can be found 127m from the northwestern boundary, on the far side of the B4242. The works required to fulfil the proposed design will be relatively localised, with adverse impacts considered unlikely. Appropriate recommendations in relation to cautionary guidance are provided in Section 6. Any change in design will require an updated consultation by a suitably qualified ecologist.

The Site is not within A Bee-lines Area, but a Wildlife Trust Reserve can be found 667m South East.

##### **5.1.3 A CEMP and INNS management plan** will help mitigate any likelihood of adverse impacts which the proposed development may bring on Protected and Priority Habitats, e.g. due to spread of INNS and pollution via watercourses. Other landscape scale impacts are considered unlikely due to the localised nature of the proposed development. Appropriate

recommendations in relation to cautionary guidance are provided in Section 6. Any change in design will require an updated consultation by a suitably qualified ecologist.

## 5.2 Habitats, Flora and Fauna

Guidelines have been provided to assess the importance of an ecological feature value within a geographical context, as recommended within the CIEEM Guidelines for Ecological Impact Assessment (2016) and the CIEEM Guidelines for Ecological Report Writing (Dec. 2015). Please refer to Table 3 and 4 below.

Table 1. Ecological Value Assessments

| Importance               | Examples of features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| International & European | European designated or proposed sites such as Ramsar Sites, Special Protection Areas, Special Areas of Conservation, World Heritage sites or Biosphere Reserves; or otherwise meeting criteria for European or International designation. Sites supporting populations of European important species. Species listed within the Annex's of The Conservation of Habitats & Species Regulations 2010                                                                                                                                                                                    |
| National                 | Nationally designated sites such as Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), areas of key habitats and species within the UK Biodiversity Action Plan. Sites supporting viable breeding populations of Red Data Book (RDB) species (excluding scarce species), or supplying critical elements of their habitat requirements. Species listed within the schedules of the Wildlife & Countryside Act 1981.                                                                                                                                        |
| Regional                 | Sites containing viable areas of threatened habitats and species listed in a regional Biodiversity Action Plan, sites exceeding Site of Importance for Nature Conservation (SINC) criteria. Sites supporting viable populations of Nationally Scarce species or those included in the Regional Biodiversity Action Plan on account of their rarity, or supplying critical elements of their habitat requirements.                                                                                                                                                                     |
| High Local               | Sites meeting the criteria for a county, vice county or metropolitan area designation (such as SINC), which may include amenity and educational criteria in urban areas. Ancient semi-natural woodland. Designated Local Nature Reserves. Sites containing viable areas of any key habitat type or species identified in the Local Biodiversity Action Plan (LBAP). Sites supporting viable breeding populations of species known to be county/metropolitan rarities e.g., featuring in county 'red data book' or LBAP, or supplying critical elements of their habitat requirements. |
| Moderate Local           | Undesignated sites or features considered appreciably to enrich the habitat resource within the context of the Borough or District, or included in the Borough or District LBAP. Amenity and educational functions will be recognised in urban areas. Sites with viable breeding populations of species listed as rare in the District or Borough LBAP or supplying critical elements of their habitat requirements.                                                                                                                                                                  |
| Low Local                | Undesignated sites or features considered appreciably enriching the habitat resource within the context of the Parish or neighbourhood.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Negligible               | Low-grade and widespread habitats.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

Table 1. Impact level Criteria

|            |                                                                                                                                                             |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Severe     | Permanent impacts                                                                                                                                           |
| Major      | Loss of feature and/or quality and integrity of feature; severe damage to key characteristics, features or elements.                                        |
| Moderate   | Loss of feature, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.                            |
| Minor      | Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements |
| Negligible | Very minor loss or detrimental alteration to one or more characteristics, features or elements                                                              |
| Neutral    | No impacts                                                                                                                                                  |



### 5.2.1 Ephemeral/Short Perennial on Previously Developed Land (PDL)

While the vegetated areas of PDL will provide forage for a range of invertebrates, small mammals and birds, there is very little of this habitat remaining within the red-line boundary, however what remains is a cohesive part of the more significant areas which remain within the blue-line boundary. There appears to be very few areas, if any, supporting habitats similar to this (PDL) in the immediate neighbourhood (assessed using Google Earth images from 2006-2018). The habitat value has been assessed as: **Low Local**. Loss of this habitat, without mitigation, is considered to be **Minor**.

### 5.2.2 Tree-lined boundaries/riparian corridor

The mature trees around the site boundary were considered to have some ecological interest, with moderate species diversity. Such habitat will provide opportunities for a range of birds, mammals and invertebrate species. It's connectivity to other hedgerows/treelines, in particular to similar riparian habitat along the Neath River will be of value to local wildlife. As this habitat forms part of the riparian corridor, its value was assessed as: **Moderate Local**. **Loss or damage to the hedgerows and trees would be Major to Moderate, without mitigation, depending on the proportion lost.**

## 5.3 UK BAP Priority Habitats and Species

UK BAP priority habitats and species were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). As a result of devolution, conservation action is now focused at a country-level rather than a UK-level, and the UK BAP was succeeded by the UK Post-2010 Biodiversity Framework in July 2012. The UK list of priority species, however, remains an important reference source and has been used to help draw up statutory lists of priority species and habitats in the four countries of the UK.

The field survey identified the on-site habitats as having the potential to provide some limited opportunities for the following groups which are also listed under UK BAP: bats, birds, mammals, reptiles, amphibians and invertebrates.

## 5.4 Ecosystem Resilience

Area loss can cause populations of organisms to decline due to a decrease in habitat size. The habitats present on site are of low-grade and relatively widespread, therefore if the proposed development site is cleared without any mitigation for development, the impact on ecosystem resilience is expected to be **low**.

## 6. CONCLUSIONS AND RECOMMENDATIONS

The combination of desk and field surveys undertaken at the proposed development site identified that the body of the site has a negligible ecological value, but the vegetated areas are considered to have **Low-Moderate** local value. The boundary features including watercourses and associated trees are of **Moderate Local** ecological value.

The majority of the site is of limited ecological value, with the proposed development itself proposed to occupy a very small proportion of the site. This offers opportunities in relation to Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty).

Recommendations necessary for the informing of the design process are provided below, as well as recommendations for biodiversity enhancement in order to fulfil the Biodiversity and Resilience of the Ecosystems Duty (Section 6 Duty). Where a species has been omitted, they are not considered a constraint to the proposed development.

### 6.1 Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

- 6.1.1 The Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty) applicable to Local Authorities. This duty filters through to all those participating in the Planning process.
- 6.1.2 Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity.
- 6.1.3 It is therefore recommended, that in order to provide a net enhancement for the development, new native planting should be incorporated into the development using species of local provenance.
- 6.1.4 In order to provide a net benefit for biodiversity it is recommended appropriate trees in the surrounding area, as well as buildings in the proposed development, should incorporate artificial habitats such as bat bricks / boxes, bird boxes / bricks or Swift / swallow cups; the details of which should be agreed with the LA ecologist and be set out in an accompanying Biodiversity Enhancements Scheme. Further recommendations are given on a case-by-case basis below.

## **6.2 Statutory / Non-Statutory Sites / Ancient Woodland**

- 6.2.1** Appropriate guidelines, such as the Pollution Prevention Guidelines (PPG) (NetRegs, 2012) and the CIRIA C741 Environmental Good Practice on Site Guide (Charles and Edwards, 2015) should be adhered to at all times during the construction of the proposed development. A full **Construction Environmental Management plan** will detail necessary precautions and practices to safeguard Protected Habitats.

## **6.3 Ephemeral/Grassland Habitats**

- 6.3.1** The proposed design layout is unlikely to cause significant loss of vegetation. However, mitigation for loss of habitat may, in part, take the form of improved management for biodiversity on the remaining areas of land within ownership.
- 6.3.2** Retention of the area of more established vegetation in and around the site entrance is strongly recommended. Where possible, the species composition of any retained or created grassland post-development should be preserved, with any additional planting to be of the native species identified during this Preliminary Ecological Appraisal.
- 6.3.3** Much of the site appears to have had layers of gravel added over a number of years (Google Earth historic images). Therefore, it is reasonable to assume that if areas which are not subject to development were identified and a depth of gravel removed, there is likely to be a more rapid colonisation from existing seed banks below the top layer of gravel.
- 6.3.4** Future management of grassland areas should seek to allow some areas to grow where possible, subject only to an annual cut, forming a transitionary buffer between the site and adjacent habitat. Longer grass provides habitat for a greater diversity of plant species, which promotes biodiversity and supports a broader range of associated wildlife. This diversity contributes to the overall ecological balance of an area, enhancing ecosystem resilience and functioning.
- 6.3.5** Furthermore, subsequent management of the remaining on-site habitat should aim to achieve a good mosaic of sub-habitats, including areas of short turf, bare ground, long grass, and a limited amount of scrub.

## **6.4 Boundary Trees**

- 6.4.1** As the footprint of the proposed building is relatively small, and no other infrastructure is required, it is not necessary to remove or manage any trees on the site.

**6.4.2** It is recommended that a new native hedge (double staggered row) is planted along the base of the stone slope which forms the western boundary. The hedgerow should be sensitively managed for wildlife, and a number of trees left to mature. Details of species and management should be provided in any Biodiversity Enhancement Scheme submitted in support of this application.

## **6.5 Otter and other mammals (including Hedgehog)**

**6.5.1** Although the nearest record returned from the Desk study for Otter is at over 1km, the Canal and watercourse are immediately adjacent, and Otter may opportunistically utilise the site for terrestrial habitat. General construction safeguards should be implemented during any on-site management (e.g. scrub clearance, INNS treatment) which will also protect other species groups using the site. These include:

- Any mammals should be protected from accessing materials through the use of spoil-proof fencing.
- Fencing off and covering of open excavations, in order to prevent animals becoming trapped or injured. Mammal ladders should be erected to allow any animals that may become trapped to leave the groundworks.
- Chemicals, such as fuels, should not be stored within 25m of waterbodies.
- If possible, access routes and machine should be chosen with the minimisation of sediment run-off as a priority.

## **6.6 Bats**

42 entries for Bats (a range of species) with the closest record being *Pipistrelle* at 231m from the site.

**6.6.1** If it becomes necessary to fell or manage mature trees, a full bat use assessment will be required, undertaken by suitably qualified and licenced ecologist.

**6.6.2** The lighting scheme will follow best practice to avoid disturbance of bats and will be designed to maintain dark corridors for bats and other nocturnal animals. Lighting will be kept to a minimum and be away from adjacent woodland.

Where artificial lighting is necessary, this should utilise a number of key design points to limit any impact, as follows:

- Low level lighting pointed towards the ground; LED bulbs to be used of 3000 Kelvin and below (warm white light and not daylight);
- Use of light shields and hoods to direct the light downwards and prevent vertical and horizontal light spill; and
- Use of passive infrared (PIR) motion sensors on timers to ensure lights only come on when necessary.

Further information on bats and lighting can be found on the Bat Conservation Trust website [www.bats.org.uk](http://www.bats.org.uk) and the latest guidance in association with the Institution of Lighting Professionals can be found at: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>.

## 6.7 Birds

- 6.7.1** There is relatively little habitat for bird on the site itself. All nesting birds are protected under Section 1 of the Wildlife and Countryside Act of 1981. Therefore, all vegetation clearance should be planned outside the nesting bird season. If management works must commence any time between the 1st of March and the end of August, it is recommended that a nesting bird check will be undertaken on the site by a suitably experienced ecologist. If an active bird nest is found, the nest area will be marked, and will be protected from disturbance or harm as advised by the Ecologist. Management procedures will not commence in the identified area until an Ecologist can confirm the young have fledged and the nest is vacant.

## 6.8 Reptiles & Amphibians

- 6.8.1** The nearest record of reptile returned in the desk study belonged to Grass Snake, located 900m away from the site. The habitat within the survey area presents common species of reptile (slow-worm and common lizard) with limited foraging opportunities, but ample basking. The denser peripheral vegetation of the site is suitable habitat for land phase amphibians. As such, it is recommended that a **Reptile and Amphibian Mitigation Method Statement** should be prepared and communicated to any contractors taking place in the management, in order to protect animals during site clearance and construction, which will likely detail a phased approach to vegetation clearance, as well as the careful removal of any refugia within the development area by hand. Following such guidelines will also help safeguard terrestrial phase amphibians and small mammals that may be present on site.

## 6.9 Summary of Recommended Biodiversity Enhancement

1. Native hedgerow planting to the Weestern boundary – at base of stone bank, to form screening below roadside stone retaining wall. Additional interplanting along the western boundary to create continuous hedge line.
2. Bat boxes to mature trees within site boundary.
3. Multi-chamber swift box to be installed externally to new unit.
4. A reptile and amphibian hibernaculum will be created in a sheltered, undisturbed location within the site

5. Additional bird nesting provision will be in the form of small-holed nest boxes to trees within the site.
6. Scraping off of selected areas of gravel to reveal sub layers, allowing faster re-vegetation of ephemeral/short perennial cover.
7. Design and implementation of an INNS treatment and management plan.



## 7. LEGISLATION

### 7.1 Otters and the Law

**7.1.1** The otter is a European Protected Species (EPS). It is against the law to damage or destroy an otter breeding site or resting place, or deliberately to capture, kill, injure or disturb an otter.

**7.1.2** Otters are fully protected by the following pieces of legislation:

- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects otters, making it **an offence to**: -
  - *Intentionally or deliberately capture, injure or kill an Otter.*
  - *Damage or destroy a breeding or resting place of an Otter, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
  - *Intentionally or recklessly disturb an Otter in a place used for shelter or protection, or deliberately disturb Otters in such a way as to be likely significantly to affect (i) the ability of any significant group of Otters to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance.*
  - *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
  - *Possess an Otter (alive or dead), or any part of an Otter*
- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects otters, making it **an offence to**: -
  - *Intentionally or recklessly disturb any otter while it is occupying a structure or place which it uses for shelter or protection*
  - *Intentionally or recklessly obstructs access to any structure or place used by an otter for shelter or protection*
  - *Sell, offer or expose for sale any otter*

**7.1.3** For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;

- i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
- ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
- iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

#### 7.1.4 Otters are also protected by;

- Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

## 7.2 Bats and the Law

### 7.2.1 Bats are protected by the following pieces of legislation:

- Schedule 5 and 6 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countrywide Rights of Way] Act 2000)
- The Environmental Damage (Prevention & Remediation) Regulations 2009 – A protected species and its habitat is protected under this legislation as well as others.
- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects all bats and their roosts, making it **an offence to deliberately kill, injure or capture** (take) bats; *to deliberately disturb bats; damage or destroy bat roosts* or resting places (this is considered an “Absolute Offence” as damage and destruction may detrimentally effect the Continuous Ecological Functionality of that roost / resting place); possess or transport a bat or any part of a bat; sell (or offer for sale) or exchange bats or parts of bats.
- For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;
  - i. the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
  - ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
  - iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

### 7.2.2 Bats are also protected by;

- Appendix III of the Bern Convention
- Appendix II of the Bonn Convention (including the Convention's Agreement on the conservation of Bats in Europe)
- Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- All bats are listed in Annex IV of the EC Habitats Directive and the British species listed in Schedule 2 of the Habitats Regulations 1994 (as amended) and are therefore designated as *European Protected Species*. These *protected* species are afforded enhanced

protection and more stringent licensing provisions than those protected by the Wildlife and Countryside Act (WACA) alone.

### 7.3 The Hazel Dormouse and the Law

**7.3.1** The hazel dormouse is a European Protected Species (EPS). It is against the law to damage or destroy a dormouse breeding site or resting place (summer or hibernation nest), or deliberately to capture, kill, injure or disturb a dormouse.

**7.3.2** Dormice are fully protected by the following pieces of legislation:

- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects dormice, making it **an offence to:** -
  - *Intentionally or deliberately capture, injure or kill a dormouse.*
  - *Damage or destroy a breeding or resting place of a dormouse, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
  - *Intentionally or recklessly disturb a dormouse in a place used for shelter or protection, or deliberately disturb dormouse in such a way as to be likely significantly to affect (i) the ability to survive, breed, rear or nurture their young, and includes in the case of animals of a hibernating or migratory species, to hibernate or migrate or (ii) the local distribution or abundance.*
  - *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
  - *Possess a dormouse (alive or dead), or any part of a dormouse*
- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects dormice, making it **an offence to:** -
  - *Intentionally or recklessly disturb any dormouse while it is occupying a structure or place which it uses for shelter or protection*
  - *Intentionally or recklessly obstructs access to any structure or place used by a dormouse for shelter or protection*
  - *Sell, offer or expose for sale any dormouse*

**7.3.3** For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;

- i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
- ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.

- iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

**7.3.4** Dormice are also protected by;

- Natural Environment and Rural Communities Act 2006 (England) and the Environment (Wales) Act 2016.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

**7.4 Reptiles and the Law**

**7.4.1** All of the UK native reptiles are protected by law. The common species of reptiles found in this locality are common lizard, slow-worm, adder and grass snake. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

**7.4.2** All native UK reptiles are considered of 'principle importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

**7.4.3** Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes all reptiles species) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

**7.5 Amphibians and the Law**

**7.5.1** All of the UK native amphibians are protected by law. The common species of amphibians in this locality are common frog, common toad, smooth newt and palmate newt. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

**7.5.2** The common toad is considered of 'principle importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

**7.5.3** Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species ) which includes the Common Toad) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

## **7.6 Birds and the Law**

**7.6.1** All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Protection was extended by the Countryside and Rights of Way (CROW) Act 2000. Under the above legislation it is an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

**7.6.2** Certain species are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Sections 1(4) and 1(5). The protection was extended by the Countryside and Rights of Way (CROW) Act 2000. There are special penalties where the offences listed above are committed for any Schedule 1 species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or
- disturb the dependant young of any such bird.

## **7.7 Badgers and the Law**

**7.7.1** The protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger, or interfere with a sett. In addition, they are listed on Schedule 6 of the Wildlife & Countryside Act 1981, which prohibits certain methods of killing and capture.

## **7.8 Water Voles and the Law**

**7.8.1** Water voles are listed under Schedule 5 of the Wildlife & Countryside Act 1981, receiving full protection since 2008. The Wildlife & Countryside Act 1981 (as amended), lists the following offences: -

- Intentionally kill, injure or take water voles (Section 9 (1)).
- Possess or control live or dead water voles or derivatives (Section 9 (2)).
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection (Section 9 (4) (a & c)).
- Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose (Section 9 (4) (b)).

- Sell water voles or offer or expose for sale or transport for sale (Section 9 (5)).
- Publish or cause to be published any advertisement which conveys the buying or selling of water voles (Section 9 (5)).

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

- 7.9.1** This act has replaced the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty. It came into force in May 2016.
- 7.9.2** Section 6 of the Act places a duty on public authorities to ‘seek to maintain and enhance biodiversity’ so far as it is consistent with the proper exercise of those functions. In doing so, public authorities must also seek to ‘promote the resilience of ecosystems’. Under Section 6, public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.
- 7.9.3** Section 7 of the Act places a duty on public authorities to take steps to maintain and enhance biodiversity. This section replaces the duty in section 42 of the NERC Act 2006. The Section 7 Priority Species under this act is a list of the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. The Section 7 Priority Habitats is a list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

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## 9. I&G ECOLOGICAL CONSULTING LEGAL DISCLAIMER

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We confirm that in preparing this Report we have exercised reasonable skill and care, taking into account the project objectives, the agreed scope of the work and prevailing site conditions.

Advice in this report is based on the judgement of I&G Ecological Consulting and the interpretation of data gathered during the course of their survey on the property named in this document.

The findings and advice given during the course of this survey is provided by employees of I&G Ecological Consulting acting only on behalf of I&G Ecological Consulting.

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## Appendix A. LERC Data Search

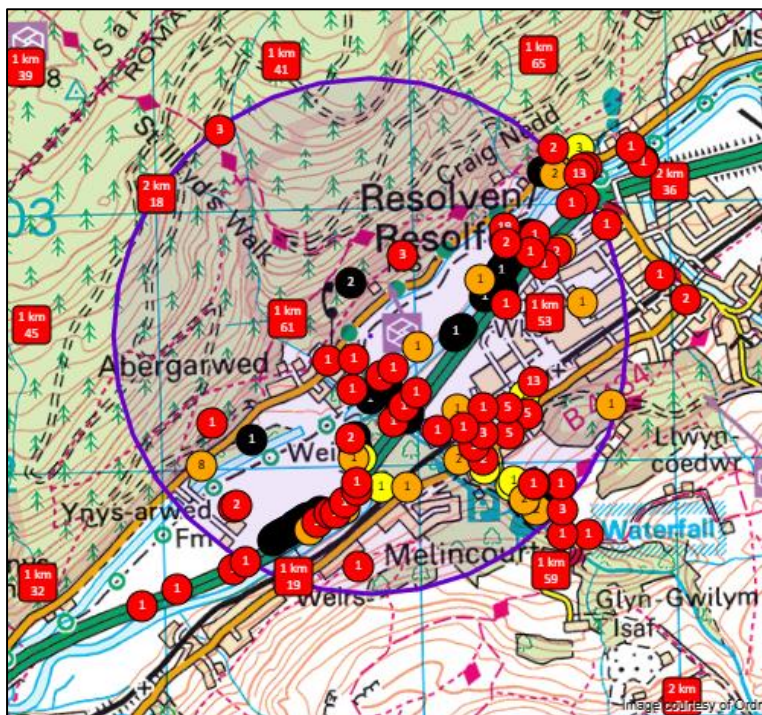


Figure 1. LERC Protected Species Data Search Records

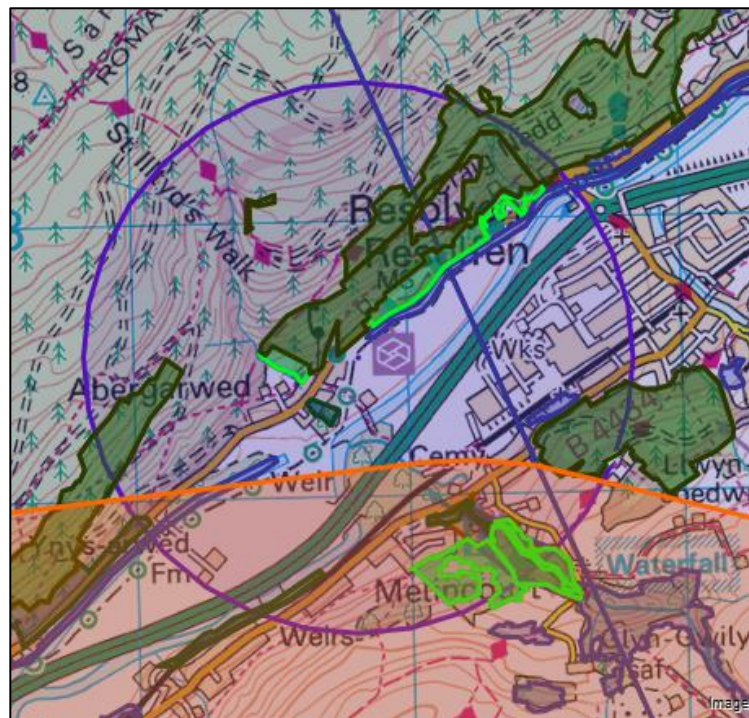
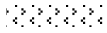
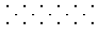


Figure 2. LERC Protected Sites Data Search

Appendix B. Phase One Habitat Plan



| Colour                                                                            | Code | Description               |
|-----------------------------------------------------------------------------------|------|---------------------------|
|  | J1.3 | Ephemeral/short perennial |
|  | J4   | Bare ground               |
|  | A2.1 | Dense/ continuous scrub   |
|  | J1.4 | Introduced shrub (JK)     |
|  | G2   | Running water (off site)  |
|  | J5   | Wall                      |

## Appendix C. Photographs



Photograph 1. Ephemeral/short perennial developing into grassland adjacent to entrance gates



Photograph 2. Ephemeral/short perennial on western boundary bank. Stone wall to roadside. Cut Gorse scrub brash.



Photograph 3. Regenerating scrub on stone bank.  
Discarded materials.



Photograph 4. Bramble scrub and tree line Eastern boundary



Photograph 5. Japanese Knotweed on access lane



Photograph 6. Bare ground with ephemeral/short perennial vegetation

## APPENDIX D – REPRESENTATIVE SPECIES LISTS

### Ephemeral/short perennial/grassland

| Species                    | Bi-nomial                      |
|----------------------------|--------------------------------|
| Barren Strawberry          | <i>Potentilla sterilis</i>     |
| Broad-leaved Willowherb    | <i>Epilobium montanum</i>      |
| Buck's-horn plantain       | <i>Plantago coronopus</i>      |
| Canadian Fleabane          | <i>Conyza canadensis</i>       |
| Cat's-ear                  | <i>Hypochaeris radicata</i>    |
| Cock's-foot                | <i>Dactylis glomerata</i>      |
| Coltsfoot                  | <i>Tussilago farfara</i>       |
| Common Bent                | <i>Agrostis capillaris</i>     |
| Common bird's-foot trefoil | <i>Lotus corniculatus</i>      |
| Common Ragwort             | <i>Senecio jacobaea</i>        |
| Creeping Buttercup         | <i>Ranunculus repens</i>       |
| Creeping Thistle           | <i>Cirsium arvense</i>         |
| Curled Dock                | <i>Rumex crispus</i>           |
| Cut-leaved Crane's-bill    | <i>Geranium dissectum</i>      |
| Dandelion                  | <i>Taraxacum officinale</i>    |
| False Brome                | <i>Brachypodium sylvaticum</i> |
| False Oat-grass            | <i>Arrhenatherum elatius</i>   |
| Field Horsetail            | <i>Equisetum arvense</i>       |
| Great Mullein              | <i>Verbascum thapsus</i>       |
| Hemp Agrimony              | <i>Eupatorium cannabinum</i>   |
| Hop Trefoil                | <i>Trifolium campestre</i>     |
| Lesser Burdock             | <i>Arctium minus</i>           |
| Lesser trefoil             | <i>Trifolium dubium</i>        |

|                           |                                   |
|---------------------------|-----------------------------------|
| <b>Meadow Buttercup</b>   | <i>Ranunculus acris</i>           |
| <b>Melilot</b>            | <i>Melilotus sp.</i>              |
| <b>Oxeye daisy</b>        | <i>Leucanthemum vulgare</i>       |
| <b>Red Clover</b>         | <i>Trifolium pratense</i>         |
| <b>Ribwort plantain</b>   | <i>Plantago lanceolata</i>        |
| <b>Rosebay Willowherb</b> | <i>Chamaenerion angustifolium</i> |
| <b>Rye grass sp.</b>      | <i>Lolium sp.</i>                 |
| <b>Selfheal</b>           | <i>Prunella vulgaris</i>          |
| <b>Smooth Sow Thistle</b> | <i>Sonchus oleraceus</i>          |
| <b>Spear Thistle</b>      | <i>Cirsium vulgare</i>            |
| <b>Tall Fescue</b>        | <i>Festuca arundinacea</i>        |
| <b>Trailing Tormentil</b> | <i>Potentilla anglica</i>         |
| <b>Vetch spp.</b>         | <i>Vicia spp.</i>                 |
| <b>White clover</b>       | <i>Trifolium repens</i>           |
| <b>Wild Parsnip</b>       | <i>Pastinaca sativa</i>           |
| <b>Wild Strawberry</b>    | <i>Fragaria vesca</i>             |
| <b>Wood Sage</b>          | <i>Teucrium scorodonia</i>        |
| <b>Yarrow</b>             | <i>Achillea millefolium</i>       |
| <b>Yarrow</b>             | <i>Achillea millefolium</i>       |
| <b>Yorkshire fog</b>      | <i>Holcus lanatus</i>             |

## Trees & Scrub

| Species        | Bi-nomial                    |
|----------------|------------------------------|
| Alder          | <i>Ulmus glutinosa</i>       |
| Ash            | <i>Fraxinus excelsior</i>    |
| Birch sp.      | <i>Betula sp.</i>            |
| Bramble        | <i>Rubus fruticosus agg.</i> |
| Dog rose       | <i>Rosa canina</i>           |
| European Gorse | <i>Ulex europaeus</i>        |
| Hazel          | <i>Corylus avellana</i>      |
| Hawthorn       | <i>Crataegus monogyna</i>    |
| Oak sp.        | <i>Quercus sp.</i>           |
| Rowan          | <i>Sorbus aucuparia</i>      |
| Sycamore       | <i>Acer pseudoplatanus</i>   |
| Willow spp.    | <i>Salix spp.</i>            |

