



## **Ecological Appraisal Report:**

Land off A4063 Pont Rhyd-y-cyff, Maesteg

**April 2020**

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## Summary

I & G Ecological Consulting were commissioned to undertake an ecological appraisal of an area of land approximately 2.0 hectares in size, located south of the village of Pont Rhyd-y-cyff, in the county borough of Bridgend.

The land within the site boundary consists predominantly of Previously Developed Land (brownfield), with scrub, and boundary hedges to the north and south.

No signs of European protected species were observed, and no non-native invasive species were encountered on the site.



**Figure 1. Location of site Grid Ref: SS 87041 88465**

In terms of the application site, the bulk of the habitat is brownfield of low ecological interest.

## 1. INTRODUCTION

- 1.1.1 I & G Ecological Consulting were commissioned to undertake an ecological appraisal of an area of land near Maesteg. The site is approximately 2.0 hectares in size. The report is to inform an application for Planning Permission for a residential development.
- 1.1.2 This report presents the findings of both a desk study and a site appraisal undertaken in April 2020. The report outlines the ecological constraints/opportunities associated with the site.
- 1.1.3 The survey was conducted during sub-optimal conditions as vegetation survey can be limited outside of the main flowering season for grassland and hedgerow habitats.

## 2. METHODOLOGY

- 2.1.1 Both a desk-based survey and an ecological site survey were undertaken to establish the ecological conditions on site.
- 2.1.2 A field botanical survey was carried out using survey methods that were based on standard Phase 1 Habitat survey techniques. The CIEEM Guidelines for Preliminary Ecological Appraisal were also followed and adhered to.

### 2.2 *Badgers*

- 2.2.1 The surrounding habitat was assessed for its suitability for badgers which includes the presence of setts, well-worn paths and runs, snagged hair, latrines, footprints and foraging. Any such incidental signs of badgers were recorded if they were encountered.

### 2.3 *Otters*

- 2.3.1 The surrounding habitat was assessed for its suitability to support otters. The area was searched for otter field signs such as spraint marking, slides, hovers or footprints.

### 2.4 *Dormouse*

- 2.4.1 The habitats on site, particularly the hedgerows were assessed for their suitability to support dormice.

### 2.5 *Birds*

- 2.5.1 The habitats on site were assessed for their suitability for breeding birds, including trees, scrub and grassland.

### 2.6 *Bats*

- 2.6.1 Habitats on site were assessed for their suitability to support bats, particularly any trees on site that could have bat roosting potential or opportunities.

## **2.7 Reptiles**

2.7.1 The habitats on site were assessed for their suitability to support reptiles.

## **2.8 Amphibians**

2.8.1 The habitats on site were assessed for their suitability to support amphibians.

## **2.9 Water Voles**

2.9.1 The surrounding habitats on site were assessed for their suitability to support water voles.

## **2.10 Marsh Fritillary**

The surrounding habitats on site were assessed for their suitability to support marsh fritillary butterfly and their food plant Devil's bit scabious *Succisa pratensis*.

## **2.11 Non-Native Invasive Species**

2.11.1 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*).

## **3. RESULTS**

### **3.1 Desk study**

3.1.1 A data search was requested from the South East Wales Biological Records Centre for the planning application site and surrounding area of up to 2km. The species information was returned to I&G Ecology on 24<sup>th</sup> April 2020. A number of protected and notable species records were returned within 2km of the site centre, but none within the site boundary. The records will not be listed here, but the most significant, those which are considered to potentially be affected by development of the site, will be briefly summarised. However, the full data are available upon request to those nominated on the request form, as some data may be classified as sensitive. The closest record to the site is for House sparrow at 401m from centre grid point.

3.1.2 The significant findings from the data search are summarised below: -

#### **3.1.3 Birds**

The data search returned 56 entries of birds which are categorised as priority species within 1km of the site. A number of records are at the 1km square level. Notable species include from site centre, including Marsh Tit (*Poecile palustris*), Linnet (*Linaria cannabina*), Barn Owl (*Tyto alba*), Skylark (*Alauda arvensis*) and Lapwing (*Vannellus vannellus*).

#### **3.1.4 Mammals**

The data search returned 11 records of mammals within 1km of the site centre, most significantly these included:-

- 2 entries for Bats (*Pipistrellus pipistrellus*), both at the 1km square level
- 1 entry for Otter (*Lutra lutra*), recorded on the afon Llynfi at Llety Brongu.
- 5 entries for Badger (*Meles meles*), closest at 409m from site.
- 1 entry for Roe Deer (*Capreolus capreolus*) at 511m from site.
- 1 entry for hedgehog (*Erinaceus europaeus*), 542m from site

#### 3.1.5 Invertebrates

The data search returned 1 record of invertebrates within 1km of the site for Small Heath (*Coenonympha pamphilus*) at the 1km grid square level. There are records for Marsh Fritillary (*Euphydryas aurinia*) and Small Pearl-bordered Fritillary (*Boloria celene*) beyond 1.5km.

#### 3.1.6 Plants

The data search returned very few records of plants within 1km of the site. There are 4 records for Bluebell (*Hyacinthoides non-scripta*), the closest being at 460m from the site.

#### 3.1.7 Reptiles

The data search returned 0 records of reptiles within 1km of the site; but Slowworm (*Anguis anguis*), Common Lizard (*Zootoca vivipara*), Adder (*Vipera berus*) & Grass Snake (*Natrix helvetica*) all occur within 1.5km.

#### 3.1.8 Amphibians

The data search returned 2 records for amphibians; Common Toad (*Bufo bufo*) and Common Frog (*Rana temporaria*) both at a 1km square resolution.

#### 3.1.9 Non-native Invasive species

The data search returned 25 records of INNS within 1km of the site. These include Japanese Knotweed (*Fallopia japonica*) within 150m; Himalayan balsam (*Impatiens glandulifera*) and Montbretia (*Crocsmia pottsii x aurea*) at 401m.

#### 3.1.10 Statutory Designated Sites

The data search showed that there is 1 site of National or International importance (e.g. SSSIs, SACs or SPAs) within the search buffer.

SSSI – Cwm Du Woodland 936m to N

#### 3.1.11 Non-statutory Sites

SINC – 15 sites within the 2km search area, the nearest:

Llety Brongu 71m N along the small un-named stream draining to the Llynfi  
Ty'n y Waun 111m to the NW.

#### 3.1.12 NRW Priority Areas

There are a good number of Priority Areas of habitat surrounding the site and are categorised thus (from WWWBIC data results table)

- 46 Ancient Semi Natural Woodland
- 6 Restored Ancient Woodland Sites
- 2 Ancient Woodland Site of Unknown category
- 1 Heathland and Grassland Priority Areas

### 3.1.13 CCW Phase 1 Survey

Information obtained from the Phase 1 Survey of Wales (CCW.1997), was also used to provide an indication of the broad habitat types previously recorded in the local area. The survey mapped the site as a mixture of bare ground, scrub, hedge, broadleaf woodland and poor semi-improved and improved grassland. It should be noted that whilst the CCW data-set is useful to indicate broad habitat types locally, it is not suitable for site specific assessment. The data set was gathered over a period of years (1979 – 1997) and habitats will have changed in the interim period depending on land use, management, development works etc.

## **3.2 Site Appraisal**

### 3.2.1 On site survey

3.2.2 The site survey was undertaken on 21<sup>st</sup> April 2020 by a suitably qualified ecologist. Where possible, the habitats were cross-referenced to any important UK priority habitats or local habitats adopted by the Local Biodiversity Action Plan.

3.2.3 The land within the red line site boundary (see Fig. 2) comprises of previously developed land, scrub, hedgerow, poor marshy grassland, semi-mature and mature trees. The site is fronted to the west by the A4063 Maesteg to Bridgend road. An access lane to Gelli Siriol Cottages runs to the north, with species poor agricultural grassland to the east and south.



Figure 2. Area surveyed (from Google maps)

- 3.2.4 The majority of the site is brownfield land, however the land at a higher level paralleling the hedgerow to the south and sweeping northward at the road frontage appears to be more natural in character. Much of the site is vegetated, except a small area of tarmac and concrete at the entrance-way.

Habitats recorded within red line boundary were as follows:-

### 3.3 **Brownfield (with ephemeral, perennial and scrub vegetation)**

- 3.3.1 The area fronting the entrance (TN1) comprises deteriorating tarmac which is being colonised by grey willow & silver birch saplings. Flora is sparse, lanceolate plantain being most evident (Fig. 3).



Fig. 3

- 3.3.2 An area to the north, fronting the A4063 and the access lane to Gelli Siriol cottages is concreted and un-vegetated (TN3; Fig.4).



Fig. 4

- 3.3.3 Beyond the hard surfaces the vegetation becomes more developed. The western section is still on very thin soils and the vegetation structure is more open (Fig. 5).



Fig. 5

Towards the eastern side the vegetation becomes closed-in and tussocky. Hard rush is the dominant component, with Yorkshire fog and creeping bent and pointed spear moss in more open areas. Forbs include creeping cinquefoil, dandelion, common knapweed and Lady's smock. Bramble and gorse are encroaching from the hedge-line and scrub.



Fig. 6

### 3.4 Poor marshy grassland

- 3.4.1 An area of land on higher ground to the south of the brown field land has marshy grassland characteristics (TN4; Fig.7). It is dominated by soft rush and creeping buttercup, with scattered angelica, birds-foot trefoil and marsh bedstraw. The area is becoming colonised by birch and grey willow saplings.



Fig. 7

### 3.5 Scrub

- 3.5.1 Dense scrub has developed in the SE section, growing out from the adjacent hedgerow. The scrub is impenetrable, and dominated by bramble (TN5; Fig.8).

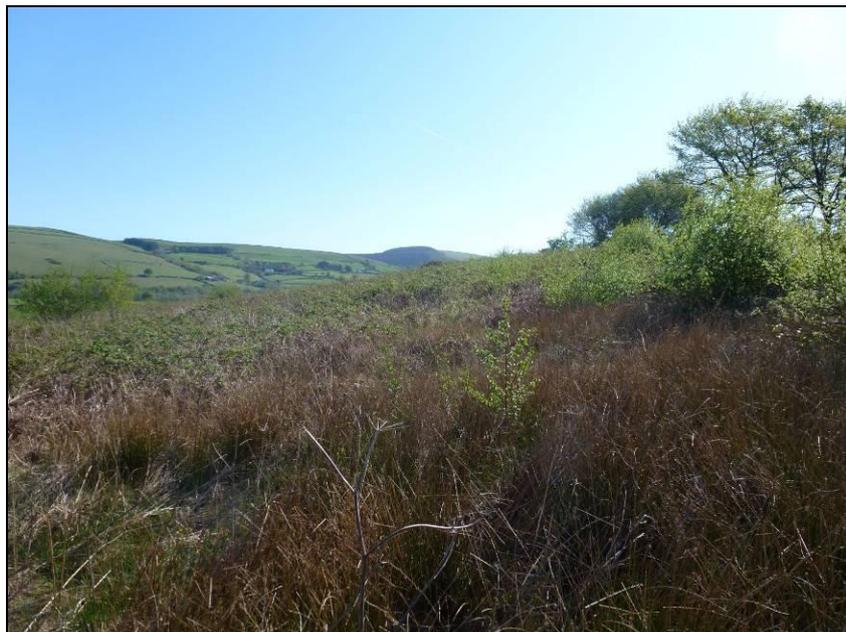


Fig. 8

### 3.6 Recently felled woodland

- 3.6.1 An area of woodland has been recently felled fronting the A4063. A strip has been retained along the road frontage. This is dominated by grey willow, with frequent silver birch and hawthorn. Alder and hazel are also present. Bramble dominates the ground layer with frequent hard shield fern (TN6; Fig. 9).



Fig. 9

### 3.7 Broadleaf woodland

- 3.7.1 A band of dense silver birch and willow saplings is developing into woodland to the north and east of the site. Bramble dominates the ground layer with frequent gorse (TN7; Fig.10).



Fig. 10

### 3.8 Hedgerow / Tree-lines (boundary feature)

3.8.1 The northern boundary is dominated by a clear line of mature grey willow, with frequent hazel, and occasional hawthorn and wych elm. Bramble dominates the ground layer (TN8; Fig11). No hedge-bank or ditch is evident.



Fig. 11

3.8.2 The southern boundary is embanked and ditched to the south (TN9; Fig.12). Dense scrub fronts the hedge on the development site preventing access. The hedge is dominated by semi-mature oak, with frequent grey willow, rowan and holly. Birch, alder, blackthorn and hazel are also present. Bramble, bluebell and honeysuckle are frequent in the ground layer.



Fig. 12

### **3.9 Badgers**

3.9.1 The grassland was considered sub-optimal for Badger foraging as soils were mostly poor/thin, making it less likely as a good source of earthworms and other subterranean prey items. The dense areas of scrub may provide cover but proximity to road and disturbance from neighbouring properties suggests it is sub-optimal habitat for setts. No evidence of badger activity was found within the scrub or elsewhere on the site.

### **3.10 Bats**

3.10.1 There are a number of semi-mature and mature trees in the hedgerows along the northern and southern boundaries of the site, mainly oak and grey willow. The hedgerow and boundary trees are likely to provide flight lines and foraging opportunities for generalist species such as pipistrelle.

### **3.11 Otters**

3.11.1 The site is some distance from the nearest watercourse, and there are no waterbodies on site to attract otter. The site is considered unsuitable for otter. The data search returned 1 record within 1km, at Llety Brongu on the afon Llynfi.

### **3.12 Reptiles**

3.12.1 The vegetation cover over the site is of mixed height, density and structure, and the range of habitats (scrub, bare ground etc) give the site the structural complexity that reptiles require to provide suitable ecotone areas for basking and cover.

### **3.13 Amphibians**

3.13.1 There is no suitable breeding habitat for amphibians on site. The dense areas of rush/grassland and scrub will support terrestrial phase amphibians and provide refugia.

### **3.14 Hazel Dormouse**

3.14.1 There are no records of dormouse in the area. The southern, and to a lesser extent northern hedgerow are poorly connected to suitable habitat, and lack the structural complexity favoured by dormice. The scrub would provide good habitat, but was impossible to survey. There is a general lack of hazel and honeysuckle in the northern hedge.

### **3.15 Water Voles**

3.15.1 No waterbodies are present and the site is unsuitable for water voles.

### 3.16 Birds

3.16.1 A number of bird species were noted during the survey; robin (*Erithacus rubecula*), great tit (*Parus major*), song thrush (*Turdus philomelos*), blackbird (*Turdus merula*), wren (*Troglodytes troglodytes*), carrion crow (*Corvus corone*) and swallow (*Hirundo rustica*). The mix of vegetation types will provide forage and shelter/nesting opportunities for a range of species.

### 3.17 Marsh Fritillary

3.17.1 Although rush species were present, and dominated some areas, there was no purple-moor grass and it did not constitute quality marshy grassland habitat, which is preferred by marsh fritillary butterflies, the area was considered unsuitable to support marsh fritillary butterfly due to the lack of preferred food plant species, devil's bit scabious.

### 3.18 Non-native Invasive Species

3.18.1 A single Buddleia plant is located within tipped material fronting the concrete apron at the NW corner. No evidence of Himalayan balsam or Japanese knotweed were observed.

## 4. ECOLOGICAL ASSESSMENTS

4.1.1 The following values 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). See Table 1 below:

**4.1.2 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.

#### 4.1.3 Table 2: 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

## 4.2 Priority Habitats and Species

4.2.1 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.

4.2.2 The Environment Wales Act (2016) (EWA) Section 6 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.

4.2.3 The Bridgend Local Biodiversity Action Plan (LBAP) aims to maintain and enhance biodiversity which covers a range of selected habitats and species which reflect both national and local priorities; develop effective local partnerships; monitor progress in achieving local biodiversity targets.

#### 4.3 Assessments on the Habitats & Species Identified During the Survey

#### 4.4 Habitats

##### 4.4.1 Brownfield

The mix of ephemeral/short perennial and more developed grass/rush vegetation will provide habitat for a range of species groups; its value has been assessed as: **Low Local**. Loss of this habitat, without mitigation, is considered to be **Minor**.

##### 4.4.2 Hedgerow/tree-lines and Scrub

The hedgerows/tree-lines and scrub were considered to be of ecological interest; they will have value as habitat cover and as food sources for a range of birds, mammals and invertebrate species. Their connectivity to other similar habitats will be of value to local wildlife. Overall, the value of the scrub and trees was assessed as: **Low Local**. **Loss or damage to this habitat would be Moderate, without mitigation.**

##### 4.4.3 Marshy grassland

The marshy grassland is of poor quality, dominated by soft rush, indicating enriched soils with impeded drainage; its value has been assessed as: **Low Local**. Loss of this habitat, without mitigation, is considered to be **Minor**.

#### 4.5 Species

4.5.1 The field survey identified the on-site habitats as having the potential to support the following species which are also listed under UK BAP: Breeding Birds, Bats, Reptiles and Amphibians.

4.5.2 The survey concluded that the site consisted of suitable habitat which could support priority species such as Thrush species, House Sparrow and Bullfinch.

#### **4.6 Ecosystem Resilience**

- 4.6.1 Area loss can cause populations of organisms to decline due to a decrease in habitat size. The area to be developed consists of four habitat types: Hedgerow, Broadleaf woodland, Marshy grassland and Brownfield. If the site is cleared without any mitigation for development the impact is expected to be **Moderate**, due to the potential loss of trees and scrub.

### **5. CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER SURVEY**

- 5.1 The combination of desk and field surveys undertaken at the proposed development site identified that the majority of the area within the planning site boundary has negligible ecological value (brownfield). However, the scrub and trees have higher ecological interest, supporting a more diverse range of species and are likely to provide nesting opportunities for birds, cover for small mammals and invertebrates and flight lines for bats.

#### **5.2 Hedgerows/Tree-lined boundaries & Scrub**

- 5.2.1 In terms of the site's ecological potential, the hedgerows, scrub and trees were considered to have higher habitat value than the main body of the site.
- 5.2.2 The boundary hedgerows and trees should be retained, with a fringing vegetation of scrub to provide connectivity to adjacent habitats, including the two adjacent SINC sites to the north.
- 5.2.3 Loss of scrub habitat and trees should be mitigated for by suitable new planting, detailed in the landscape scheme and approved by the LA ecologist. Any new planting should be with trees and shrubs of local provenance and should seek to replicate the species mix present in the existing hedgerow. Landscaping should include berry bearing species such as guelder rose, rowan and purging/alder buckthorn, which will also attract brimstone butterfly.
- 5.2.4 Protection of remaining scrub and trees is recommended; the use of Root Protection Zones and appropriate working methodology as well as proximity of development boundary must be considered.

#### **5.3 Birds**

- 5.3.1 All nesting birds are protected under Section 1 of the Wildlife and Countryside Act of 1981. Therefore, vegetation clearance should be planned outside the nesting bird season.

#### **5.4 Bats**

- 5.4.1 The boundary scrub and tree-lines will act as flight lines for bats and any dark corridors should be maintained as such. An appropriate lighting plan in relation to bats will take such habitat into consideration. Any mature trees which require felling or management in

order to accommodate the development will be subject to inspection and assessment for suitability for use by bats, by a licenced bat surveyor following current guidelines (Bat Conservation Trust).

## 5.5 Dormice

5.5.1 The areas of dense bramble scrub provide suitable habitat for dormice, however, there are no records for dormouse in the area. A precautionary approach to site clearance should be taken. Enhancement opportunities may exist within the development layout which will improve the integrity and species diversity of the remaining scrub and woodland belts, and seek to increase connectivity to any adjacent suitable habitat.

## 5.6 Reptiles & Amphibians

5.6.1 A **method statement and mitigation plan** should be prepared in order to protect reptiles and amphibians during site clearance and construction.

## 5.7 Invasive Non-native species

5.7.1 A single Buddleia plant is located within tipped material fronting the concrete apron at the NW corner. No evidence of Himalayan balsam or Japanese knotweed were observed. Materials brought into the site should be clean and free from INNS.

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

5.8.1 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.

5.8.2 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.

5.8.3 It is therefore recommended, that in order to mitigate for loss of scrub, a similar amount of new native hedgerow/planting should be incorporated into the development. However, in order to *enhance* the site for biodiversity, additional hedgerow should be planted, and it is suggested that this forms a part of the boundaries of the new properties.

New dwellings should include 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.

## 6. LEGISLATION

### 6.1 Otters and the Law.

6.1.1 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.

6.1.2 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*

6.1.3 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.

#### 6.1.4 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

## 6.2 Bats and the Law

### 6.2.1 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 [Countryside 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.

### 6.2.2 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.

### 6.3 The Hazel Dormouse and the Law

6.3.1 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.

6.3.2 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*

6.3.3 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.

#### 6.3.4 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

### 6.4 Reptiles and the Law

- 6.4.1 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).
- 6.4.2 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.
- 6.4.3 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.

### 6.5 Amphibians and the Law

- 6.5.1 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).
- 6.5.2 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.

6.5.3 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.

## **6.6 Birds and the Law**

6.6.1 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.

6.6.2 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.

## **6.7 Badgers and the Law**

6.7.1 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.

## **6.8 Water Voles and the Law**

6.8.1 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)).

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

- 6.9.1 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.
- 6.9.2 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 so doing, 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.
- 6.9.3 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.

## 7. REFERENCES

Amphibian & Reptile Conservation UK (Sept. 2010) *Legislative Protection for Herpetofauna (England & Wales)*

British Standard (2005) *Trees in relation to construction – recommendations BS 5837:2005*

Crown copyright (1992) *Protection of Badgers Act 1992*

CIEEM (2015) *Guidelines for Ecological Report Writing*, Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester

DEFRA (2007) *Hedgerow Survey Handbook A standard procedure for local surveys in the UK*

English Nature (2002) *Badgers & Development*, English Nature.

Environment & Heritage Service (2004) *Badgers & Development*, Environment & Heritage Service Publishing Unit.

Hundt L (2012) *Bat Surveys, Good Practice Guidelines*, Bat Conservation Trust.

JNCC (2004) *National Vegetation Classification, Field Guide to Woodland*, Joint Nature Conservation Committee.

National Federation of Badger Groups (2005) *Badgers and the Law*, NFBG  
[www.badger.org.uk/action/index.html](http://www.badger.org.uk/action/index.html)

Poland. J & Clement. E (2009) *The Vegetative Key to the British Flora*, BSBI.

Rose, F. (2006) *The Wildflower Key (2nd end.)*, Penguin London.

Wales Biodiversity Partnership (2016) *Environment Act (Wales)*.

Welsh Assembly Government (WAG 2016). Environment (Wales) Act 2016 Section 7 – list of the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. Welsh Government, Cardiff.

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## 9. Representative Species List

Species				
	1	3	4	5
Grey willow <i>Salix cinerea</i>	A	O	F	
Ribwort Plantain <i>Plantago lanceolata</i>	F	F	O	
Dandelion <i>Taraxacum officinale</i>	O	F		
White Clover <i>Trifolium repens</i>	R			
Red Clover <i>Trifolium pratenses</i>	R			
Silver birch <i>Betula pendula</i>	F	O	F	
Cat's ear <i>Hypochaeris radicata</i>	O			
Tufted vetch <i>Vicia cracca</i>	R	O		
Cock's foot <i>Dactylis glomerata</i>	O	F		
Soft rush <i>Juncus effusus</i>		O	D	
Common sedge <i>Carex nigra</i>		F		
Creeping buttercup <i>Ranunculus repens</i>		F	A	
Toad rush <i>Juncus buffonis</i>		O		
Lady's smock <i>Cardamine pratensis</i>		F		
Dog rose <i>Rosa canina</i>		O		
Yorkshire Fog <i>Holcus lanatus</i>		A		
European gorse <i>Ulex europaeus</i>		O		
Common knapweed <i>Centaurea nigra</i>		F		
Common Daisy <i>Bellis perennis</i>		O		
Bramble <i>Rubus fruticosus agg.</i>		A	O	D
Hard Rush <i>Juncus inflexus</i>		D		
Broad-leaved Dock <i>Rumex obtusifolius</i>		O	R	
Nettle <i>Urtica dioica</i>		O	O	
Colt's-foot <i>Tussilago farfara</i>		O		
Wild strawberry <i>Fragaris vesca</i>		O		
Lesser trefoil <i>Trifolium dubium</i>		O		
Creeping Cinquefoil – <i>Potentilla reptans</i>		F		

Field Horsetail <i>Equisetum arvense</i>		R		
Pointed Spear-moss <i>Calliergonella cuspidate</i>		A		
Creeping Bent <i>Agrostis stolonifera</i>		F		
Hawkbit sp. <i>Leontodon</i> sp.		O		
Spear Thistle <i>Cirsium vulgare</i>		O	O	
Butterfly Bush <i>Buddleia davidii</i>		R		
Angelica <i>Angelica archangelica</i>			F	
Birds-foot trefoil <i>Lotus uliginosus</i>			O	
Alder <i>Alnus glutinosa</i>			O	
Foxglove <i>Digitalis purpurea</i>			O	
Spearwort <i>Ranunculus flamula</i>			R	
Rose-bay willowherb <i>Chamerion angustifolium</i>			R	
Marsh bedstraw <i>Gallium palustre</i>			O	
Bracken <i>Pteridium aquilinum</i>			O	F
Pendulous sedge <i>Carex pendula</i>			R	
Square-stalked St. John's-wort <i>Hypericum tetrapterum</i>			R	
Lesser celandine <i>Ficaria verna</i>		O	R	
Ground ivy <i>Glechoma hederacea</i>			O	
Hogweed <i>Heracleum sphondylium</i>		O		
Compact rush <i>Juncus conglomeratus</i>		O		
Common yellow sedge <i>Carex demissa</i>		O		

Species				
	6	7	8	9
Grey willow <i>Salix cinerea</i>	D	A	D	F
Holly <i>Ilex aquifolium</i>	R			F
Hawthorn <i>Crataegus monogyna</i>	F		O	
Ivy <i>Hedera helix</i>	O		F	F
Hazel <i>Corylus avellana</i>	R		F	O
Silver birch <i>Betula pendula</i>	F	A		O
Hard shield fern <i>Polystichum aculeatum</i>	F			
Wych elm <i>Ulmus glabra</i>			O	
Cherry <i>Prunus avium</i>				R
Honeysuckle <i>Lonicera periclyneum</i>				F
Blackthorn <i>Prunus spinose</i>				O
Rowan <i>Sorbus aucuparia</i>				F
Herb Robert <i>Geranium robertianum</i>				O
Dog rose <i>Rosa canina</i>			O	
Yorkshire Fog <i>Holcus lanatus</i>	R			
European gorse <i>Ulex europaeus</i>		F		
Bramble <i>Rubus fruticosus agg.</i>	A	F	A	F
Pendunculate oak <i>Quercus robur</i>				D
Bluebell <i>Hyacinthoides non-scripta</i>				F
Nettle <i>Urtica dioica</i>	O			
Alder <i>Alnus glutinosa</i>	O			R
Foxglove <i>Digitalis purpurea</i>				O
Bracken <i>Pteridium aquilinum</i>	R			
Lesser celandine <i>Ficaria verna</i>				O
Ground ivy <i>Glechoma hederacea</i>				O



Fig. 15 Phase 1 Habitat Plan.



Colour	Code	Description
	J5	Other (Previously Developed Land)
	B5	Marshy Grassland (poor)
	A4.1	Recently felled woodland
	J2.3.2	Native Hedges & Trees
	A1.1.1	Immature broadleaf trees
	A2.1	Dense continuous scrub

Phase 1 Habitat Code Key: