



## **Ecological Appraisal Report:**

Land off New Mill Road, Cardigan, Ceredigion

**June 2023**

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## Summary

I & G Ecological Consulting were commissioned to undertake a preliminary ecological appraisal of an area of land approximately 1.8 hectare in size, situated off New Mill Road, Cardigan. (See Fig. 1 for location).

The land within the site boundary consists primarily of improved grassland with semi-improved and tall ruderals at the margins and boundary hedges of native tree species with bramble understory.

No signs of European protected species were seen, however non-native invasive species were encountered on the site; Butterfly bush (*Buddleia davidii*).

In terms of the application site, much of the site is of negligible ecological interest, while the hedge and tree-lined boundaries are considered to be of high ecological value. The site will provide habitat for nesting birds, reptiles, mammals (inc. Bats), invertebrates, and terrestrial phase amphibians.

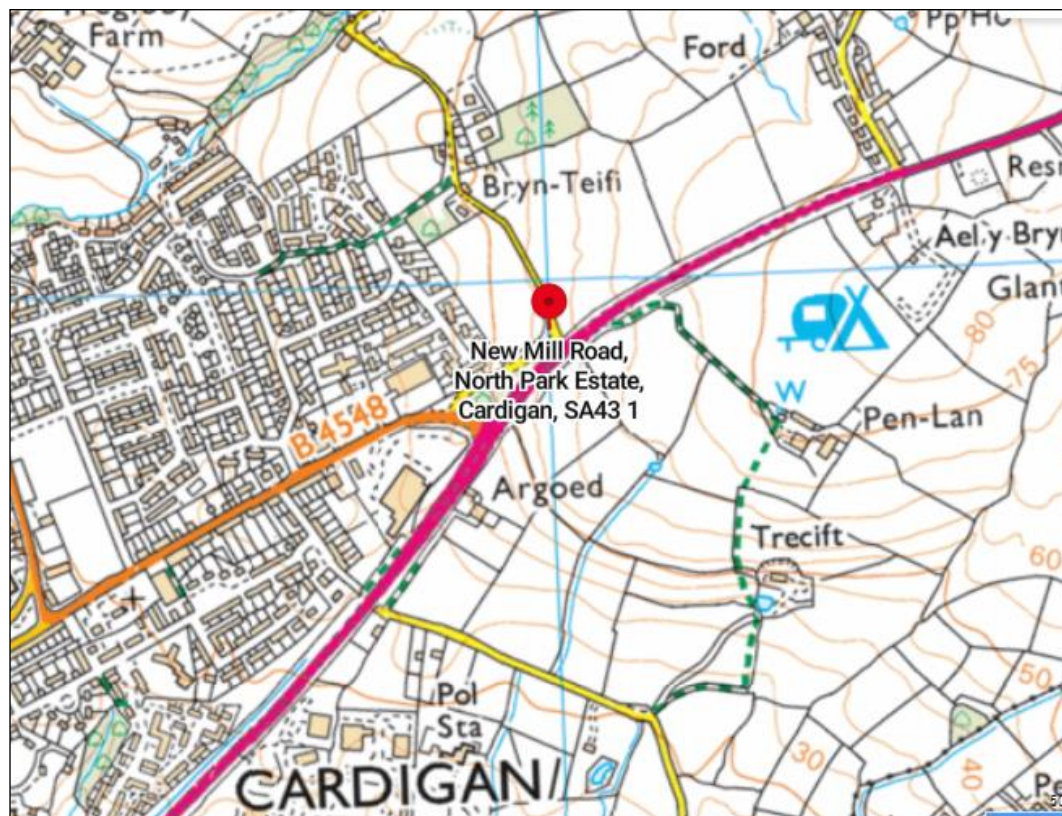


Figure 1. Location of site , Grid Ref: SN 18925 47012

## 1. INTRODUCTION

- 1.1.1 I & G Ecological Consulting were commissioned to undertake an ecological appraisal of an area of land off New Mill Road, Cardigan. The site is approximately 1.8 hectare in size. A proposed development layout plan has not been provided at the time of writing.
- 1.1.2 This report presents the findings of both a desk study, and a site appraisal undertaken in June 2023. The report outlines the ecological constraints/opportunities associated with the site.
- 1.1.3 The survey was conducted during optimal survey conditions, as it is considered to be at the height of the vegetation survey season. There were no constraints to this survey.

## 2. METHODOLOGY

- 2.1.1 Both a desk-based survey and an ecological site survey were undertaken to establish the ecological conditions on site. The survey was undertaken by Wendy Larcombe BSc (Hons), an experienced ecological surveyor who specialises in Preliminary Ecological Appraisal survey.
- 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.
- 2.1.3 The area surveyed is shown at Fig. 2, outlined in red.

### 2.2 *Badgers*

- 2.2.1 The site and surrounding habitat was assessed (where possible) 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 West Wales Biodiversity Information Centre (WWBIC) for the planning application site and surrounding area of up to 2km. The species information was returned to I&G Ecology 15th June 2023. A number of protected and notable species records were returned within 1km of the site centre. 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.

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

### **3.1.3 Birds**

Birds c250 entries, the closest most recent being for Red Kite (*Milvus milvus*) at 28m from site; other species include Skylark (*Alauda arvensis*) at 670m from site; House Sparrow (*Passer Domesticus*) Song Thrush (*Turdus philomelos*) and Dunnock (*Prunella modularis*) all at 786m from site.

### **3.1.4 Mammals**

The data search returned c125 entries for mammals within 2km of the site including some historical records.

94 entries for Bats (*Pipistrelle* species, *Pipistrellus*, *Myotis* sp., Noctule (*Nyctalus noctula*) and Brown Long-eared (*Plecotus auratus*) with the nearest entry being for *Myotis* and Brown Long-eared at 1253m from site.

13 entries for Badger (*Meles meles*), the closest most recent being 1601m from site.

9 entries for Western Hedgehog (*Erinaceus europaeus*), the closest being at 321m from site.

28 entries for Otter (*Lutra lutra*), closest most recent at 1354m from site.

1 (historical) entry for Hazel Dormouse (*Muscardinus avellanarius*) at 1547m from site.

### 3.1.5 Invertebrates

The data search returned c300 records, the majority historical and for moths.

The closest most recent records are for Shaded Broad-bar (*Scopteryx chenopodiata*) at 1242m from site, and Blood vein (*Timandra conae*) at 1543m from site.

### 3.1.6 Plants

14 entries, the majority historical; the closest most recent being for Bluebell (*Hyacinthoides non-scripta*) at 1581m. Other more historical entries include Annual Knawel (*Scleranthus annuus*) at 89m from site, Common Fragrant Orchid (*Gymnadenia conopsea*) at 1378m from site, and Western Marsh-Orchid (*Dactylorhiza purpurella*) at 1565m from site.

### 3.1.7 Reptiles

The data search returned 100 entries for reptiles within 2km of the site;

15 entries for Common Lizard (*Zootoca vivipara*), the closest at 1472m from site.

11 entries for Grass Snake (*Natrix helvetica*), the closest at 1753m from site.

23 entries for Slow-worm (*Anguis fragilis*), the closest being at 475m from site.

3 (historical) entries for Adder (*Vipera berus*), the closest being at 1547m from site

### 3.1.8 Amphibians

The data search returned 17 records for amphibians, majority historical, the closest most recent being for Common toad (*Bufo bufo*) at 1697m from site. Other more historical records include: 6 entries for Common Frog; 2 entries for Palmate newt (*Lissotriton helveticus*), and 9 entries for Common toad (*Bufo bufo*).

### 3.1.9 Bony Fish

The data search returned 7 entries, the closest being for European Eel (*Anguilla Anguilla*) and Atlantic Salmon (*Salmo salar*) at 1350m from site.

### 3.1.10 Invasive Non-native species

The data search returned c90 entries, the closest most recent being for Montbretia (*Crocsmia pottsii*) at 882m, and Cherry laurel (*Prunus laurocerasus*) at 1055m from site.

### 3.1.11 Statutory Designated Sites

The data search showed that there are Nationally or Internationally important sites (e.g., SSSIs, SACs or SPAs) which lie within the search buffer.

**SAC - AFON TEIFI / RIVER TEIFI** (1102m S) designated for a range of species and habitats including Bullhead, River, Sea and Brook Lamprey, Floating Water-plantain, Otter, Atlantic Salmon and Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.

**SSSI AFON TEIFI** (1102m S) As above

**SSSI BANC Y MWLDAN** (1354m NE) – Lowland unimproved pastures/neutral calcareous grassland/site of outstanding floristic and ecological interest in this predominantly acidic District. The site also has an insect fauna of national significance.

**SSSI BANC-Y-WARREN** (1440m NE) - an important site for fluvioglacial landforms and sediments.

**SSSI COEDYDD A CORSYDD ABER TEIFI** (Teifi Estuary Woodlands and Marshes) (1623m S)  
Estuarine Marsh/freshwater marsh/herb-rich flood meadows/unvegetated mudflats which provide a feeding ground for many species of waterfowl, particularly dunlin, oystercatcher, curlew, teal, mallard and wigeon.

### 3.1.12 NRW Priority Areas

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

4 Ancient Semi Natural Woodland Sites, to the south

4 Restored Ancient Woodland Sites to the north, east and west

1 NRW Priority Area (Lowland Wetland) to the northeast

### 3.1.13 Local Non-Statutory

There is 1 Wildlife Trust Reserve:

TEIFI MARSHES (1119m S)

1 BEE-LINES area surrounding the site, but predominantly south of the site

### 3.1.14 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 has not mapped the site or surrounding land (therefore likely to all be 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 22nd June 2023 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 site is located off a minor road, on the outskirts of the coastal town of Cardigan, in the administrative county of Ceredigion. The land is adjacent to agricultural pasture to the North, East and South (the A487 is situated immediately to the South of the site), while housing lies to the West.

3.2.4 The land within the red line site boundary (see Fig. 2) comprises of improved grassland with mature native boundary hedge with mature trees.



Figure 2. Aerial image of site surveyed (outlined in red)

\* Wendy Larcombe has an Honours degree in Environmental Biology with over 20 years survey experience, specialising in Preliminary Ecological Appraisal since 2018



Habitats recorded within red line boundary were as follows: -

### 3.3 Improved Grassland with Tall Ruderal

- 3.3.1 Tall ruderals within Semi-improved grassland (poor) can be found throughout a 1-2m border between the boundary hedge and the main body of the field (which is dominated by Perennial Rye Grass). This transition area is dominated by tall herbs, including nettle (*Urtica dioica*), Dock (*Rumex spp*), Cock's foot (*Dactylis glomerata*), Hogweed (*Heracleum sphondylium*), Pendulous Sedge (*Carex pendula*), Spear thistle (*Cirsium vulgare*), Horsetail (*Equisetum arvense*) and Willowherb species (*Epilobium spp.*), while ground cover is dominated by Creeping Buttercup (*Ranunculus repens*), Yorkshire Fog (*Holcus lanatus*) and Red clover (*Trifolium pratense*) and Cut-leaved cranesbill (*Geranium dissectum*). See Fig. 3.



Figure 3. Grassland with Tall Ruderal/Semi-improved perimeter

### 3.4 Hedgerow with Trees

- 3.4.1 Mature hedgerow boundary around entire site (with well-maintained stock fencing). Broadleaved trees are an occasional feature of the site boundaries. Species include Oak sp. (*Quercus sp.*), Ash (*Fraxinus excelsior*), Willow species (*Salix spp.*), English Elm (*Ulmus procera*), with Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and Holly (*Ilex aquifolium*) forming a shrub layer with Bramble dominant ground layer. Frequent Dog Rose (*Rosa canina*) and Honeysuckle (*Lonicera periclymenum*), particularly to the western boundary, potentially providing resources for invertebrates, birds and mammals including Dormouse. There is one young oak within the body of the site. See Fig. 4.



**Figure 4. Mature boundary hedge with occasional trees and bramble understorey**

### 3.5 Other Features/Habitats

3.5.1 **Ditch** – An ephemeral, narrow, vegetated ditch runs N/S, beneath the boundary hedge to the west of the site. At the time of survey, it was dry, however, during less prolonged periods of drought, may provide refuge for terrestrial phase amphibians. See Fig. 5.



Figure 5. Ephemeral ditch to the western boundary

3.5.2 **Pylon Footings** – A pylon stands in a slightly elevated corner to the far north west of the site, the vegetation beneath which has been strimmed. There are patches of bare earth and dry earth ditch banks, with occasional fern. This area might provide basking for reptiles. Species here include coppiced willow spp., St-John's Wort (possibly a garden escape), Creeping buttercup (*Ranunculus repens*) and Hedge bindweed (*Calystegia sepium*). See Fig. 6.



Figure 6. Cleared area around pylon footings, with dry ditch banks

3.5.3 **Semi-improved grass roadside verge** – currently un-cut verge to the southern and eastern boundary, with clovers, Common Knapweed (*Centauria nigra*), Broad-leaved dock (*Rumex obtusifolius*), Hogweed (*Heracleum sphondylium*). See Fig. 7.



Figure 7. Semi-improved grass roadside verge

3.5.4 **Non-Native Invasive Species** – Only one occurrence of INNS was noted: Butterfly bush (*Buddleia davidii*) mid-way along the western boundary hedge (behind which are dwellings). See Fig. 8.



Figure 8. Butterfly bush in the western boundary hedge (INNS)

### **3.6 Badgers**

3.6.1 The site itself offers very little in the way of quality forage or sett opportunities, however the wooded corridor to the west and north of the site will offer cover for commuting to feeding areas and potentially for sett building where cover is sufficiently dense. No signs of Badger use such as tracks, snuffle holes or latrines were observed during the survey.

### **3.7 Bats**

3.7.1 There are mature native trees along the site boundaries, some of which would be considered large enough and may contain features of interest to support bats (e.g., Ivy cover, rot holes, thick bark). The hedgerow boundaries will act as flight lines and the wooded areas to the north will provide forage for bats.

### **3.8 Otters**

3.8.1 There are no watercourses on or immediately adjacent to the site. The Afon Mwldan is some 500m meters away to the North and the Afon Teifi is approximately 1.2km South. The site therefore is considered to be within range of the river corridor and may be utilised by Otter. No evidence of Otter activity was noted on site.

### **3.9 Reptiles**

3.9.1 The site provides a number of habitats and resources for reptiles: grassland, scrub, bare ground/short perennials, and potential hibernation sites in the form of Bramble scrub and tree-roots. The vegetation on site is limited in size and likely to be of low quality and is unlikely to provide sufficient invertebrate forage to support a good population of Slow Worm or Common Lizard, however, given the peripheral scrub and proximity to other potentially suitable habitat (adjacent pastures), the site is considered suitable for reptiles.

### **3.10 Amphibians**

3.10.1 There are no ponds or other suitable waterbodies on or adjacent to the site for breeding amphibians, however, features such as Bramble scrub will offer refuge opportunities for terrestrial phase amphibians.

### **3.11 Hazel Dormouse**

3.11.1 The hedgerow boundaries support species utilised by Dormouse, including Honeysuckle, Oak and Bramble, and they are of sufficient structural quality for foraging or breeding. This hedgerow corridor forms connectivity to small areas of potential habitat to the North of the site. The site hedgerow boundaries are considered potentially suitable for breeding and suitable for Dormouse commuting.

### **3.12 Water Voles**

3.12.1 There are no suitable watercourses on or adjacent to the site. Therefore, the site is considered to be unsuitable for use by Water Vole and no evidence of Water Vole activity was noted on site.

### **3.13 Birds**

3.13.1 The site appears to be suitable for a range of birds. Species observed during the survey were: Dunnock (*Prunella modularis*), Collard Dove (*Streptopelia decaocto*), Wood Pigeon (*Columba palumbus*), Great-tit (*Parus major*) and Wren (*Troglodytes troglodytes*).

3.13.2 The peripheral grassland and tall herb vegetation will potentially provide forage for seed eating species such as Bullfinch (*Pyrrhula pyrrhula*) as well as Thrush species (*Turdus* spp.). Hedgerows will support Dunnock Linnet (*Linaria cannabina*), Tits and other passerines. Bramble scrub, hedgerow and trees will provide nesting, feeding and shelter for a wide range of bird species including those who favour woodland and garden habitats.

### **3.14 Marsh Fritillary**

3.14.1 The site contains no elements of Rush Pasture; there is no Devil's-bit Scabious (*Succisa pratensis*) or Purple Moor-grass (*Molinia caerulea*) evident, both of which are key elements of Marsh Fritillary habitat, therefore it is considered that there is no suitable Marshy grassland habitat on site to support Marsh Fritillary.

### **3.15 Invasive Non-native species (INNS)**

3.15.1 Only Butterfly Bush (*Buddleia davidii*) was observed in the hedgerow to the western border. No other INNS were noted during the survey.

### **3.16 Invertebrates**

3.16.1 A number of Lepidoptera (including Skipper, Meadow Brown), plus Bee and Beetle species were observed during the survey, predominantly utilising the marginal grassland and hedgerows.

#### 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 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 Improved Grassland (with SI/tall ruderals)

The grassland will provide limited resources for a range of species, including invertebrates, birds, reptiles and mammals. The habitat value has been assessed as: **Negligible**. Loss of this habitat, without mitigation, is considered to be **Negligible**.

#### 4.4.2 Hedgerow and Trees

The hedgerows, with Bramble understory provide forage, cover and refuge to birds, mammals, reptiles and amphibians, as well as nectar forage for invertebrates. They may act as commuting routes to areas of woodland, providing cover for birds and small mammals. Trees will provide connectivity and a resource for feeding and refuge to birds, mammals, reptiles and amphibians, as well as nectar forage for invertebrates. The habitat provides connectivity to, and along, the site boundaries which are connected to better quality and extent of habitat. This habitat's value has been assessed as: **Low Local**. Loss or damage of the scrub and trees will be **Major** without mitigation.



#### 4.4 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 Ceredigion LBAP and/or UK BAP: Breeding Birds, Invertebrates, Dormouse, Bats, Reptiles and Amphibians.
- 4.5.2 During the field survey, 1 bird species (Dunnock), listed under the LBAP and UK BAP as being associated with the on-site habitats, was recorded. The survey concluded that the site consisted of suitable habitat which could support priority species frequenting Grassland, Woodland and Scrub habitat.

#### 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 3 principal Natural habitat types: Improved Grassland with Tall Ruderals, Trees, Hedgerows (with scrub). If the site is cleared without any mitigation for development the impact is expected to be **Major (hedgerows) and Negligible (field)**.

### 5. CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER SURVEY, MITIGATION AND ENHANCEMENT

- 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. Boundary features including Trees, Hedgerow and Scrub offer habitat for a range of animal groups and have **Low Local** ecological value.

#### 5.2 Trees & Scrub

- 5.2.1 If any scrub or trees are to be removed or managed to accommodate the development, then the area of scrub/individual trees will be assessed for suitability for, and use by, Dormouse, Bats, Reptiles and nesting birds, by a suitably qualified and experienced ecologist. No vegetation clearance will be undertaken during the bird breeding season.
- 5.2.2 All trees and hedgerows will be protected by way of Root Protection Zones, which will be marked out and cordoned off (according to the agreed Tree Survey to BS standard).

#### 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 (generally accepted to be 1<sup>st</sup> March – 31<sup>st</sup> Aug).
- 5.3.2 Any loss of bird habitat, as a result of the development, must be mitigated for by way of suitable provision on site. This may partly be encompassed in a Landscaping Plan, with the

inclusion of new hedging, trees, fruit/seed bearing planting which will provide cover, feeding and nesting opportunities. Advice on suitable species mix can be sought from local suppliers, depending on ground conditions of the intended planting locations.

#### 5.4 Bats

5.4.1 The boundary scrub, tree-lines and hedgerows will act as flight lines for bats; any dark corridors should be maintained as such. An appropriate lighting plan in relation to bats will take such habitat features into consideration. In relation to trees see 5.31 above.

#### 5.5 Amphibians & Reptiles

5.5.1 The boundary vegetation will be retained and protected as part of the hedgerow protection (see 5.2.2 above), and therefore should not be affected by site clearance procedures, however, a temporary reptile fence along the hedgerow is recommended. Site clearance should be undertaken in a method and to timing which limits the likelihood of death or disturbance to animals. It is recommended that an **Amphibian & Reptile Mitigation Method Statement** is agreed.

#### 5.6 INNS

5.6.1 There is one INNS plant on site – Butterfly Bush. It is recommended that this be carefully removed by hand. There is also one specimen of Pyracantha which should also be removed. (Both plants are on the western border nearest to the neighbouring dwellings).

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

5.7.1 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.

5.7.2 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.

5.7.3 In order to *enhance* the site for biodiversity, additional planting can provide improved habitat; **it is recommended that the roadside boundary hedgerow is strengthened by additional tree planting to fill gaps and to widen hedgerows/corridor. All planting will be managed appropriately to benefit wildlife.** Final development layout may allow for further sections of hedgerow, which would ideally connect to existing hedging/scrub pockets. This will facilitate connectivity between the site and surrounding habitats.

5.7.4 New buildings will include artificial habitats such as bat bricks/boxes, bird boxes/bricks or Swift/Swallow cups as appropriate; the details of which should be agreed with the LA ecologist.

5.7.5 Mature trees can support bird nesting boxes and artificial bat roosts.

5.7.6 All non-native Invasive species will be removed from site following agreed methodology, to limit such species spreading to the wild.

## 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 (Wales) Act 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.



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## 9. Representative Species List

### Hedgerow Trees & Scrub

Species	Frequency
Ash - <i>Fraxinus excelsior</i>	O
Black Bryony - <i>Dioscorea communis</i>	F
Bramble – <i>Rubus fruticosus</i> agg.	LD
Dog Rose – <i>Rosa canina</i>	R
Hawthorn - <i>Crataegus monogyna</i>	R
Holly - <i>Ilex aquifolium</i>	O
Honeysuckle - <i>Lonicera periclymenum</i>	A
Pedunculate Oak – <i>Quercus robur</i>	F
Sycamore – <i>Acer pseudoplatanus</i>	O
Willow spp. – <i>Salix</i> spp.	O

### Improved Grassland with Tall ruderals

Species	Frequency
Broad-leaved Dock - <i>Rumex obtusifolius</i>	A
Cat's ear - <i>Hypochaeris radicata</i>	R
Cock's foot - <i>Dactylis glomerata</i>	O
Common Bird'sfoot Trefoil - <i>Lotus corniculatus</i>	R
Common Knapweed – <i>Centaurea nigra</i>	R
Common nettle – <i>Urtica dioica</i>	F
Common Vetch - <i>Vicia sativa</i>	R
Creeping Buttercup – <i>Ranunculus repens</i>	F
Creeping thistle - <i>Cirsium arvense</i>	O
Cut-leaved Cranesbill – <i>Geranium dissectum</i>	O
Dandelion – <i>Taraxacum</i> agg.	O
Hedge Bindweed - <i>Calystegia sepium</i>	LF
Horsetail - <i>Equisetum arvense</i>	LF
Pendulous Sedge - <i>Carex pendula</i>	R
Perennial Ryegrass – <i>Lolium perenne</i>	D
Red Clover – <i>Trifolium arvense</i>	LF
Self-heal – <i>Prunella vulgaris</i>	R
Spear thistle – <i>Cirsium vulgare</i>	O
White Clover – <i>Trifolium repens</i>	A
Willowherb spp. – <i>Epilobium</i> spp.	LF
Yorkshire Fog - <i>Holcus lanatus</i>	A

### INNS/Introduced Shrub

Species	Frequency
Butterfly Bush – <i>Buddleia davidii</i>	R
Pyrocantha sp.	R

### 10. WWBIC/Aderyn Data Search

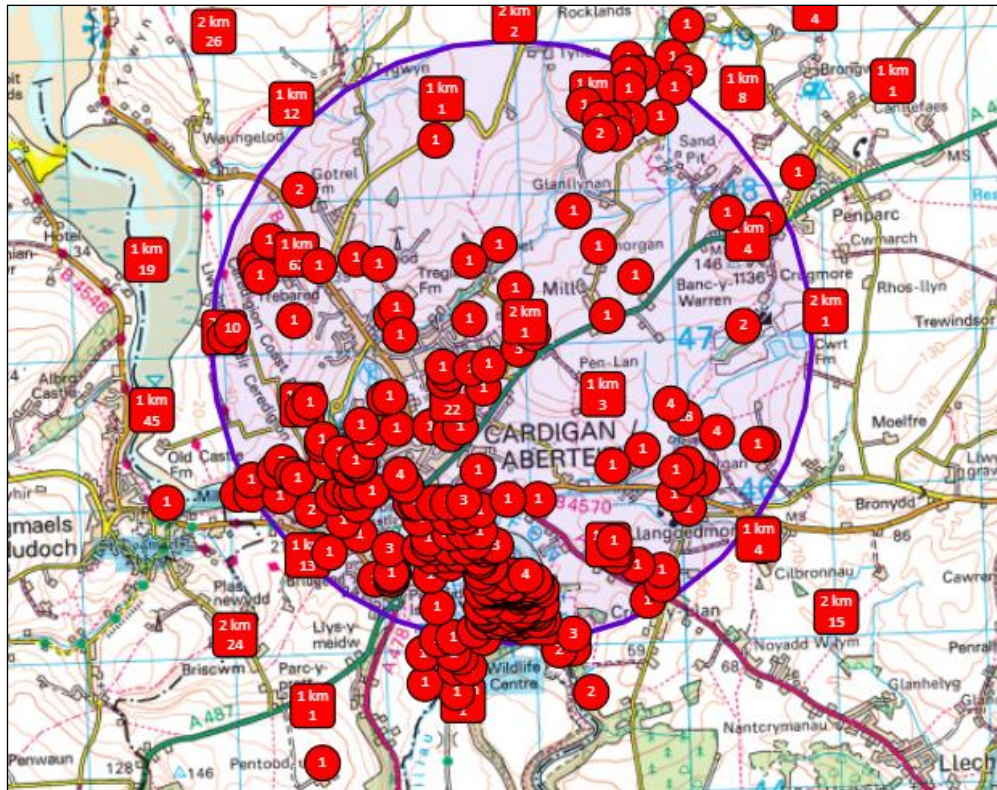


Figure 9. WWBIC Protected Species Data Search 15th June 2023

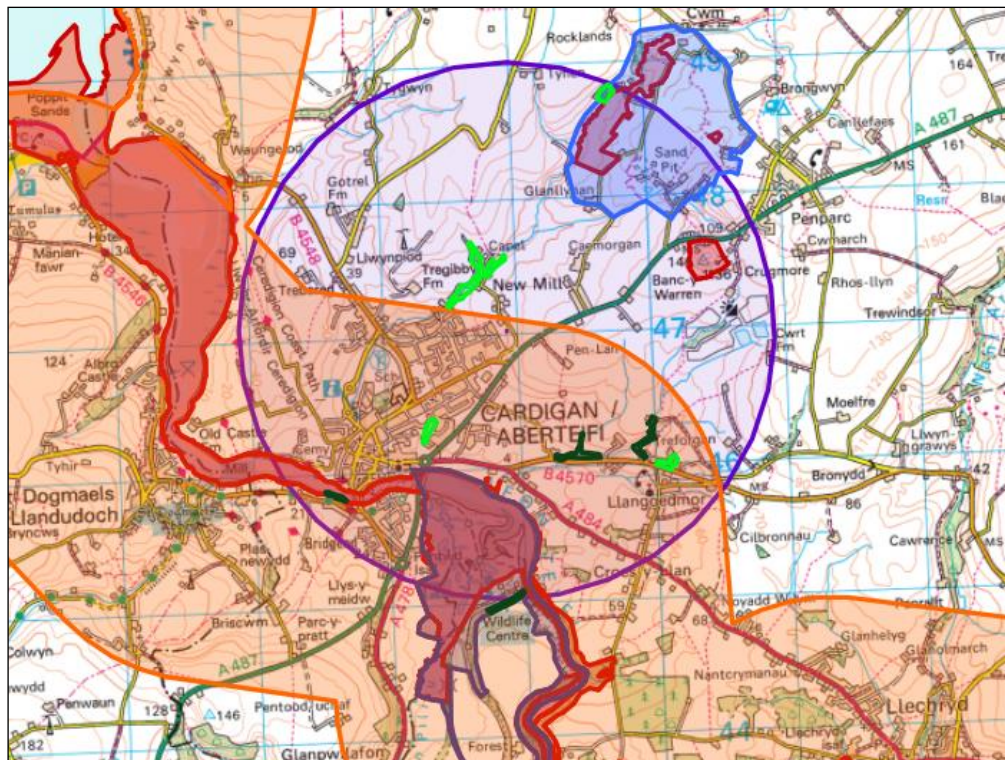


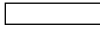
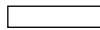



Figure 10. WWBIC Protected Sites Data Search 15th June 2023

**APPENDIX**

**PHASE 1 HABITAT PLAN**



**Phase 1 Habitat Code Key:**

Colour	Code	Description
 A	J.1.1	Cultivated Land - Arable (P. Rye)
 SI	B6	Semi-improved neutral (poor)
	J2.3.1	Native Species Rich Hedge with Trees
	J2.4	Fence
	J2.6	Dry Ditch