



Ecological Appraisal Report:

Land at
Maesydderwen,
Gwbart,
Cardigan,
Ceredigion,
SA43 1JX

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Contents

Summary	2
1. Introduction	3
2. Methodology	3
2.2 Badgers	
2.3 Otters	
2.4 Dormouse	
2.5 Birds	
2.6 Bats	
2.7 Reptiles	
2.8 Amphibians	
2.9 Water Vole	
2.10 Marsh Fritillary	
2.11 Non-native Invasive Species	
3. Results	4
3.1 Desk Study	4
3.2 Site Appraisal	6
4. Ecological Assessments	14
5. Conclusions and Recommendations	17
6. Legislation	19
7. References	25
8. Legal Disclaimer	26
9. Representative Species Lists	27
10. LRC Data Search	30
11. Phase 1 Plan	31

Summary

I & G Ecological Consulting were commissioned to undertake an ecological appraisal of land at Maesydderwen, Gwbert, Ceredigion in support of an application to develop housing.

The land within the site boundary consists of improved grassland and hedgerows.

No signs of European protected species were observed within the site boundary. Single plants of Monbretia and buddleja were located.



Figure 1. Location of site Grid Ref: SN 17744 46881

1. INTRODUCTION

- 1.1.1 I & G Ecological Consulting were commissioned to undertake an ecological appraisal of an area of land of just over 2ha at Maesydderwen, Gwbert, Ceredigion. The proposal is for the development of housing.
- 1.1.2 This report presents the findings of both a desk study and a site appraisal undertaken in September 2022. The report outlines the ecological constraints and opportunities associated with the site.
- 1.1.3 The survey was conducted during optimal conditions.

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 West Wales Biodiversity Information Centre for the planning application site and surrounding area of up to 2km. The species information was returned to I&G Ecology on 12th September 2022. A number of protected and notable species records were returned within 2km of the site centre (Fig. 14). 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

The data search returned 479 entries of birds which are categorised as priority species. The closest record is at 490m for Mediterranean gull.

3.1.4 Mammals

The data search returned 93 records of mammals within 2km of the site centre. Most significantly these included:-

- 12 records for otter, the closest 1028m away
- 1 record for dormouse 1633m away across the Teifi at the Teifi marshes
- 55 records for bats including common & soprano pipistrelle, brown long-eared, greater & lesser horseshoe, natterer's, daubentons, whiskered, brandts, serotine and noctule
- 8 records for badger, the closest 269m away

3.1.5 Invertebrates

The data search returned 26 records of butterfly within 2km of the site, with 2 records for wall butterfly within 1km and a number of records for brown hairstreak beyond 1km.

3.1.6 Plants

There are 6 plant records within 2km, with 2 records for bluebell within 1km.

3.1.7 Reptiles

The data search returned 29 records of reptiles within 2km of the site. The closest, for slow worm, are between 700 and 800m from the site. Common lizard, grass snake and adder are also recorded.

3.1.8 Amphibians

The data search returned 8 records for amphibians within 2km of the site, for frog and common toad, but none within 500m of the site.

3.1.9 Non-native Invasive species

The data search returned 36 records of INNS within 2km. These include Japanese knotweed, rhododendron, cherry laurel, white stonecrop and montbretia within 1km.

3.1.10 Statutory Designated Sites

Afon Teifi SAC 921m
Afon Teifi SSSI 921m
Aberarth – Carreg Wylan SSSI 1964m
Coedydd a Corsydd Aberteifi 1545m

3.1.11 Non-statutory Sites

The site lies within a B-Line

3.1.12 NRW Priority Areas

There are a number of Priority Areas of habitat within the search buffer but none in close proximity to the site (Fig. 15).

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 data search return mapped no habitats within the site, but broadleaved woodland on the southern boundary. 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 the 11th September 2022 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 survey boundary (Fig. 2) comprises of improved grassland and hedgerow. Areas of the site have already been developed, or have been top-soil stripped and levelled. There are mounds of topsoil and subsoil, stone and sand. The site is bounded by development to the north, a house & large gardens to the west, farmland and woodland to the south and a road to the east.



Figure 2. Area surveyed (from Google maps)

Habitats recorded within red line boundary were as follows:-

3.3 Improved grassland

- 3.3.1 The main body of the site is improved grassland, dominated by rye grass, bent, timothy, Yorkshire fog and clover, with agricultural weeds including ragwort, dandelion, creeping buttercup and creeping thistle (TN1-3; Fig. 3-5).



Fig. 3

Land at Maesydderwen, Gwbert, Ceredigion

- 3.3.2 The eastern section on the downslope is wetter with patches of soft rush and hairy sedge, and significant amounts of ragwort.



Fig. 4

- 3.3.3 The north eastern field has been partly developed, partly top soil stripped and levelled and has a number of mounds of material deposited on it.



Fig. 5

3.4 Hedgerow

- 3.4.1 The internal hedgerow is bisected by the access track (TN4; Fig. 6&7). The upper section is closely flailed and dominated by blackthorn, with elm and hawthorn. The lower section has a number of mature non native oak and sycamore.



Fig. 6



Fig. 7

- 3.4.2 A hedge-bank and dry ditch form the southern boundary of the site (TN5; Fig. 8). There are a number of mature oak, beech, sycamore and ash trees. Some of the ash are showing signs of dieback. The bank is shaded and dominated by ivy, with hart's tongue and soft shield fern.



Fig. 8

3.5 Miscellaneous

- 3.5.1 A storage yard for building materials and equipment occupies the SW corner. This is fenced out and in the absence of grazing, tall ruderal vegetation has developed along the margins. This is dominated by willowherb, nettle, ragwort and thistle with rank grasses (TN6; Fig. 9).



Fig. 9

- 3.5.2 There are a number of piles of material, soils and waste around the site (TN7; Fig10-11).



Fig. 10-11

3.5.3 The upslope section of the northern parcel has been cleared and levelled (TN8;Fig12) and the northern boundary has been built upon (TN9;Fig13).



Fig. 12



Fig. 13

Land at Maesydderwen, Gwbert, Ceredigion

3.6 Badgers

3.6.1 There is no evidence of badger setts on site, and no signs of activity.

3.7 Bats

3.7.1 There are a number of mature (both native and non native) oak and ash in the hedge lines to the south of the site and in the short length of internal hedgerow below the track which are likely to provide roosting opportunities for bats. They will also provide flight lines and feeding opportunities. The grassland if grazed by cattle will provide foraging interest for species such as noctule.

3.8 Otters

3.8.1 There is no suitable habitat for otters on or adjacent to the site.

3.9 Reptiles

3.9.1 The site is heavily managed, and areas of suitable habitat are shaded by the tree lines. Given the housing to the north of the site, the presence of slow worms along this boundaries cannot be ruled out.

3.10 Amphibians

3.10.1 There is no suitable habitat for amphibians on site.

3.11 Hazel Dormouse

3.11.1 There is no suitable habitat for dormouse on site.

3.12 Water Voles

3.12.1 The site is unsuitable for water vole.

3.13 Birds

3.13.1 The hedgerow will provide forage and shelter/nesting opportunities for a range of species.

3.14 Invertebrates

3.14.1 There is no suitable habitat on site to support marsh fritillary butterfly.

3.15 Non-native Invasive Species

3.15.1 There is one small plant of montbretia and a buddleja in the lower half of the internal hedge.

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 Ceredigion 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

The grassland on site is improved, species poor, heavily managed and similar to other fields in the locality.

Overall, the value of this habitat within the development parcel has been assessed as: **Negligible**. Loss of this habitat, without mitigation, is considered to be **Negligible**.

4.4.2 Hedgerow

The boundary and internal hedgerows contain a number of mature specimen trees, will support a range of species, and will provide important habitat, foraging opportunities, dispersal routes and landscape interest.

Overall, the value of this habitat within the development parcel has been assessed as: **High Local**. Loss or damage to this habitat would be **Major**, without mitigation.

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.

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 mainly of improved grassland and hedgerows. If the site is cleared without any mitigation for development the impact is expected to be **Major**, due to the potential loss of hedgerows and mature trees.

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; however the hedgerows have high ecological value. The hedgerows have the potential to support a 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 Hedgerow

- 5.2.1 No plans were available in relation to the proposed site layout. Some groundworks have already commenced adjacent to the internal hedge-bank.
- 5.2.2 New hedgerows should be established within the development to partition the site and link in with the existing internal and boundary hedgerow. These should be planted with a range of hedgerow species of local provenance. A mix primarily of

hazel (30%), blackthorn (20%) and hawthorn (20%) with the remainder made up of a mixture of holly, rowan, silver birch and wayfaring tree.

- 5.2.3 Any diseased trees that require felling should be replaced with whips of oak, rowan or sycamore. These should be staked and protected and allowed to develop into hedgerow trees.
- 5.2.4 Protection of trees and hedgerows through 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 There are a significant number of mature trees on site which are likely to provide roosting features. 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).
- 5.4.2 The hedge-banks are well connected to other hedge and woodland features in the vicinity and will provide valuable foraging habitat and flight corridors. The open field area if cattle grazed and might attract foraging bats such as noctule.
- 5.4.3 The installation of a number of bat boxes suitable for species such as pipistrelle, noctule and brown long-eared within the hedgerow trees is recommended.
- 5.4.4 Site lighting has the potential to impact upon bats. A lighting plan should be agreed, with low level cowled lighting and the retention of dark corridors along the boundary features.

5.5 Invasive Non-native species

- 5.5.1 Materials brought into the site should be clean and free from INNS.
- 5.5.2 The montbretia and buddleja plants should be removed from the internal hedgerow

5.6 Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

- 5.6.1 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.

- 5.6.2 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.
- 5.6.3 The size of the site allows for the creation of areas of interconnected habitat within the development envelope. It is therefore recommended, that in order to provide a net enhancement for the development, a landscaping plan should be developed to create a network of interconnecting hedgerows throughout the site. New native planting should be incorporated into the development using species of local provenance. Landscaping should include native berry and nectar bearing species such as guelder rose, spindle, crab apple, purging buckthorn, elder and wayfaring tree.
- 5.6.4 Public open space should provide the opportunity to develop areas of species rich grassland to provide pollinator habitat and landscape value.
- 5.6.5 SUDS should be constructed to provide a network of ditches and ponds to manage site run-off but also to provide habitat for amphibians and invertebrates such as dragonflies. These should link into the ditch-line to the south.
- 5.6.6 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.

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8. 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.

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9. Representative Species List

	Target note							
	1	2	3	4	5			
Creeping Bent <i>A stolonifera</i>	A	F	A					
Cock's foot <i>Dactylis glomerata</i>	O							
False oat grass <i>Arrhenatherum elatius</i>					F			
Yorkshire fog <i>Holcus lanatus</i>	D	A	A					
Rye grass <i>Lolium perenne</i>	A	D	D					
Timothy <i>Phleum pratense</i>	O		O					
Hairy sedge <i>Carex hirsuta</i>		F						
Soft rush <i>Juncus effusus</i>	O	F						
Birds foot trefoil <i>Lotus corniculatus</i>	O							
Bittersweet <i>Solanum dulcamara</i>				O				
Hedge Bindweed <i>Calysegia sepium</i>				O				
Creeping buttercup <i>Ranunculus repens</i>	A		A					
Meadow buttercup <i>Ranunculus acris</i>	O							
Cleavers <i>Galium aparine</i>				O				
White clover <i>Trifolium repens</i>		O						
Red Clover <i>Trifolium pratenses</i>	O							
Creeping cinquefoil <i>Potentilla reptans</i>			O					
Dandelion <i>Taraxacum officinale</i>	F		O					
Broad leaved dock <i>Rumex obtusifolius</i>	F	F	F					
Herb Robert <i>Geranium robertianum</i>					O			
Hogweed <i>Heracleum sphondylium</i>				O	F			
Ivy <i>Hedera helix</i>				O	F			
Montbretia <i>Crocsmia x crocosmiiflora</i>				R				
Nettle <i>Urtica dioica</i>	O			O	O			
Ribwort Plantain <i>Plantago lanceolata</i>		O	O					
Ragwort <i>Jacobaea vulgaris</i>	F	A	O					
Red bartsia <i>Odontites verduis</i>		O						

Red campion <i>Silene dioica</i>				O				
Common sorrel <i>Rumex acetosa</i>	F		O					
Prickly sow thistle <i>Sonchus asper</i>					O			
Creeping thistle <i>Cirsium arvense</i>			A					
Spear thistle <i>Cirsium vulgare</i>		O						
Broad leaved willowherb <i>Epilobium montanum</i>		O			O			
Ash <i>Fraxinus excelsior</i>					F			
Beech <i>Fagus sylvatica</i>					O			
Blackthorn <i>Prunus spinosa</i>				D	A			
Bramble <i>Rubus fruticosus agg</i>				O	O			
<i>Buddleja sp</i>				R				
Common Elm <i>Ulmus minor</i>				A				
Hazel <i>Corylus avellana</i>					O			
Hawthorn <i>Crataegus monogyna</i>				F	D			
English oak <i>Quercus robur</i>				R	F			
Sessile oak <i>Quercus petraea</i>				O	F			
Sycamore <i>Acer pseudoplatanus</i>				O	O			
Dog rose <i>Rosa canina</i>				R	O			
Hart's tongue Fern <i>Asplenium scolopendrium</i>					F			
Soft shield fern <i>Polystichum setiferum</i>					F			

10. WWBIC Data Search

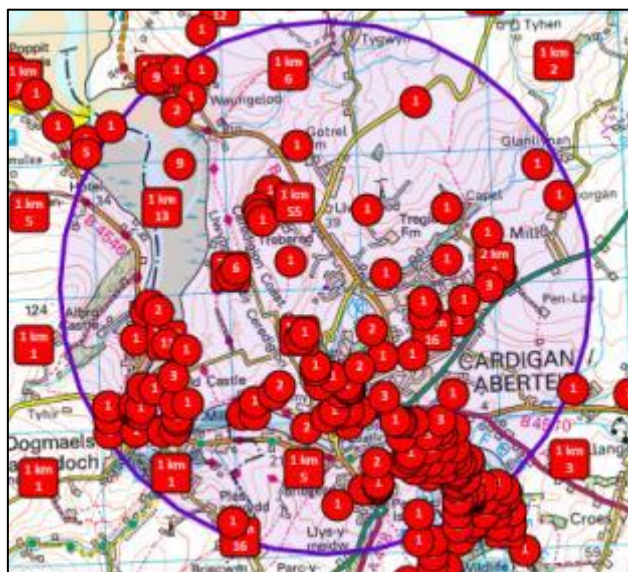
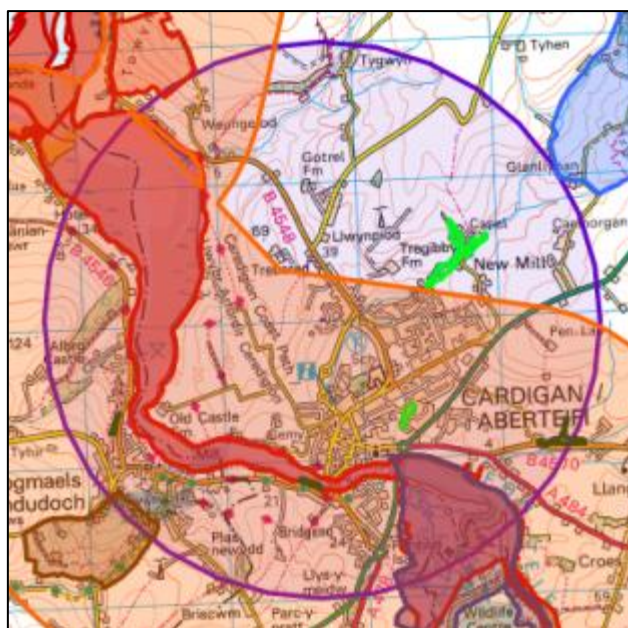


Fig. 14. Protected Species Data Search



Site Type	Key	Number of sites	Category	Intersection Area	Percentage of search area	Display clipped	Display full
Special Area of Conservation		1	International - Statutory	1,811,594 m ²	14.50%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Site of Special Scientific Interest		3	National - Statutory	1,823,145 m ²	14.59%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Regionally Important Geodiversity Site		1	Local - Non-statutory	40,004 m ²	0.32%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wildlife Trust Reserve		1	Local - Non-statutory	501,701 m ²	4.02%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ancient Semi Natural Woodland		3	Priority Area	16,204 m ²	0.13%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Restored Ancient Woodland Site		2	Priority Area	39,573 m ²	0.32%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NRW Priority Area (Lowland Wetland)		1	Priority Area	82 m ²	< 0.01%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B-Lines		1	Local - Non-statutory	8,851,513 m ²	70.85%	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fig. 15. Protected Sites & Priority Areas Data Search

Fig. 16 Phase 1 Habitat Plan.



Colour	Code	Description
1	B 4	Improved grassland
	J2.1.1	Native intact Hedgerow
	J4	Bare ground