



Preliminary Ecological Appraisal and Preliminary Roost Assessment

Field at Pentre Minera, Wrexham, LL11 3DW

Jayne Thomas

Status	Issue	Name	Date
Draft	1	Katy Perry BSc (Hons) MCIEEM, Senior Consultant	14/12/2023
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Arbtech Consultant's Contact Details:

Katy Perry
Senior Ecological Consultant
Tel: 07874071273 Email: katyperry@arbtech.co.uk
<https://arbtech.co.uk>

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation, and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary, and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate. The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Jayne Thomas to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Field at Pentre Minera, Wrexham, LL11 3DW (hereafter referred to as “the site”). The survey was required to inform a planning application for the change of use of existing pastoral fields into “doggy day care” fields and continued use of the barn as it is on site (hereafter referred to as “the proposed development”). Out of the three fields, the field furthest east will be retained at a longer sward length and used less frequently without dog toys, just for walking through. The other two fields will have a longer sward length than at present due to the waterlogged nature of the ground, without grazing, longer grass will prevent erosion to bare earth from the presence of dogs on the land. Cattle will no longer graze the fields.

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 7 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	There are two statutory sites within 2km of the site, the closest being Llantysilio Mountains and Minera Site of Special Scientific Interest (SSSI) located ~115m from the site.	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the location of the site with surrounding physical barriers.	None. There is no removal of habitats on site and there is not likely to be increased recreational pressure to sites in the area as dogs are being dropped off to be looked after during day-time hours.
Habitats and flora	There are no notable habitats within the site, but notable habitats are present within 2km of the site, with designated sites within 200m. The grasslands on site and all habitats present are to be retained. No protected or notable plant species were recorded during the survey.	No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the location of the site with surrounding physical barriers.	None as no habitats are due to be removed. However, the eastern field which has longer vegetation present and is more likely to support animals, it should be used less frequently or have a section fenced off to provide an undisturbed area for refuge.
Badger	There was no evidence of badgers observed on site, but evidence of deer was observed on site and therefore, if present, badgers could commute through the landscape.	No impacts are anticipated on badgers as a result of the proposed development.	None, however, due to the presence of mammals commuting in the landscape; The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers or commuting mammals could use.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Jayne Thomas to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Field at Pentre Minera, Wrexham, LL11 3DW (hereafter referred to as “the site”). The survey was required to inform a planning application for the change of use of existing pastoral fields into “doggy day care” fields and continued use of the barn as it is on site (hereafter referred to as “the proposed development”). Out of the three fields, the field furthest east will be retained at a longer sward length and used less frequently without dog toys, just for walking through. The other two fields will have a longer sward length than at present due to the waterlogged nature of the ground, without grazing, longer grass will prevent erosion to bare earth from the presence of dogs on the land. Cattle will no longer graze the fields. A plan showing the proposed development is not provided in Appendix 1 as there will be no changes to the site.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging, or commuting.

No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author’s knowledge, by any other consultancy.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SJ 26621 51423 and has an area of approximately 1ha comprising a residential dwelling, outbuildings, scattered trees, and amenity fields. It is surrounded by agricultural land and scattered residential dwellings with a woodland to the west and east, with Minera Quarry Nature Reserve to the north-east and the river Clywedog to the north. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

The PEA element of this report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

The PRA element of this report provides a description of all features suitable for roosting, foraging, and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.

- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species, including roosting bats.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of the magic.gov.uk database for statutory designated sites. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

2.2 Field Survey

The survey was undertaken by Katy Perry BSc (Hons) MCIEEM, Senior Consultant (Natural England Bat Licence Number: 2022-10404-CL18-BAT)) on 14th November 2023.

Preliminary Ecological Appraisal

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure, and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

Ponds on and adjacent to the site were assessed for their suitability to support great crested newts using the *Habitat Suitability Index (HSI) Assessment Methodology* (Oldham et al, 2000).

Preliminary Roost Assessment

The PRA focussed on one built structure which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging, and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the building for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the building was also made, including the living areas and any accessible roof spaces, using a torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

Suitability Assessment

Built structures were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low, and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats.

Classification	Feature of building and its context
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
Moderate	A structure with one of more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. maternity or classic cool/stable hibernation site.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood. The site is steep and has stock proof fencing around the perimeter of each of the fields. There is no access to the top of the site to the access road or the adjacent fields, but the waterbody to the south-east of the site was able to be viewed.

There were no specific limitations to the survey.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 2 below.

Table 2: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural Resources Wales and COFNOD and United Nations Educational, Scientific and Cultural Organisation (UNESCO)
Llantysilio Mountains and Minera Site of Special Scientific Interest (SSSI)	116m to the south	The site is notified firstly on biological grounds, for its heather moor, limestone, and neutral grassland habitats and for its species interest comprising a range of upland breeding birds, rare and uncommon plants and the use of mines and caves by bats. The site is also notified on geological grounds as it contains three sites of special interest within its boundaries.
Berwyn and South Clwyd Mountains Special Area of Conservation (SAC)	~116m to the south and west	Presence of blanket bogs, Calcareous and calcshist screes of the montane to alpine levels, Calcareous rocky slopes with chasmophytic vegetation, European dry heaths, Semi-natural dry grasslands, and scrubland facies: on calcareous substrates (<i>Festuco Brometalia</i>) and Transition mires and quaking bogs.

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 3.

Table 3: Weather conditions during the survey

Date:	14/11/2023
Temperature	10°C
Humidity	56%
Cloud Cover	50%
Wind	1mph
Rain	None

Habitats and Flora

The following habitats are present within and adjacent to the site:

- Buildings – u1b5
- Hard standing – u1b
- Native hedgerows with scattered trees – h2a
- Bracken – g1c
- Bramble and nettle scrub – h3d

- Lolium-cynosurus neutral grassland – g3c6
- Holcus-juncus neutral grassland – g3c8

A description and photograph of each habitat is provided in Table 4.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 4: Description and photographs of habitats within and adjacent to the site

Habitat Type	Habitat description	Photograph
Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	The north of the site has a number of buildings, of which only one – B1, shown opposite, is included within the redline boundary. The metal barn is to be retained and be used for the “doggy day care” without any external modifications to it. The building is assessed for its suitability for roosting bats in the table below. Around the perimeter of the building is hard core aggregate for access and parking at the site. The hard standing has negligible ecological value.	

Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	There are three fields which will be used for the “doggy day care” walks and activities. These are all steep sloped grass fields, of which the two most western fields were previously grazed by cattle and have been maintained to a short sward length, of less than 10cm, as shown in the image opposite. The composition includes predominantly perennial rye grass, and Yorkshire fog dominating the fields, frequent creeping buttercup, dandelion, thistles and occasional willowherb, and rushes. The fields will be left to grow to a longer sward length in order to prevent erosion of the grass from the presence of dogs on the fields. Without grazing this should improve the grassland to include visibly flowering species.	
Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	The two shortly grazed fields are connected with stock proof fencing around the perimeter. Along the boundaries there are hedgerows which include scattered trees. The hedgerows comprise hazel and holly predominantly and have ash, birch, and oak. The trees are to be retained on site as the hedgerows which run between the fields are fenced off.	

Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	The field furthest south-east within the site boundary has longer vegetation present. There are most rushes within the grass and there are large sections of bracken present throughout the field with some gorse interspersed occasionally. The field has some moderate suitability for supporting small mammals and there were deer droppings observed to the north-west of the field. The field is to be retained with long vegetation bar the pathway through the middle of the field where shorter vegetation is present already.	
Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	To the north-west of the site, and within the middle of the two western fields, there are patches of bramble, nettle, and bracken, as shown in the image opposite. These overgrown areas around the edges and hedges of the site are to be kept longer, in particular around the bases of the hedgerows.	

Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	Outside of the red line boundary, on mapping there is a pond present to the north-east. This is fed by running water from storm water and inclement weather from the hills above. The pond is heavily shaded and has running water which reduces its suitability for supporting great crested newts, if present in the local landscape.	
Buildings – u1b5 Hard standing – u1b Native hedgerows with scattered trees – h2a Bracken – g1c Bramble and nettle scrub – h3d Lolium-cynosurus neutral grassland – g3c6 Holcus-juncus neutral grassland – g3c8	To the south of the bracken and rush dominated field, there are deer droppings present in the longer vegetation. Evidence of rabbits was observed across the entire site too. No other evidence of mammals was observed on site.	

Fauna

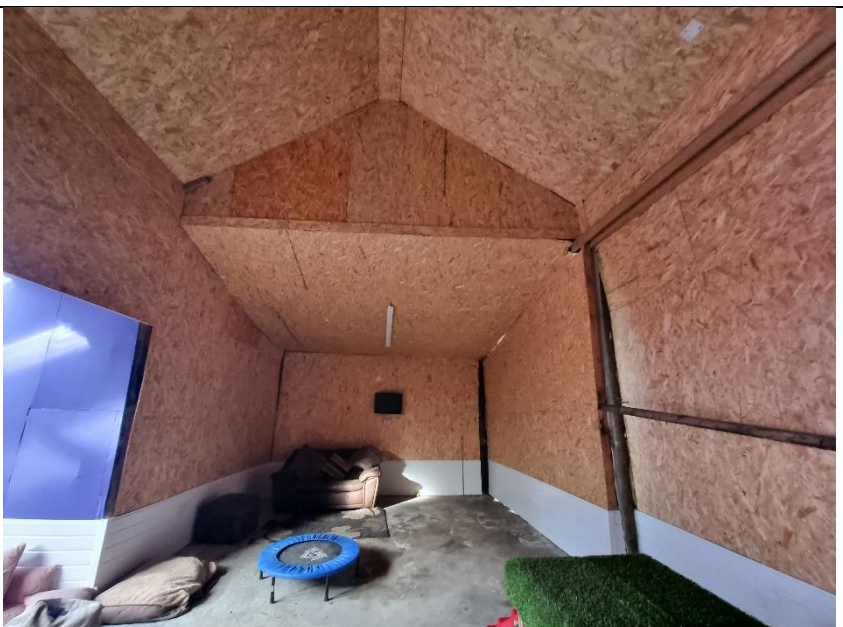
Bats

The results of the PRA are provided in Table 5. No evidence of roosting bats was identified during the survey.

Table 5: Assessment of the suitability of the site for bats

Feature	Description	Photographs
Bat foraging and commuting habitat	MAGIC maps does not provide insight to bat licences in Wales. However, the habitat surrounding the site has moderate to high value for supporting foraging and commuting bats in the surrounding landscape. With running water in the landscape and woodlands present to the east and west, there is suitable habitat for foraging. In addition, grazed fields and cattle provide insects where dung is present.	
B1 - overview	B1 is a detached metal sided, and metal sheet roof barn structure. There are long sloped single-storey extensions to the north-east and a pitched roof to the south-west, with a connected internal space. The windows and doors of the building are UPVC and secure with no gaps around the frames.	

B1 – north-eastern and south-eastern elevation	The metal corrugated panels on the sides of B1 and the roof are interlocking and secure with no gaps or means of ingress around the sides. The UPVC windows and doors are secured into the metal walls with wooden frames and expanding foam with no gaps around that would allow any ingress and no gaps are present.	
B1 – south-western elevation	The metal roof slopes downwards to the metal sheet walls. On the south-western corner there is some stone wall present which is exposed, but the mortar between the stones is present. Within the roof there are clear plastic inserts, as seen in the left-hand corner of the photograph, which allows light into the building within. The metal roof is in very good condition with a secure ridgeline and no gaps present.	

B1 – interior	The large UPVC windows and doors allow a large amount of light within the interior of the building, reducing its suitability for supporting roosting bats. There is no loft space within the building, there are vaulted ceilings, either exposed metal as shown opposite or cladding with plywood.	
B1 – interior	The interior is secure and there was no evidence of bats observed within the building, with no droppings or feeding remains seen within.	

B1 – interior	The clear inserts within the roof of the building allow for high lux levels within the building, as shown opposite.	
B1 – suitability assessment	There was no evidence of roosting bats, nor suitable features bats could utilise on the building. In the overhang by the entrance there was an old swift nest present. The building has negligible value for supporting roosting bats and it is not due to be impacted or altered by the proposed works.	

Other Species

An assessment of the suitability of the site for protected or notable species is provided in Table 6.

Table 6: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability
Amphibians	The two fields present to the west of the site have short, grazed grass which is of low suitability for supporting great crested newts and amphibians in general. There is a pond present to the north-east, outside the site boundary, but it is heavily shaded, and it has running water flowing in and out of it from the hills present on and around the site, reducing its suitability for supporting amphibians. The heavily shaded pond has no submergent vegetation present within the pond for egg-laying and is unlikely to support egg-laying newts. The pond and landscape could still support common amphibians such as toads. The field to the east of the site with longer vegetation is more suited for amphibians commuting through the landscape. None of the habitats are to be removed as part of the proposals, but the grass is to be retained and on the two western fields, it is due to left to get longer, which is likely to enhance the habitats for amphibians. The site will be used for “doggy day care” between 9am and 2pm and therefore any crepuscular or nocturnal commuting from amphibians is not due to be impacted.
Reptiles	The field furthest east has long bracken and gorse present which offers suitable sheltering opportunities for reptiles if present in the landscape. The current fields and vegetation are managed to a short sward length which offers little suitability for insects and therefore foraging opportunities. The habitats on site are to be retained, with a usable path through the field to allow safe access for dogs and walkers. The site will be used for “doggy day care” between 9am and 2pm and therefore any crepuscular or nocturnal commuting from reptiles is not due to be impacted. The vegetation will increase in sward length across the site, improving the suitability of the site. The field furthest east will not be used for toy play but only for walking through to retain the longer vegetation within.
Badgers	There was no evidence of badgers present on site. No strong mammal paths or prints were observed in any of the exposed earth on site. No hairs were present within the stock proof fencing and no visible push-throughs were observed under the fencing. In addition, no sett entrances were seen across the entire site.
Hazel Dormouse	The site lacks the suitable connected woodland and hedgerow canopy cover for supporting dormice and lacks connectivity to any larger woodlands in the landscape that may support dormice. Therefore, dormice are not considered to be present on site or present a constraint to the site. In addition, hedgerows and trees around the site perimeter are being retained as part of the proposals.
Hedgehog	The hedgerows and scrub on site and around the perimeter could support hedgehogs. The proposals will allow for an increase in sward length of vegetation on site and no removal of suitable habitats and therefore no impacts to hedgehogs are anticipated.
Otter and water vole	There is a river over 295m north of the site. There is no riparian habitat connectivity between the site and the river. There are no watercourses on or adjacent to site and therefore no anticipated impact on riparian mammals.
Birds	The site is very steep sloped, and two of the three fields are short, grazed fields and unlikely to support ground nesting birds. The site lacks arable or heath which support ground nesting birds. The hedgerows and scattered trees around the site perimeter are to be retained.
Invertebrates	The site has some suitability for supporting invertebrates and the proposals do not include the removal of any habitats.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in Appendix 4.

Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e. the area covered by the desk study and field survey), and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

4.2 Evaluation

Taking the desk study and field survey results into account, Table 7 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the change of use of the fields for “doggy day care”.

Table 7: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Opportunities ¹ Enhancement
Designated sites	There are two statutory sites within 2km of the site, the closest being Llantysilio Mountains and Minera Site of Special Scientific Interest (SSSI) located ~115m from the site.	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the location of the site with surrounding physical barriers.	None. There is no removal of habitats on site and there is not likely to be increased recreational pressure to sites in the area as dogs are being dropped off to be looked after during day-time hours.	None.
Habitats and flora	There are no notable habitats within the site, but notable habitats are present within 2km of the site, with designated sites within 200m. The grasslands on site and all	No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the location of the site with surrounding physical barriers.	None as no habitats are due to be removed. However, the eastern field which has longer vegetation present and is more likely to support animals, it should be used less frequently or have a section fenced off to provide an undisturbed area for refuge.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development: Enhancing the existing hedgerows around the site with supplementary planting

¹ The Local Planning Authority has a duty to ask for enhancements under the Planning Policy Wales (2021).

	habitats present are to be retained. No protected or notable plant species were recorded during the survey.			of native fruiting and flowering species A small section of the eastern field should be fenced off to retain an undisturbed section to support animals within the landscape. Species-specific enhancement opportunities are detailed later in this table.
Amphibians	The two eastern fields have short vegetation of low suitability for supporting amphibians. The pond closest to site has low suitability for supporting GCN being shaded, having flowing water and no submergent vegetation. There are no habitats to be removed on site as part of the proposed works.	No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be likely absent from the site. The site will be used between 9am-2pm by dogs and humans walking through the fields, predominantly the western fields. The grass is to be left to grow longer in those fields to reduce the likelihood of erosion of the grass through use of the fields.	None as no habitats are due to be removed. However, the eastern field which has longer vegetation present and is more likely to support animals, it should be used less frequently or have a section fenced off to provide an undisturbed area for refuge.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for amphibians: Brash and logs should be retained on site along the hedgerows to create refugia for amphibians on site.
Reptiles	The two western fields have reduced suitability for supporting reptiles in the landscape. The eastern field with long bracken and tussocky vegetation has moderate value for supporting reptiles.	No impacts are anticipated on reptiles as a result of the proposed development with no habitats being removed on site. The eastern field has longer vegetation which could support reptiles if present in the landscape, but will be used at a reduced rate to the western fields, will retain the longer vegetation and will only be subject to some disturbance from 9am-2pm.	None as no habitats are due to be removed. However, the eastern field which has longer vegetation present and is more likely to support animals, it should be used less frequently or have a section fenced off to provide an undisturbed area for refuge.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles: - Brash and logs should be retained on site along the hedgerows to create refugia for reptiles on site. - A section or area of the eastern field should be fenced off for refuge for animals due to the higher value of the field with the presence of bracken and taller vegetation for refuge.

Roosting bats (B1)	Building 1 has negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on roosting bats as the building is to be retained and unimpacted.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on mature trees around the site or any of the buildings on site. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice or cavity dwelling bats such as NHBS Improved crevice or cavity boxes, Beaumaris or Vivara Pro or a similar alternative brand.
Foraging and commuting bats	Scattered trees and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development will not include the use of lighting which could spill on to bat roosting, foraging, or commuting habitat and deter bats from using these areas.	None as no habitats are being removed and no lighting will be installed or present on site overnight. If lighting is required: • Light spill on perimeter vegetation should be avoided. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers, and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimnable' and set to the lowest	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • Enhancing the existing hedgerows around the site with supplementary planting of native fruiting and flowering species

			light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	
Badger	There was no evidence of badgers observed on site, but evidence of deer was observed on site and therefore, if present, badgers could commute through the landscape.	No impacts are anticipated on badgers as a result of the proposed development.	None, however, due to the presence of mammals commuting in the landscape; The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers or commuting mammals could use.	None.
Hazel dormouse	The site is unlikely to support dormice with a lack of suitable connective canopy from hedgerows and trees on site and a lack of connectivity to larger woodlands in the landscape.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.
Hedgehog	Hedgehogs could utilise the hedgerows and scrub on and around the site, but no vegetation is to be removed as part of the proposals.	No impacts are anticipated on hedgehogs as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: - Brash and logs should be retained on site along the hedgerows to create refugia for mammals on site. - Gaps in fences and under fences should be installed that allow hedgehogs to commute but keep the dogs secure.

Otter and water vole	The nearest river is over 290m north of the site with no connectivity or riparian habitats between the site and the river.	No impacts are anticipated on otters or water voles as a result of the proposed development.	None.	None.
Birds	The proposed works is not due to remove any vegetation on site. The proposed site will be subject to disturbance from dogs between 9am and 2pm, however, the fields will have been used for grazing cattle previously.	No impacts are anticipated on nesting birds as a result of the proposed development.	None as no vegetation is to be removed.	The installation of three bird boxes at the site will provide additional nesting habitat for birds. The bird boxes will be installed on mature trees around the site or any buildings. General purpose bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain, and strong sunlight. Species-specific bird boxes should be installed in line with manufacturers specifications. For example, swift and swallow cups should be installed on B1. A section or area of the eastern field should be fenced off for refuge for animals due to the higher value of the field with the presence of bracken and taller vegetation for refuge.
Invertebrates	No habitats are being removed as part of the proposed works.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • The western fields will have a longer sward length which could result in flowering plants improving the suitability on site. • Fruiting and flowering hedgerow species to be planted.

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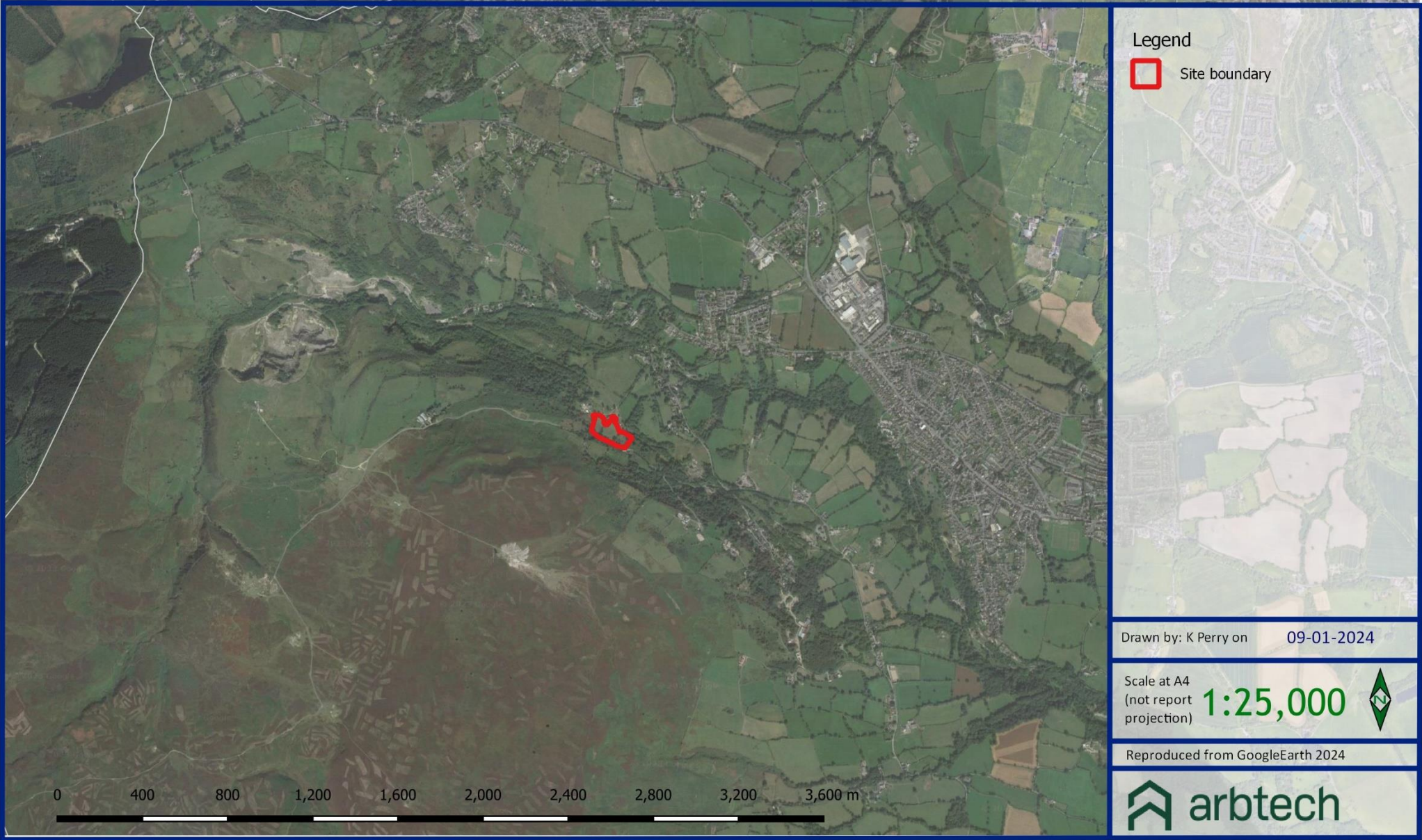
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Appendix 1: Proposed Development Plan

Not available at the time of writing this report.

Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



Appendix 3b: PRA Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as “*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres*”.

However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites.

The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education, and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies, or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure, or take a badger.
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof.
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof.
- Intentionally or recklessly disturb a badger when it is occupying a badger sett.

- Intentionally or recklessly cause a dog to enter a badger sett.
- Sell or offers for sale, possesses, or has under his control, a live badger.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural Resources Wales) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests, and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure, or take any wild bird.
- Intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy an egg of any wild bird.
- Sell, offer, or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young.
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species.
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate.
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA, and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering, or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard, and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure, or take (capture) water voles.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection.
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural Resources Wales) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species.
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate.
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches, or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate.
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species.
- Deliberate disturbance of species in such a way as:

- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate.
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking.
- Protected against selling, offering, or advertising for sale, possessing or transporting for the purpose of sale.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural Resources Wales) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, crush, drown, drag, or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering, or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
 - Deliberately pick, collect, cut, uproot, or destroy a wild Schedule 5 species.
 - Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural Resources Wales) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation of Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain ‘injurious weeds’ including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY***Environment (Wales) Act 2016 and the Biodiversity Duty***

The Environment (Wales) Act 2016 introduces a new biodiversity duty, which highlights biodiversity as an essential component of ecosystem resilience. This new duty replaces the biodiversity duty in the Natural Environment and Rural Communities Act 2006 (referred to as the NERC Act). Part 1 of the Act deals with Sustainable management of natural resources including Biodiversity and Resilience of Ecosystems Duty. The Environment Act enhances the current NERC Act duty to require all public authorities, when carrying out their functions in Wales, to seek to “maintain and enhance biodiversity” where it is within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”. As under the NERC Act the new duty will apply to a range of public authorities such as the Welsh Ministers, local authorities, public bodies, and statutory undertakers. This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long-term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

Planning Policy Wales (2021)

Paragraph 6.4.3 of the document refers to Biodiversity and Ecological Networks and states:

The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. Information contained in SoNaRR, Area Statements and species records from Local Environmental Record Centres should be taken into account. Development plan strategies, policies and development proposals must consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;
- ensure statutorily and non-statutorily designated sites are properly protected and managed;
- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent, and connectivity of ecological networks.

Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. Planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

- a) Diversity between and within ecosystems;

- b) The connections between and within ecosystems;
- c) The scale of ecosystems;
- d) The condition of ecosystems (including their structure and functioning); and
- e) The adaptability of ecosystems.

In fulfilling this duty, planning authorities must have regard to:

- a) The list of habitats of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016;
- b) The State of Natural Resources Report (SoNaRR), published by NRW; and
- c) Any Area Statement that covers all or part of the area in which the authority exercises its functions.

Planning Authorities should also refer to up to date ecological survey information (where appropriate).

A proactive approach towards facilitating the delivery of biodiversity and resilience outcomes should be taken by all those participating in the planning process. In particular, planning authorities should demonstrate that they have sought to fulfil the duties and requirements of Section 6 of the Environment Act by taking all reasonable steps to maintain and enhance biodiversity in the exercise of their functions.

The broad framework for implementing the duty and building resilience through the planning system includes addressing:

- Diversity: to ensure mechanisms are in place to minimise further loss and that circumstances allow for species' populations to expand and recolonise their natural range (former range) or adapt to future change. This means development should provide a net benefit for biodiversity, and at the very least, with no significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity;
- Extent: to ensure mechanisms allow for the maintenance of existing assets and networks and promote the restoration of damaged, modified, or potential habitat and the creation of new habitat. This means that planning choices should incorporate measures which seek the creation and restoration of green networks and linkages between habitats and maintaining and enhancing other green infrastructure features and networks;
- Condition: Ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services. Planning decisions should not compromise the condition of ecosystems. By taking an integrated approach to development, for example, which considers both direct and wider impacts and benefits it should be possible to make a positive contribution. Planning for the long-term management of retained habitats is key to maintaining condition through for example, the use of planning obligations;
- Connectivity: to take opportunities to develop functional habitat and ecological networks within and between ecosystems and across landscapes, building on existing connectivity and quality and encouraging habitat creation, restoration, and appropriate management. The opportunities could include enlarging habitat areas, developing buffers around designated sites or other biodiversity assets or corridors, including transport and river corridors, and the creation of 'stepping stones' which will strengthen the ability of habitats and ecological networks to adapt to change, including climate change; and

- Adaptability to change: primarily in the form of climate change, for both species (diversity) and ecosystems requires action to protect the extent, condition and connectivity of habitats, features, and ecological networks. Development plans, planning proposals and applications which build on protecting designated sites and securing and enhancing green infrastructure will be key ways of addressing the attributes of ecosystems resilience identified in the Environment Act as well as facilitating social and economic resilience aspirations of the Well-being of Future Generations Act.

Good Practice Guide GPG 3 (October 2015) NRW Approach to Bats and Planning

As explained in Planning Policy Wales (Chapter 5 - Conserving and Improving Natural Heritage and the Coast), the presence of a European protected species is a material consideration for a development proposal that would be likely to result in disturbance or harm to the species or its breeding sites or resting places. Planning Policy Wales also explains that planning authorities should seek the advice of Natural Resources Wales for all planning applications likely to result in disturbance or harm to bats and should always consult them before granting permission. Local Planning Authorities address this by screening applications to identify when there is a reasonable likelihood that bats may be present and, therefore, when to require a bat survey and report that will confirm if bats are present and if they likely to be disturbed or harmed by the proposal. The overall requirement on Local Planning Authorities, Natural Resources Wales and developers is to avoid harm or disturbance to bats and their breeding sites and resting places, unless Natural Resources Wales has given a licence to allow the harm or disturbance. Natural Resources Wales may only give a licence if the requirements for derogation are met, including that disturbance or harm to individual bats (or to their breeding sites and resting places) would not be detrimental to the maintenance of the population.