
National Road BESS
on behalf of REWE 2 Ltd
Ecological Assessment Report



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1 INTRODUCTION

1.1 Background

- 1.1.1 Avian Ecology Limited (AEL) was commissioned by REWE 2 Ltd to undertake an Ecological Assessment in relation to a proposed Battery Energy Storage System (BESS) with Associated Infrastructure, Earthworks including On-Site Substation, Access, Drainage and Landscaping and Underground Cable Route Connection (hereafter referred to as the 'Proposed Development') on Land North and South of National Road, Cilfynydd, Pontypridd (the 'Site'), as shown on **Figure 1**.
- 1.1.2 The aims of this Ecological Assessment are to assess the conservation value of the Site, the likely presence of rare or protected and notable species, and to identify any features, habitats or species that would constitute potential constraints to the proposed development. Mitigation and proposed enhancement measures are also discussed where relevant.

1.2 Site Overview

- 1.2.1 The Site covers an area of approximately 24.3 ha and comprises three core areas hereafter referred to as North Site, South Site and Cable Corridor. North Site (excluding access) covers an area of c. 5.7ha, located at grid reference ST0928093564, with development to comprise battery storage and associated infrastructure. South Site covers an area of c. 2.4ha, located at grid reference ST0968493308 with development to comprise of a HV substation. The Cable Corridor covers the remaining area, with development to comprise installation of a buried 400kV cable, connecting into the Cilfynydd National Grid Substation. The Site is shown on **Figure 1**.
- 1.2.2 In the wider context, the Site is surrounded by farmland and woodland.

1.3 Scope of Appraisal

- 1.3.1 The objectives of this Ecological Assessment are to:
- Identify the proximity of any designated sites for nature conservation interest and provide an assessment of any potential effects the Proposed Development may have on these;
 - Provide baseline information on the current habitats and ecological features both within the Site and immediate surrounding area;
 - Identify the presence or potential presence of any protected species or habitats and provide an Assessment of any potential effects the proposed development may have on these; and,
 - Provide recommendations for further pre-construction checks and / or mitigation measures, if required.
- 1.3.2 The Assessment has comprised a desk study review of existing ecological information for the Site and surrounding area, together with an extended habitat survey and preliminary bat roost assessment.
- 1.3.3 Only common species names have been used throughout the Assessment, scientific names are presented in **Appendix 2**.

1.4 Legislative Framework, Planning Policy and Guidance

- 1.4.1 During the preparation of this report, reference has been made to the following key pieces of legislation, planning policy and guidance listed in **Table 1.1** below.

Table 1.1: Key legislation, planning policy and guidance.

International
• Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (hereafter referred to as the ‘the Ramsar Convention’)¹; • Convention on the Conservation of European Wildlife and Natural Habitats 1979 (hereafter referred to as the ‘the Bern Convention’²; and, • UNESCO convention on the protection of the World Cultural and Natural Heritage (1972)³.
National
• Countryside and Rights of Way Act 2000; • Hedgerow Regulations 1997; • Infrastructure Act 2015; • Natural Environment and Rural Communities (NERC) Act (2006); • Protection of Badgers Act 1992; • The ‘Conservation of Habitats and Species Regulations 2017 (as amended); • The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019; • Environment (Wales) Act 2016; • The Invasive Alien Species (Enforcement and Permitting) Order 2019; • The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (hereafter referred to as the EIA Regulations); • The Wildlife and Countryside Act 1981 (as amended); • Biodiversity Net Gain. Good practice principles for development; • BS 42020:2013 Biodiversity – Code of Practice for Planning and Development; • BS 8683:2021 Process for Designing and Implementing Biodiversity Net Gain – Specification; • Planning Policy Wales (2024); • Future Wales: The National Plan, 2040; and, • The United Kingdom Biodiversity Action Plan (UK BAP).
Local
• Rhondda Cynon Taf Local Development Plan 2006-2021⁴ • Rhondda Cynon Taf Supplementary Planning guidance: Nature Conservation⁵ • Rhondda Cynon Taf Action for Nature Plan (LBAP)⁶

¹ <https://www.ramsar.org/>

² <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104>

³ <https://whc.unesco.org/en/convention/>

⁴

<https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/RelateddocumentsLDP20062021/AdoptedLocalDevelopmentPlan.pdf>

⁵

<https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/RelateddocumentsSupplementaryplanningGuidanc/NatureConservationSPG.pdf>

⁶ <https://rctlnp.wixsite.com/rct-actionfornature>

- 1.4.2 The Conservation of Habitats and Species Regulations 2017 (as amended) remains in place following the United Kingdom's (UK's) withdrawal from the European Union (EU) with only relatively minor changes coming into force on 31st December 2020, with the 2017 regulations being transposed into national (England and Wales) legislation via the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 which came into force on 31st December 2020. They are hereafter referred to as the 'Habitats Regulations'.
- 1.4.3 The 'UK Post-2010 Biodiversity Framework' succeeds the UK Biodiversity Action Plan (UK BAP) and 'Conserving Biodiversity – the UK Approach'. The lists of priority species and habitats agreed under UK BAP still form the basis of much biodiversity work and are therefore considered within this report in the context of the objectives of the Biodiversity Framework. BAPs identify habitats and species of nature conservation priority on a UK (UK BAP) and Local (LBAP) scale. UK BAPs formed the basis for statutory lists of priority species and habitats in Wales under Section 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006 (then replaced by Section 7 of the Environment (Wales) Act 2016), and so are also relevant in the context of this legislation.
- 1.4.4 This report is provided in accordance with the provisions of British Standard 42020:2013 Biodiversity: Code of Practice for Planning and Development.

⁷ [https://www.caerphilly.gov.uk/business/planning-and-building-control-for-business/local-development-plan/local-development-plan-2010-\(adopted\)](https://www.caerphilly.gov.uk/business/planning-and-building-control-for-business/local-development-plan/local-development-plan-2010-(adopted))

2 METHODOLOGY

2.1 Desk Study

2.1.1 A desk study was undertaken to identify existing information on the presence of designated sites for nature conservation, protected and notable species and habitats within 2km of the Site centroid (SP69672251) as follows:

- Statutory designated sites for nature conservation, within 5km of the Site, extended to 10km for internationally designated sites with mobile qualifying features;
- Non-statutory designated sites for nature conservation within 2km of the Site; and,
- Existing records of protected and notable faunal species, within 2km of the Site (dated within the last 10 years).

2.1.2 The following key sources were consulted:

- Natural Resource Wales (NRW) website⁸;
- Welsh Government Data Map website⁹;
- The Multi Agency Geographic Information for the Countryside (MAGIC) website¹⁰;
- The Woodland Trust Ancient Tree Inventory website¹¹;
- National Biodiversity Network (NBN) Atlas¹²;
- South East Wales Biodiversity Records Centre (SEWBReC)¹³; and,
- Rhonda Cynon Taf Local Development Plan Supplementary Planning Guidance: Nature conservation (2008).

2.1.3 Reference was also made to Ordnance Survey maps of the wider area and online aerial images (www.google.co.uk/maps) in order to determine any features of nature conservation interest in the wider area, including potential ponds.

2.2 Preliminary Ecological Appraisal

2.2.1 A Preliminary Ecological Appraisal (PEA) of the Site was undertaken on 8th December 2022 by K. Love MSc, a suitably qualified ecologist.

2.2.2 The objective of the PEA was to undertake a high level appraisal of the habitats present and identify any ecological constraints present or potentially present that may require further survey.

2.3 Extended Habitat Survey

2.3.1 An extended habitat survey of the Site was undertaken on 14th June 2023 by S Turner MSc and C Dean PhD and on 18th September 2024 by C Dean PhD, both suitably competent and qualified ecologist.

⁸ <https://naturalresources.wales/>

⁹ <https://datamap.gov.wales/>

¹⁰ <https://magic.defra.gov.uk/MagicMap.aspx>

¹¹ Woodland Trust Ancient Tree Inventory <https://ati.woodlandtrust.org.uk/>

¹² NBN Atlas <https://nbnatlas.org/>

¹³ www.sewbrec.org.uk

- 2.3.2 Habitats were recorded and mapped in accordance with the methodology described within the *UK Habitat Classification Manual Version 1.1* (UK Habitat Classification Working Group. 2020¹⁴). All habitats were mapped and described using a series of 'target notes' (TNs) to the highest level of UK habitat classification as possible, with each individual habitat feature being assigned to a primary habitat and then described with secondary codes if applicable.
- 2.3.3 The survey was extended to include the additional recording of specific features indicating the presence, or likely presence, of protected species, invasive species and other species of conservation significance.
- 2.3.4 The extent of the Site and habitats as surveyed is shown on **Figure 4**, with accompanying photographs in **Appendix 1**.

Ground Level Tree Assessment

- 2.3.5 Trees within the Site, as defined by the Site boundary (Figure 1), were assessed for their suitability to support roosting bats by way of Ground Level Tree Assessment (GLTA) in accordance with Bat Conservation Trust guidance (Collins, 2023¹⁵). Suitability for roosting bats was classified as follows (from Tables 4.2 and 6.2):
- None: Either no Potential Roost Feature (PRF) in the tree or highly unlikely to be any
 - FAR: Further assessment required to establish if PRF's are present in the tree
 - PRF: A tree with at least one PRF present
 - PRF- I: PRF is only suitable for individual bats or very small numbers of bats due to size or lack of suitable surrounding habitats.
 - PRF- M: PRF is suitable for multiple bats and may therefore be used by a maternity colony.

2.4 Limitations

Desk Study

- 2.4.1 A desk study does not identify a comprehensive account of all species and features of ecological importance within the study area, however it improves the understanding of the Sites ecological value and the likely species and habitats within the area.
- 2.4.2 The data request to SWEBRC utilised an earlier area of the planning boundary and as such some areas on the edge of the search radius have not been subject to a local records request. The additional area not included in the local record request is equivalent to approximately 8% of the total 2km search area and primarily encompasses the urban areas of Nelson and Glyncoch, and as such is not considered likely to be of high biodiversity value, and the absence of these areas from the local records search is not considered a significant limitation to the assessment.

Preliminary Ecological Appraisal

- 2.4.3 The PEA was undertaken in December, and therefore outside of the optimal period for botanical surveys (approximately April to September). The objectives of the survey were not to undertake a detail habitat survey, but to broadly identify the habitats present and the need for future surveys, and

¹⁴ <https://ukhab.org/ukhab-documentation/>

¹⁵ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London.

therefore the timing is not considered a limitation to the objectives of the PEA survey, particularly given follow up surveys undertaken at an optimal time of year, discussed below.

UKHab Survey

- 2.4.4 The habitat survey visits were undertaken in June 2023 and September 2024, and therefore within the optimal period for botanical surveys (approximately April to September). As such, the timing of the visits is not considered a limitation to the survey.
- 2.4.5 The cable route to connect to Cilfynydd Substation is proposed to be taken through private land to the east of the development parcels. For the proposed cable corridor, an assessment has been made of these areas based on an understanding of the wider area alongside a review of imagery and OS mapping. All areas are proposed to be subject to a pre-works check prior to commencement.

Ground Level Tree Assessment

- 2.4.6 The assessment of bat roosting potential was originally undertaken using Collins (2016)¹⁶ guidance as applicable at the time surveys were undertaken. This guidance has since been superseded in October 2023, and as such definitions have been updated to reflect this guidance.

¹⁶ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust, London.

3 BASELINE

3.1 Designated Sites for Nature Conservation

Statutory Designated Sites

- 3.1.1 This Section should be read with reference to **Figure 2**.
- 3.1.2 Nelson Bog Site of Special Scientific Interest (SSSI), located approximately 3km north-east of the Site, was the only statutory designated site for nature conservation located within 5km of the Site. No internationally designated sites for nature conservation with mobile qualifying features were located within 10km of the Site.
- 3.1.3 Nelson Bog SSSI is designated for the range of mire communities found; ranging from poor fen, mesotrophic grasslands, alder carr and upland oak woodland. It also has a varied ornithological interest, with over 90 species recorded.

Non-statutory Designated Sites

- 3.1.4 This Section should be read with reference to **Figure 3**.
- 3.1.5 A review of the data provided by SEWBRc confirms that the Proposed Development intersects Craig-Ecan Leyshon SINC.
- 3.1.6 The Site is also located immediately adjacent to the Cilfynydd Coal Tips 'Regionally Important Geodiversity Site' (RIGS), however as a geological designation RIGS are not considered further in this assessment.
- 3.1.7 A total of nine Sites of Importance for Nature Conservation (SINC) were identified within 2km of the Site. Details of these non-statutory designations are provided in **Table 3.1**.

Table 3.1: Non-statutory designated sites.

Site Name	Approximate Distance and Direction from Site	Description
Craig-Evan Leyshon Common SINC	Within the Site	Designated for habitat mosaics of bracken and acid grassland, also with heather heaths, marshy grassland, vegetating coal spoil tips, ancient woodland, alder woodland and the Nant Cae-dudwg stream. Offers excellent invertebrate habitat, as well as habitat for birds, bats and reptiles including adder.
Land at Tair Waun Uchaf Isaf and Cwmheldeg Farm SINC	400m east	Wooded valley and stream containing broadleaved woodland, some classified as ancient woodland, with an assemblage of semi-natural ground flora indicators.
Lower Cynon	620m west	A wide river with pool-riffle sequences supporting a range of bird species and otter. Includes bank-side habitats including wetland, willow and alder carr, floodplain grasslands and ponds.
Mynydd Eglwysilan, North of Senghenydd SINC	900m south	Extensive area of upland grazing pasture comprised of acid grassland, heath and marshy grassland; supporting a range of indicator species for each habitat type.

		A small area of broad-leaved ancient woodland is also present to the north.
Whitehall Golf Course SINC	1.1km north	Bracken, dry heath, acid grassland and semi-natural woodland along the course of an old railway line and disused quarries forming a mosaic of habitats within the golf course.
Mynydd Eglwysilian	1.18km south	Upland area of heath with acid grassland and bracken, and also including semi-natural ancient woodland
Coed Pen-y-parc	1.19km west	Primarily conifer plantation on ancient woodland sites but also with native broadleaved woodland, grassland and ponds.
Lower Clydach Woodlands	1.26km west	Section of the Nant Clydach woodland and associated semi-natural woodland and grassland habitats.
Pont Sion Norton Woodland and Ffridd	1.43km southwest	Valley-side woodland and upland fringe (ffridd) of bracken and acid grassland. Good nesting bird and reptile habitat.
Cwm Afon Railway Line, West of Nelson SINC	1.5km north	A disused railway embankment that supports semi-improved acid grassland pasture, with areas of bracken and species rich marshy grassland also present. The embankment is bordered by mature broad-leaved oak and beech trees. Large anthills are present within the grassland.
Lower Taf and Edwardsville SINC	1.5km north	No citation provided by SEWBRcC.
Craig-yr-Hesg / Lan Wood	1.6km south west	Extensive area of ancient semi-natural woodland supporting crags and old quarries.
Nant Cae-Dudwg Mire, North of Senghenydd SINC	1.6km east	Series of fields beside the Nant Cae-Dudwg stream containing a mix of marshy grassland and semi-improved acid grassland. Trees line the edge of the stream and water vole have been recorded along it in recent years.
Cwm Afon, West of Nelson SINC	1.7km north east	Field of semi-improved grassland and species-rich marshy grassland. The Nant Mafon stream forms the southwestern boundary.
Cwm Mafon SINC	1.8km north	Wet woodland along the course of the Nant Mafon. The wet woodland supports a rich ground flora. Included along the course are adjacent areas of marshy grassland, neutral grassland, bracken and scrub.
Nant Cae'r-Moel Swamp and Woodland, Senghenydd SINC	1.8km south	Nant Cae'r-Moel stream and surrounding habitats. Originating from a flush, the stream passes through areas of marshy grassland, disused quarries, acid grassland with heath, swamp and scattered trees/scrub.
Darren y Celyn	2km north	A mosaic of conifer plantation and heath offering good habitat for birds, reptiles and invertebrates

3.2 Priority Habitats – Existing Records

- 3.2.1 A review of Welsh government data map, SEWBRc data and aerial imagery identified 12 Priority Habitats listed under Section 7 of the Environment (Wales) Act 2016 within 2km of the Proposed Development. Of these, none were identified within either Site. Eight of the Priority Habitats are further listed under the Rhondda Cynon Taf Action for Nature Plan (LBAP).
- 3.2.2 Although not classified as a Priority Habitat, an area of the South Site was assessed as comprising rush pasture. This is discussed further in relation to on-Site habitats.
- 3.2.3 Review of Welsh government data map, SEWBRc data and aerial imagery identified the closest ancient/semi-natural woodland to be approximately 250m south/south-east of the South Site. Review of the Woodland Trust Ancient Tree Inventory¹⁷ identified no notable trees in or within 500m of the Proposed Development.
- 3.2.4 Information on Priority Habitats within 2km of the Proposed Development is presented in **Table 3.2** below. Where numerous records of a particular habitat were recorded, only the closest record to the Site has been provided, to provide context for the Proposed Development and surrounding area.

Table 3.2: Priority Habitats – existing records.

Priority habitat name	Designation	Approximate Distance from Site
Lowland Dry Acid Grassland	EWA S.7, LBAP	90m south-west
Purple Moor Grass and Rush Pasture	EWA S.7	210m north-east
Restored Ancient Woodland	AWI	250m south
Ancient Semi-natural Woodland	AWI	250m south/south-east
Open Mosaic on Previously Developed Land	EWA S.7	370m north-west
Traditional Orchard	EWA S.7	430m east
Blanket Bog	EWA S.7, LBAP	1.1km south/south-east
Upland Heath	EWA S.7, LBAP	1.1km south/south-east
Upland Flushes, Fens and Swamps	EWA S.7, LBAP	1.4km south-east
Raised Bog	EWA S.7, LBAP	1.4km south
Lowland Heathland	EWA S.7, LBAP	1.6km south-east
Marsh Fritillary Habitat	EWA S.7	1.6km east
Lowland Fens and Reedbeds	EWA S.7, LBAP	1.9km north-east
Wood Pasture	EWA S.7, LBAP	2km north-west

Key

EWA S.7: Section 7 of the Environment (Wales) Act (2016)

AWI: Ancient Woodland Inventory

LBAP: Rhondda Cynon Taf Action for Nature Plan

¹⁷ <https://ati.woodlandtrust.org.uk/>

3.3 Extended Habitat Survey

- 3.3.1 This section should be read in conjunction with the Habitat Plan presented as **Figure 4**, Target Notes (TNs) presented in **Table 3.3** and photographs presented in **Appendix 1**. The survey focused on the Proposed Development, and habitats within the vicinity.

North Site

- 3.3.2 Habitats comprised of modified grassland (UKHab code: g4), with boundary features of tree lines (w1g6), earth mounds and stone walls (both u1e) between the individual fields.
- 3.3.3 The modified grassland was grazed sheep pasture comprising of species; sweet vernal grass, Yorkshire fog, crested dog's-tail, creeping buttercup, white clover and creeping thistle.
- 3.3.4 Tree lines made up the southern and eastern Site boundaries, as well as two additional ones cutting through areas of the Site. The tree line that runs along the southern and east boundaries comprised birch, sycamore, ash, hazel, hawthorn and holly on a low earth bank that was previously a stone wall. Some of the trees were mature, with some sycamores of notable maturity (possibly veterans).
- 3.3.5 The tree line that runs north to south through part of the Site comprised scattered hawthorn, with mature sycamore and oak trees. The tree line that runs east to west through one of the fields comprised beech, hazel and hawthorn trees growing on an earth bank.
- 3.3.6 Access to the North site is via an existing track lined with bracken and grassland associated with Criag-Evan Leyshon Common SINC.
- 3.3.7 A secondary access track may be created from National Road using an existing access though an area of lowland mixed deciduous woodland (w1f) and then passing through two fields comprised of other lowland acid grassland (g1d) showing signs of agricultural improvement.
- 3.3.8 Species associated with other lowland acid grassland included bent grass, sweet vernal, sheep sorrel, ribwort plantain, white clover, creeping thistle, bracken, compact rush and occasional gorse. One of these fields was heavily grazed at the time of survey.
- 3.3.9 The woodland area followed National Road and consisted mature ash, birch, rowan, hawthorn, hazel and sessile oak, also with holly and bramble understory but little ground flora at the time of survey.

South Site

- 3.3.10 Habitats comprised of predominantly rush pasture (UKHab code: f2b), with an area of modified grassland (g4) to the west of the Site. A single tree line (w1g6) runs along part of the southern boundary. All other boundaries comprised stock fencing.
- 3.3.11 The rush pasture comprised predominantly soft rush, with patches of sharp-flowered rush, Yorkshire fog, crested dog's-tail, sweet vernal grass, rough stalked meadow grass, oval sedge, hairy sedge, glaucous sedge, yellow sedge, white clover, daisy, marsh thistle and black medick.
- 3.3.12 The tree line comprised hawthorn, holly, willow and hazel with scattered bramble.

Cable Corridor

- 3.3.13 Habitats comprised part of two fields recently ploughed at the time of survey (UKHab code: c1), a block of woodland the northern section of which consisted recently planted trees (UKHab code: w1g) and the southern section of which was mature (UKHab code: w1f), and two grassland fields, one of which was modified grassland grazed by sheep (UKHab code: g4) and the other rough grassland pasture with acid grassland indicators (UKHab code: g1d). The Cable Corridor also incorporates the existing

Cilfynydd Substation and surrounding habitats; whilst this land was not surveyed at the point of undertaking baseline habitat surveys, it is understood that the habitats consist of hardstanding within the substation and similar grassland to that described above within the surrounding area.

- 3.3.14 The area of lowland mixed deciduous woodland consisted predominantly of mature alder with some sycamore and oak, while the plantation area comprised young birch, alder, oak, hazel and *prunus sp.*
- 3.3.15 North-east of the woodland, the area of rough acid grassland comprised grazing pasture with species including common bent, sheep sorrel, foxglove, compact rush, sweet vernal grass, creeping thistle and nettle. North of this, the sheep grazed pasture was heavily improved with few forb species present.
- 3.3.16 Habitats within the substation are comprised entirely of hardstanding and built development, while surrounding grassland appears similar to adjacent surveyed other lowland acid grassland habitats, albeit with a higher coverage of bracken.

Table 3.3: Target Notes

Target Note	Comment
TN1	Notable mature sycamore. Diameter at chest height c. 1m. Some holes; PRF-I.
TN2	Notable mature oak. Diameter at chest height c. 2m. PRF-I.
TN3	Notable mature sycamore. Cracks present; PRF-I.
TN4	Notable mature sycamore. Holes present; PRF-I.

3.4 Protected and Notable Species

Birds

- 3.4.1 The SEWBrEC data search returned 834 records for 69 notable bird species within 2km of the Site during the last ten years. This includes eleven species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Schedule 1 species returned during the data search include barn owl, crossbill, hobby, merlin, fieldfare, peregrine, red kite, green sandpiper, goshawk, kingfisher and redwing.
- 3.4.2 The data return also included 27 species listed on Section 7 of the Environment (Wales) Act 2016. These species include black-headed gull, bullfinch, cuckoo, curlew, dunnoek, golden plover, grasshopper warbler, grey partridge, herring gull, house sparrow, kestrel, lapwing, lesser redpoll, lesser spotted woodpecker, linnet, pied flycatcher, reed bunting, ring ouzel, skylark, song thrush, spotted flycatcher, starling, tree pipit, willow tit, wood warbler, yellow wagtail and yellowhammer.
- 3.4.3 The data search also returned eighteen species listed as Red Listed BoCC and twenty species listed as Amber Listed BoCC.
- 3.4.4 Habitats within the Site are likely to support tree nesting species, such as woodpigeon, within the tree lines present. The open grassland fields could also support ground nesting species such as skylark and curlew, however intensive grazing reduces suitability for these species.

Bats

- 3.4.5 The SEWBrEC data search returned 19 bat records, consisting of 3 species and two other groups, within 2km of the Site. Records comprised common pipistrelle (7 records), soprano pipistrelle (6 records), Pipistrelle species (4 records), Brandt's bat (1 record), and unidentified bat species (1 record).

- 3.4.6 The majority of the records are from dwellings in the nearby villages of Abercynon and Glyncoch, located c. 1.5km north-west and c. 1.3km south-west of the Site respectively.
- 3.4.7 There are no built structures within either Site.
- 3.4.8 During the preliminary roost assessment and extended habitat survey, a number of the mature trees within the tree lines were considered to support potential roost features, including trees with PRF-I roosting potential. Notable trees are described within **Table 3.3** above.
- 3.4.9 Habitats within the Site are considered to most closely fit the description for land of 'moderate' interest for foraging bats in accordance with Bat Conservation Trust (BCT) guidance¹⁸, with continuous habitat connected to the wider landscape that could be used by bats for commuting and foraging such as lines of trees that is connected to the wider landscape. This value is primarily associated with boundary features including tree lines and stone walls, with the open grassland also likely to be used, to a lesser extent.
- 3.4.10 The linear features within and around the Site such as the tree lines and stone walls are considered to offer the most favourable habitats within the Site for foraging / commuting bats.

Badger

- 3.4.11 The SEWBrEC data search returned four records of badger from within 2km of the Site. The closest record was located c. 1.5km north-east of North Site, dating from 2018.
- 3.4.12 No evidence of badger was identified within the either Site during the extended habitat survey.
- 3.4.13 The Site provides good quality habitat foraging/commuting badgers, and to a lesser extent some suitable sett building opportunities, with stoney earth mounds, tree lines and grassland providing the most suitable habitat.

Hazel Dormouse

- 3.4.14 The SEWBrEC data search returned one record of hazel dormouse within 2km of the Site, however, it is worth noting that the description provided with the record states that this is not a confirmed record of hazel dormouse.
- 3.4.15 The Site were assessed for their potential to support hazel dormouse based on guidance outlined in the *Dormouse Conservation Handbook*¹⁹. The Site has habitat of limited suitability for foraging and hibernating hazel dormouse populations with moderate connectivity to any expansive woodland habitats in the wider area. The majority of the Site comprises open grassland of negligible value for the species, with the linear, boundary features of mature tree lines, with limited suitable food plants, considered species-poor and sub-optimal. With the lack of any confirmed records for the species in the wider environment, the likelihood of dormouse presence within the Site is low.

Otter

- 3.4.16 The SEWBrEC data search returned nine records of otter within 2km of the Site. The majority of these records were located along the River Taff to the west of the Site, being c. 800m away at its nearest point.

¹⁸ Bat Conservation Trust (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition).

¹⁹ Bright PW, Morris PA and Mitchell-Jones A. (2006). *Dormouse Conservation Handbook 2nd Edition*. English Nature, Peterborough.

- 3.4.17 No signs of otter presence were found during the extended habitat survey. The North Site and South Site offer very limited habitat suitability for otters, with no watercourses or wet ditches present, providing no opportunities for foraging and holt creation.
- 3.4.18 The source/ headwater of the Nant Ddu is located immediately west of the existing substation along the Cable Route, however is considered to be relatively isolated and of insufficient size and permanence to offer a foraging resource, and as such otter are unlikely to utilise this watercourse.
- 3.4.19 Otter could potentially use lower reaches of the Nant Ddu, located c. 100m east of the South Site, as a commuting route to other watercourses in the wider area, however this is considered sufficiently distanced from the Site and the species is not discussed further in this report.

Water Vole

- 3.4.20 The SEWBreC data search returned no records of water vole within 2km of the Site. A single historic record dating from 2000 was returned, located within rush pasture c. 900m east.
- 3.4.21 The Site has very limited habitat suitability for water vole, with no watercourses or wet ditches present within the North Site or South Site. The source/ headwater of the Nant Ddu is located immediately west of the existing substation along the Cable Route, however is considered to be isolated and of insufficient depth and permanence to support water vole. As a result, water vole is very unlikely to be present within the Site and the species is not discussed further in this report.

Amphibians

- 3.4.22 Data received from SEWBreC included one record of great crested newt within 2km of the Site. Other amphibian records within 2km include common toad (five records) and common frog (three records). No recent amphibian records were returned within the Site.
- 3.4.23 No ponds are located within the Site with no ponds identified within 500m of the Site, indicating great crested newt are likely absent, however other common amphibian species may still be present.
- 3.4.24 The modified grassland, especially when being grazed, is of low value for amphibians, providing limited opportunities for foraging, refuge and dispersal. The rush pasture is considered to be of greater habitat value to amphibians, providing favourable opportunities for foraging, refuge and dispersal due to the structural diversity of this habitat, although it is not considered to be floristically species rich.

Reptile

- 3.4.25 The SEWBreC data search returned two records of adder, two records of common lizard and four records of slow-worm within 2km of the Site. The closest record to the Site is of common lizard c. 35m west of the proposed North Site access.
- 3.4.26 Habitats within the Site, particularly the rush pasture, stone walls and earth mounds are considered to offer suitable habitat for reptiles, providing foraging, refuge and commuting opportunities. The modified grassland, especially when being grazed, is of lower value, providing limited opportunities for foraging, refuge and commuting.

White-clawed crayfish

- 3.4.27 The data received from SEWBreC returned no records of white-clawed crayfish within 2km of the Site.
- 3.4.28 No suitable habitats are present within the Site to support white-clawed crayfish. As a result, they are therefore excluded from further discussion in this report.

Fungi

- 3.4.29 The SWEBReC data search returned one record of dark-purple earthtongue and two records of *Ramalina calicaris* within 2km of the Site.
- 3.4.30 The close grazed modified grassland fields within the Site offer some suitability for waxcap, however it is unlikely to support more than a few individuals and is not considered to be a high value site for fungi.

Invertebrates

- 3.4.31 The SWEBReC data search returned 106 recent records of invertebrates within 2km of the Site including nine records of coleoptera, 31 of Lepidoptera, 18 of odonata, 43 of hymenoptera, three of orthoptera, one of hemiptera and one of diptera.
- 3.4.32 Grazed pasture grassland offers few opportunities for notable invertebrate populations. Rush pasture within the South Site appeared relatively species poor and consequently had limited invertebrate interest.

Other Notable Species

- 3.4.33 The SWEBReC data search returned two records of brown hare and eight records of hedgehog were provided within 2km of the Site.
- 3.4.34 The habitats within the Site are suitable for brown hare and hedgehog, if present. Rush pasture may support notable invertebrate species.

3.5 Invasive Non-native Species

- 3.5.1 The SWEBReC data search returned 34 records for seven invasive non-native species within 2km of the Site. These comprised; giant hogweed (1 record), Himalayan balsam (16 records), Japanese knotweed (16 records), Canada goose (2 records), ring-necked parakeet (1 record), golden pheasant (1 record) and American mink (1 record).
- 3.5.2 No invasive non-native species were recorded during the extended habitat survey.

4 DISCUSSION

4.1 Designated Sites for Nature Conservation

- 4.1.1 The Site does not form part of any statutory site for nature conservation. The only statutory designated site for nature conservation within the desk study area was Elson Bog SSSI designated for mire communities.
- 4.1.2 The Site access intersects Craig-Evan Leyshon Common SINC. All other non-statutory designated sites for nature conservation are located over 400m from the Site and as such are considered sufficiently distanced that no impacts could occur.
- 4.1.3 Minor vegetation removal of bracken habitat within Craig-Evan Leyshon Common SINC may be required along the site access to allow for adequate turning circles and passing places. In line with the Stepwise approach, this loss has been avoided with passing places located within existing vegetation breaks wherever practicable. The loss of less than 100m² of bracken and grassland habitat is considered negligible and given the existing access track at this location would not negatively affect any of the criteria for which the SINC is designated.
- 4.1.4 All works will be confined to the Site boundary, with Heras fencing or similar erected within the first phase of works to ensure no encroachment beyond the Site boundary.
- 4.1.5 Standard measures to ensure runoff control and pollution prevention, including following Guidelines for Pollution Prevention²⁰, would be implemented during the construction of the Proposed Development; these measures will minimise the likelihood of any pollution effects on the closest designated sites.
- 4.1.6 Due to the nature of the Proposed Development, and separation distances involved, it is not considered that any direct or indirect impacts will occur to any designated sites or the habitats and species they support, outside the red line boundary, as a result of the Proposed Development.

4.2 Habitats

- 4.2.1 The North Site comprises predominantly modified grassland and improved acid grassland. The South Site is dominated by species poor rush pasture not meeting the priority habitat definition. The Cable Corridor consists of further improved acid grassland, cropland and woodland. Grassland habitats within the Site are typically of low conservation value in their current state, being heavily grazed and lacking both structural and species diversity.
- 4.2.2 Rush pasture within the South Site does not meet the definition of priority habitat purple moor grass and rush pasture, and instead represents a waterlogged improved grassland. As shown on the Landscape Masterplan (drawing number: P22-2733-04A) this field will be developed as a substation and associated infrastructure. The area surrounding the substation will be subject to tree planting for screening purposes, however the remaining area will be managed through regular topping of rushes to recreate rush pasture of higher conservation value.
- 4.2.3 Within the North Site battery storage containers will be situated primarily within areas of modified grassland of low conservation value. Boundary habitats including tree lines and hedgerows will be largely retained and protected as far as reasonably practicable. Tree, woodland and hedgerow planting will offset the minor removal of existing hedgerow required.

²⁰ <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>

- 4.2.4 Cut and fill required to achieve suitable levels within the Site offers opportunities to recreate acid grassland of higher quality than currently present within the Site. Subject to soil conditions, lower nutrient any excess subsoils would be utilised for sowing a suitable acid grassland seed mix. While agricultural grassland of low ecological value will be lost to facilitate the proposed development, it is considered that the development presents opportunities for the creation of higher quality grassland.
- 4.2.5 Woodland habitats along the cable route will be avoided where possible, with the cable instead routed through adjacent improved acid grassland habitats. Works associated with cabling will be short term and temporary and as such no permanent impacts are anticipated. To ensure no lasting long term impacts to these habitats, cabling works will be undertaken following a soil management plan whereby excavated top and sub-soils are stored separately and returned in the order they were excavated.

4.3 Protected and Notable Species

Birds

- 4.3.1 All wild birds, their nests and eggs are, with few exceptions, protected under the Wildlife and Countryside Act 1981 (as amended). Species listed under Schedule 1 of the Act, have special protection with increased penalties for offences committed towards these birds. Additional protection is provided to species listed under Directive 2009/147/EC on the conservation of wild bird (the 'Birds Directive') codified version.
- 4.3.2 The design of the Proposed Development so far as reasonably practicable avoids the most suitable habitats for breeding bird species, including woodland and hedgerow habitats. The Site is not considered suitable for ground nesting species due to current management practices of intensive sheep grazing.
- 4.3.3 Hedgerows and field boundary habitats will be largely retained and protected throughout construction and operation of the proposed development with only minor removal required. The Landscape design includes substantial tree, woodland and hedgerow planting which will offer increased nesting habitat for a variety of bird species.
- 4.3.4 In order to avoid impacts on nesting birds and to ensure compliance with the provisions of the Wildlife and Countryside Act 1981 (as amended), if possible, construction, and any associated vegetation removal would take place outside of the bird breeding season (March-August inclusive). If vegetation works are necessary during the breeding season any suitable nesting habitat to be affected by works; including agricultural fields, should be checked by a suitably experienced ecologist prior to works commencing. Works would be permitted to proceed only when the ecologist is satisfied that no offence will occur under the legislation.
- 4.3.5 The main potential effect of construction and operation of the proposed development is the displacement of birds nesting within woodland, tree and hedgerow habitats due to increased noise and visual disturbance.
- 4.3.6 In addition, a minimum of ten bird boxes would be installed on land within the Site to provide in enhancements for breeding bird species.

Bats

- 4.3.7 All species of British bat are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are further protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The Act and Regulations make it an offence to:
- kill, injure or take any wild bat;
 - damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and

- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection.

- 4.3.8 While some trees along field boundaries have been identified as offering bat roost potential to individual bats (PRF-I), these features will be retained and protected throughout construction and operation and as such no impacts to roosting bats are anticipated. In the event that unforeseen tree works are required, trees would be subject to a pre-commencement check. Where trees are assessed as offering PRF-I a roost resource approach will be followed as outlined with Collins (2023). Where trees are assessed as offering PRF-M, further surveys would be undertaken as in accordance with best practice guidance to demonstrate likely absence or inform a licence application to Natural Resources Wales (NRW).
- 4.3.9 Hedgerows and field boundary habitats will be largely retained and protected throughout construction and operation of the proposed development with only minor removal required. The Landscape design includes substantial tree, woodland and hedgerow planting which will serve to ensure that bat foraging and commuting habitats are not affected by the Proposed Development.
- 4.3.10 The Site will not be routinely lit during construction or operation. Construction will be undertaken primarily during daylight hours and as such would not require lighting other than for specific tasks, or during times of low light (i.e., winter months). During operation, the site would not be routinely lit with lighting required only in the event of a security breach or emergency out of hours maintenance tasks. The scheme lighting design will be developed in accordance with the principles within 'Bats and Artificial Lighting at Night' (2023)²¹
- 4.3.11 In addition, a minimum of ten bat boxes would be installed on land within the Site to provide in enhancements for roosting bats.

Badger

- 4.3.12 Badgers and their setts are protected under the Protection of Badgers Act 1992. Under the Act it is an offence to: wilfully kill, injure, take, possess or cruelly ill-treat a badger; to attempt to do so: or, intentionally or recklessly interfere with a sett.
- 4.3.13 Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or destroyed.
- 4.3.14 No evidence of badger was identified during the extended habitat surveys, and as such the species is considered likely absent from the Site.
- 4.3.15 Badgers are however known in the wider area, and as a mobile species could become present within the Site prior to the onset of development. As such, a pre-commencement badger survey will be undertaken to assess for any newly excavated setts within the Site. In the event an active sett is identified, no works would be undertaken until either the development has been redesigned to avoid impacts, or a licence to permit impacts to a badger sett has been obtained from NRW.

Hazel Dormouse

- 4.3.16 Hazel dormice are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Additionally, the hazel dormouse is listed as priority species under Section 7 of the Environment (Wales) Act. With

²¹ Institute of Lighting Engineers and Bat Conservation Trust (2023) *GN08/23: Bats and Artificial Lighting at Night*

only a single historic record of this species within 2km, and with limited presence of or connectivity to high quality woodland habitat, the likelihood of presence within the Site is considered to be low.

- 4.3.17 Grassland habitats within the site are unlikely to be used by the species, with more suitable habitats confined to boundary hedgerows which will be largely retained and protected throughout construction and operation of the Proposed Development.
- 4.3.18 As a precaution, minor hedgerow loss will be undertaken following reasonable avoidance measures to ensure no harm to dormouse, if present within the Site.

Amphibians and Reptiles

- 4.3.19 Great crested newts and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The Act and Regulations make it an offence to kill, injure or take a great crested newt; damage, destroy or obstruct access to any place that a great crested newt uses for shelter or protection; and intentionally or recklessly disturb a great crested newt while it is occupying a structure or place that it uses for shelter or protection.
- 4.3.20 Common reptile species namely the common lizard, slow-worm, grass snake and adder are protected against killing, injuring and sale under the Wildlife & Countryside Act 1981 (as amended). Great crested newt and common toad and widespread reptile species (common lizard, slow worm, grass snake and adder) are listed as priority species under Section 7 of the Environment (Wales) Act and UK BAP.
- 4.3.21 No ponds were identified within 500m of the Site, and with only one desk study record returned the presence of great crested newt is considered unlikely. The Site may however be utilised by other common species of amphibians including common toad. Common species of amphibian, including adder, common lizard and slow worm are known to be present within the wider area, and may utilise the Site.
- 4.3.22 The majority of habitat lost to the proposed development is short sward grassland, of low value to reptiles and amphibians, lacking the required structural complexity, however patches of higher quality habitat are present within the Site, particularly areas of rush dominated grassland within the South Site.
- 4.3.23 Any works within suitable areas of habitat, consisting hedgerow bases and structurally diverse grassland, would be undertaken under Reasonable Avoidance Measures (RAMS) to minimise impacts to individual amphibians and reptiles.

Invertebrates

- 4.3.24 Habitats within the Site typically lack the structural and species diversity to support notable invertebrate populations.
- 4.3.25 The majority of habitat lost to the proposed development is short sward grassland, of low value to reptiles and amphibians, lacking the required structural complexity, however patches of higher quality habitat are present within the Site, particularly areas of rush dominated grassland within the South Site.
- 4.3.26 The landscape masterplan includes habitat creation that will enhance the Site for invertebrates, including the creation of higher quality rush pasture and acid grassland that will be managed for biodiversity benefit for the operational lifespan of the Proposed Development.

Other species

- 4.3.27 The Site and surrounding area may potentially support hedgehog and brown hare; however, these species are not considered to be a significant constraint in terms of Proposed Development.
- 4.3.28 The habitats on Site are typical of those in the wider environment, and suboptimal for these species. Therefore the loss of pastoral farmland foraging habitat as a result of the Proposed Development is not considered to negatively impact local populations of brown hare and hedgehog. Habitat creation including woodland and hedgerow planting as well as creation of higher quality grassland would enhance the Site for these species, if present.

Invasive Non-native Species

- 4.3.29 No invasive non-native species were recorded within the Site. A pre-construction check will be undertaken to ensure no invasive species have colonised the proposed development area and if necessary, suitable biosecurity measures will be employed to prevent the accidental introduction or spread of such species during or after construction.

5 RECOMMENDATIONS

5.1.1 **Table 5.1** summaries recommendations and next steps associated with the Proposed Development.

Table 5.1: Mitigation and Enhancement Summary

Feature	Summary of Mitigation and Enhancement
Designated sites for Nature Conservation	a. Site is partially located within Craig-Evan Leyshon SINC and required minor removal of bracken and grassland b. Works to be micro sited where existing vegetation gaps are present
Habitats & Flora	c. Trees, hedgerows and woodland to be retained where reasonably practicable d. Standard best practice pollution prevention measures to be employed e. Cabling works to be undertaken following a soil management plan f. Landscape design to include acid grassland and rush pasture creation and hedgerow planting
Birds	g. Trees, hedgerows and woodland to be retained where reasonably practicable h. Vegetation to be undertaken outside of the nesting bird season (March to August inclusive) where reasonably practicable. Any clearance works within this period will only be undertaken following a check for nests by a suitably qualified ecologist i. Landscape design to include acid grassland and rush pasture creation and hedgerow planting j. Ten bird boxes to be installed
Bats	k. Trees, hedgerows and woodland to be retained where reasonably practicable l. Landscape design to include acid grassland and rush pasture creation and hedgerow planting m. Minimal use of lighting through construction and operation n. Landscape design to include acid grassland and rush pasture creation and hedgerow planting o. Ten bird boxes to be installed
Badger	p. Pre-construction survey to confirm baseline changes
Amphibians	q. Vegetation clearance of suitable habitats including hedgerows and rush pasture to be undertaken following RAMs r. Landscape design to include acid grassland and rush pasture creation and hedgerow planting
Reptiles	s. Vegetation clearance of suitable habitats including hedgerows and rush pasture to be undertaken following RAMs t. Landscape design to include acid grassland and rush pasture creation and hedgerow planting
Hazel dormouse	u. Vegetation clearance of suitable habitats including hedgerows and rush pasture to be undertaken following RAMs
Otter	v. N/A – unlikely to be present within the Site or immediate surrounds
Water vole	w. N/A – unlikely to be present within the Site or immediate surrounds
Invertebrates	x. Landscape design to include acid grassland and rush pasture creation and hedgerow planting
Invasive species	y. Pre-construction survey for colonisation by invasive non-native plant species z. Best practice measures employed to prevent spread
Other Species	aa. Vegetation clearance of suitable habitats including hedgerows and rush pasture to be undertaken following RAMs

FIGURE 1: SITE LOCATION PLAN



FIGURE 2: STATUTORY DESIGNATED SITES

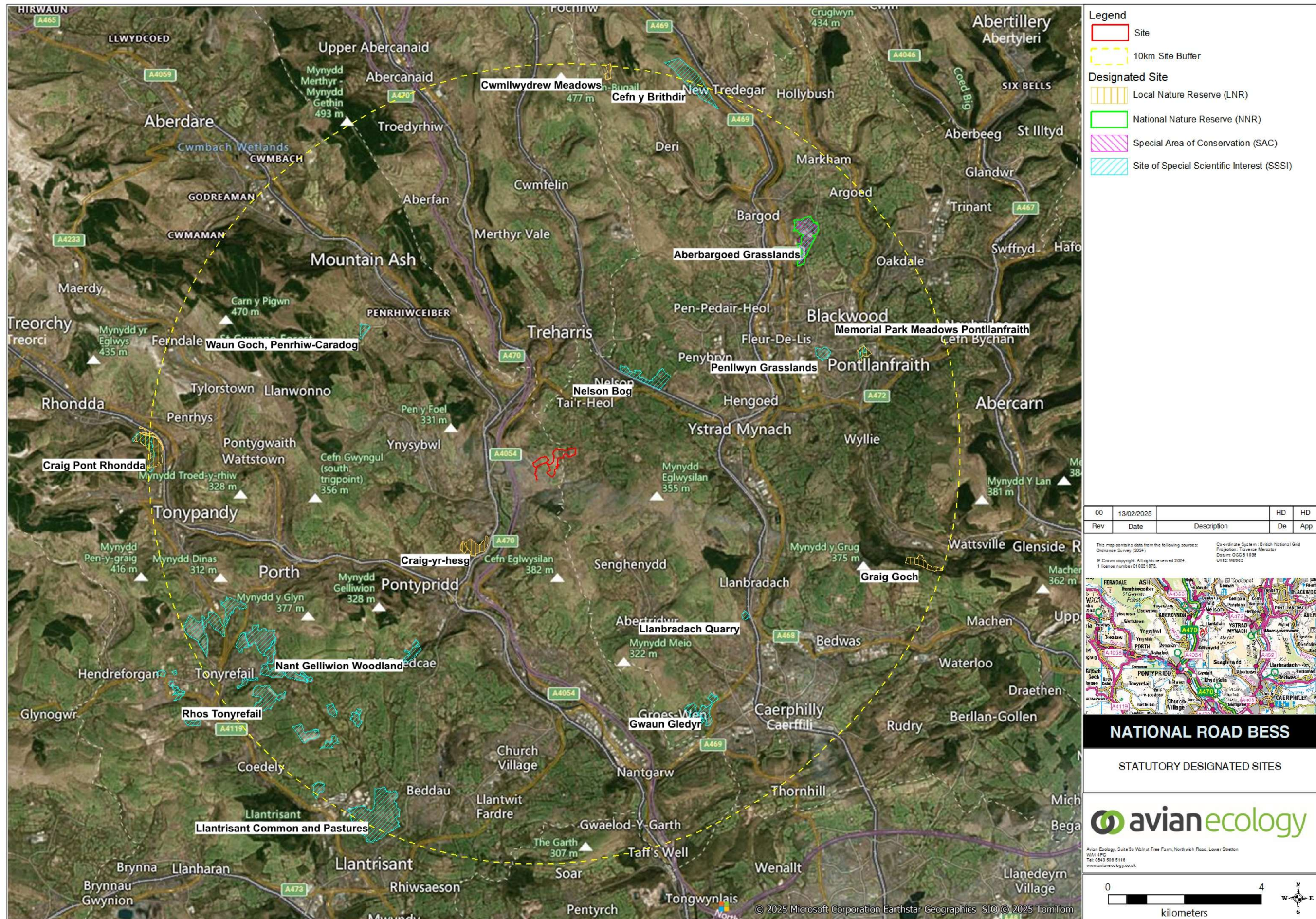
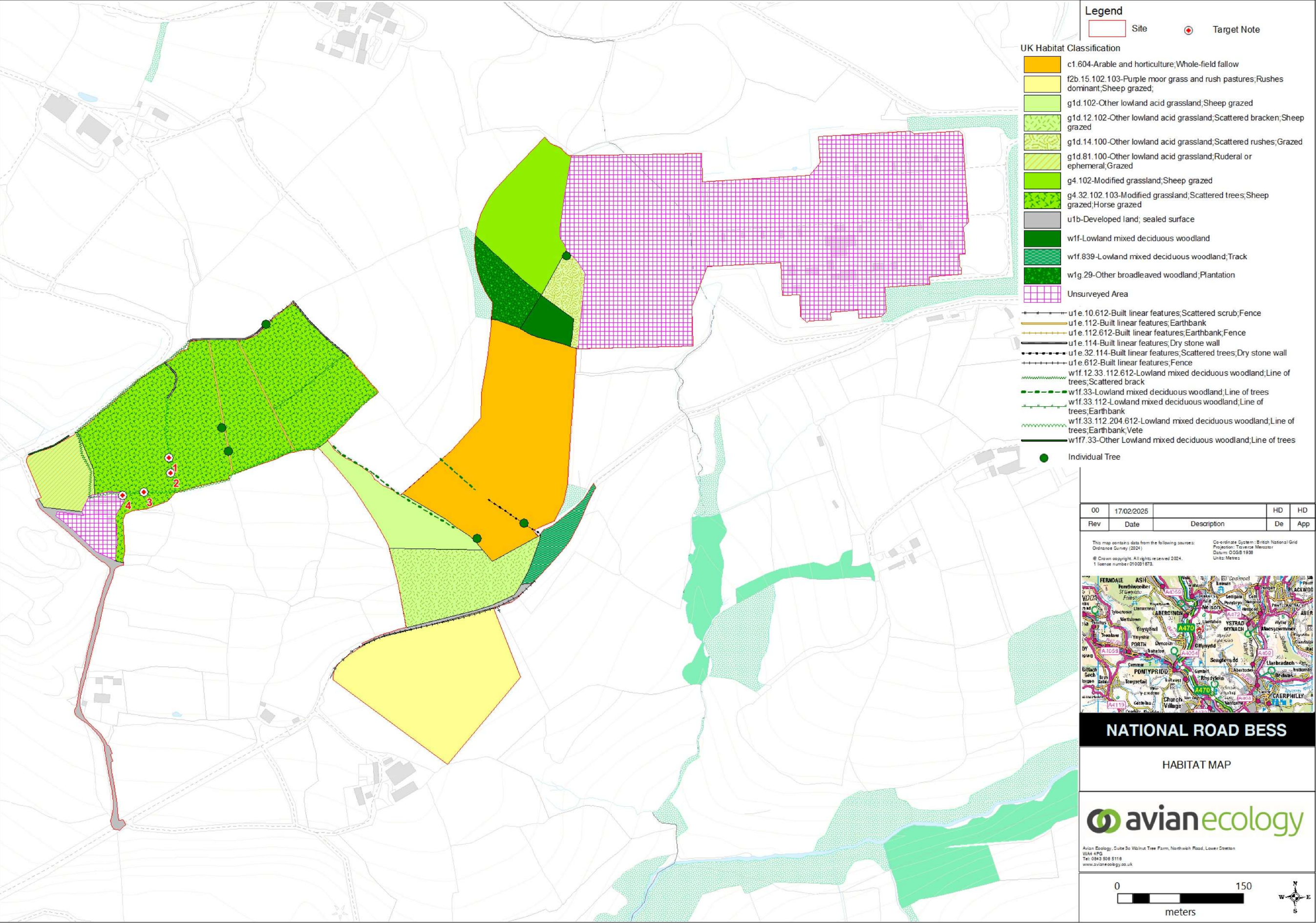


FIGURE 3: NON-STATUTORY DESIGNATED SITES PLAN



FIGURE 4: HABITATS PLAN



APPENDIX 1: PHOTOGRAPHS

Table A1.1 presents photographs of habitats and features within the Site.

Table A1.1: Photographs.

	Photo 1 Example of modified grassland (g4) within the Site. Potential waxcap habitat.
	Photo 2 Rush pasture (f2b) within South Site (recently topped)



Photo 3
Rush pasture (f2b)
within South Site



Photo 4
Mature sycamore
tree with LBRP as
highlighted in TN1.



Photo 5
Mature oak with
LBRP as highlighted
in TN2.



Photo 6
Mature sycamore
with LBRP as
highlighted in TN3.



Photo 7

Mature sycamore with L to MBRP as highlighted in TN4.



Photo 8

Example of tree line within/bordering the North Site.



Photo 9

Tree line along the southern boundary of the South Site.



Photo 10

Example of stone wall within the North Site.



Photo 11
Example of earth mound within the North Site.

APPENDIX 2: SCIENTIFIC NAMES

Table A2.1 presents the scientific names of all species mentioned within the Assessment.

Table A2.1: Scientific Names.

Common Name	Scientific Name
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
Yorkshire fog	<i>Holcus lanatus</i>
Crested dog's-tail	<i>Cynosurus cristatus</i>
Rough stalked meadow grass	<i>Poa trivialis</i>
Oval sedge	<i>Carex cephalophora</i>
Hairy sedge	<i>Carex hirta</i>
Glaucous sedge	<i>Carex flacca</i>
Yellow sedge	<i>Carex demissa</i>
White clover	<i>Trifolium repens</i>
Daisy	<i>Bellis perennis</i>
Marsh thistle	<i>Cirsium palustre</i>
Creeping thistle	<i>Cirsium arvense</i>
Creeping buttercup	<i>Ranunculus repens</i>
Black medick	<i>Medicago lupulina</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Himalayan balsam	<i>Impatiens glandulifera</i>
Japanese knotweed	<i>Reynoutria japonica</i>
Birch	<i>Betula sp.</i>
Sycamore	<i>Acer pseudoplatanus</i>
Ash	<i>Fraxinus excelsior</i>
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Holly	<i>Ilex aquifolium</i>
Beech	<i>Fagus sylvatica</i>
Willow	<i>Salix sp.</i>
Bramble	<i>Rubus fruticosus</i>
Barn owl	<i>Tyto alba</i>
Crossbill	<i>Loxia curvirostra</i>
Hobby	<i>Falco subbuteo</i>
Merlin	<i>Falco columbarius</i>
Peregrine	<i>Falco peregrinus</i>
Kestrel	<i>Falco tinnunculus</i>
Fieldfare	<i>Turdus pilaris</i>

Common Name	Scientific Name
Redwing	<i>Turdus iliacus</i>
Red kite	<i>Milvus milvus</i>
Goshawk	<i>Accipiter gentilis</i>
Kingfisher	<i>Alcedo atthis</i>
Green sandpiper	<i>Tringa ochropus</i>
Black-headed gull	<i>Chroicocephalus ridibundus</i>
Cuckoo	<i>Cuculus canorus</i>
Bullfinch	<i>Pyrrhula pyrrhula</i>
Curlew	<i>Numenius arquata</i>
Golden plover	<i>Pluvialis apricaria</i>
Dunnock	<i>Prunella modularis</i>
Grasshopper warbler	<i>Locustella naevia</i>
Grey partridge	<i>Perdix perdix</i>
Herring gull	<i>Larus argentatus</i>
House sparrow	<i>Passer domesticus</i>
Lapwing	<i>Vanellus vanellus</i>
Lesser redpoll	<i>Acanthis cabaret</i>
Lesser spotted woodpecker	<i>Dendrocopos minor</i>
Linnet	<i>Linaria cannabina</i>
Pied flycatcher	<i>Ficedula hypoleuca</i>
Reed bunting	<i>Emberiza schoeniclus</i>
Ring ouzel	<i>Turdus torquatus</i>
Skylark	<i>Alauda arvensis</i>
Song thrush	<i>Turdus philomelos</i>
Spotted flycatcher	<i>Muscicapa striata</i>
Starling	<i>Sturnus vulgaris</i>
Tree pipit	<i>Anthus trivialis</i>
Willow tit	<i>Poecile montanus</i>
Wood warbler	<i>Phylloscopus sibilatrix</i>
Yellow wagtail	<i>Motacilla flava</i>
Yellowhammer	<i>Emberiza citrinella</i>
Canada goose	<i>Branta canadensis</i>
Ring-necked parakeet	<i>Psittacula krameri</i>
Golden pheasant	<i>Chrysolophus pictus</i>
Common pipistrelle	<i>Pipistrellus pipistrellus</i>
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>
Pipistrelle species	<i>Pipistrellus sp.</i>

Common Name	Scientific Name
Brandt's bat	<i>Myotis brandtii</i>
Bat species	<i>Chiroptera sp.</i>
Badger	<i>Meles meles</i>
Hazel dormouse	<i>Muscardinus avellanarius</i>
Otter	<i>Lutra lutra</i>
Water vole	<i>Arvicola amphibius</i>
Brown hare	<i>Lepus europaeus</i>
Hedgehog	<i>Erinaceus europaeus</i>
American mink	<i>Neovison vison</i>
Great crested newt	<i>Triturus cristatus</i>
Common toad	<i>Bufo bufo</i>
Common frog	<i>Rana temporaria</i>
Adder	<i>Vipera berus</i>
Common lizard	<i>Zootoca vivipara</i>
Slow-worm	<i>Anguis fragilis</i>
White-clawed crayfish	<i>Austropotamobius pallipes</i>
Dark-purple earthtongue	<i>Geoglossum atropurpureum</i>
Waxcap	<i>Hygrocybes sp.</i>