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ECOLOGICAL IMPACT ASSESSMENT REPORT

YSGOL Y GRAIG, CEFN COED Y CYMMER

MERTHYR TYDFIL COUNTY BOROUGH COUNCIL

DOCUMENT REF: WWE22121 ECIA REV_A | 11/01/2023

Client:	Merthyr Tydfil County Borough Council
Site/Job:	Ysgol y Graig, Cefn Coed y Cymmer
Report title:	Ecological Impact Assessment Report
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Surveyed by:	Amy Williams Schwartz, Jack McCormack, Jenny O'Neill, Maddie Anderson, Julie Player, Emma Douglas, and Steven Shutt

VERSIONING AND QUALITY ASSURANCE

Rev	Status	Date	Author(s)	Reviewed by	Approved by
A	Final	11/01/2023	David Withington Ecologist & Dr Amy Williams Schwartz ACIEEM Senior Ecologist	Dr Mererid Howells MCIEEM CEnv Principal Ecologist	

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The evidence which we have prepared and provided is true and has been prepared and provided in accordance with the guidance of The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

SUMMARY

Purpose	- Wildwood Ecology was commissioned by Merthyr Tydfil County Borough Council (the client) to undertake a Preliminary Ecological Appraisal (PEA), Preliminary Roost Assessment (PRA), and bat activity surveys of Ysgol y Graig, Cefn Coed y Cymmer. - The site is the subject of a proposed demolition order.
Work undertaken	- A PEA was undertaken consisting of a field survey and desk study undertaken in September 2022 following the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal (2017) guidelines and standard Phase 1 Habitat Survey protocol (JNCC, 2010). - A PRA was undertaken consisting of a desk study and field survey undertaken in August 2022 and two dusk bat surveys were undertaken in September 2022 following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edn (Collins 2016).
Key issues	- The proposed demolition works may result in impacts on wildlife and habitats affecting the following protected sites and species: - Statutory and non-statutory designated sites; - Bats; - Otter; - Reptiles; and - Nesting birds.
Recommendations	- A Construction Environmental Management Plan (CEMP) should be produced outlining methods to minimise the impacts of the proposed demolition on designated sites. - Due to the presence of bat roosts within the school, a European Protected Species Licence will need to be granted in order that the proposed site works can be legally carried out. - Otter are unlikely to use the site itself, but due to the proximity of the site to the river and existing otter records, the CEMP will include methods of minimising potential impacts to this protected species. - The proposed demolition works will take place outside the nesting bird season for birds or be subject to a nesting bird check prior to the start of site works. - The CEMP will include methodology to minimise the impact on reptiles and hedgehog if onsite vegetation is impacted by the proposed works.
Conclusions	- Providing that the recommendations outlined within this report are successfully implemented, it should be possible for the proposed development to proceed and for there to be no long-term impacts upon the key protected species present at the site. - This ecological report will remain valid for a period of 18 months from the date of the last survey – i.e. until March 2024.

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1 INTRODUCTION

- 1.1 Wildwood Ecology was commissioned by Merthyr Tydfil County Borough Council (the client) to undertake a Preliminary Ecological Appraisal (PEA), Preliminary Roost Assessment (PRA) and bat surveys of Ysgol y Graig, Cefn Coed y Cymmer (the site) centred at grid reference SO 03380 08026.

Site description

- 1.2 The aerial image of the site (Figure 1) shows the site to consist predominantly of a large area of hard standing with a large complex school building. Areas of scrub and grassland are visible around the southern boundary of the site.

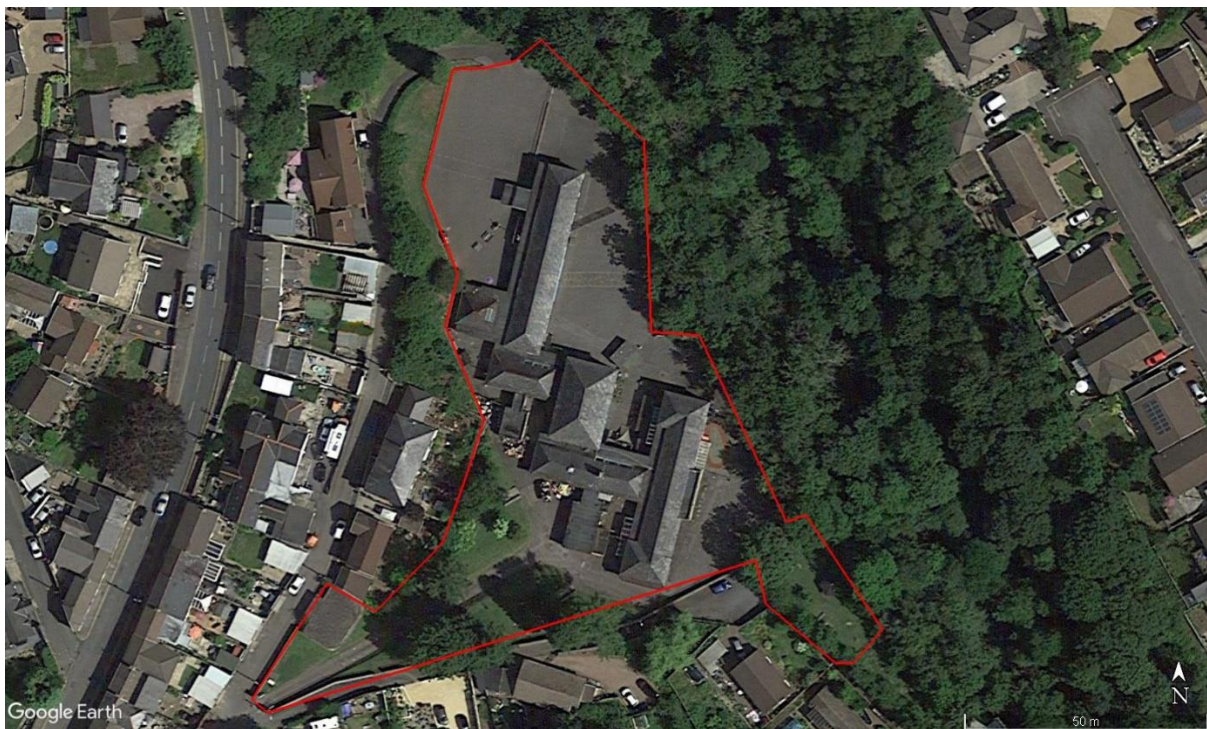


Figure 1 – Aerial image of the site (red line shows the site boundary). Image used under licence (©2023 Google). Imagery date 20/07/2021.

- 1.3 The distant aerial image of the site (Figure 2) shows the habitat surrounding the site to consist of residential areas to the south and west and is directly adjacent to the Taf Fechan river and wooded valley to the north and east.



Figure 2 – Distant aerial image of the site (red line shows the site boundary). Image used under licence (©2023 Google). Imagery date 20/07/2021.

Proposed development

- 1.4 The site is the subject of a proposed demolition order.

Purpose of this report

- 1.5 The purpose of this report is to provide sufficient information for the local planning authority to fully assess the potential ecological impacts of the proposed demolition.
- 1.6 The result of the PEA and PRA has been used to inform whether further surveys are required, or to establish the need for, and extent of, any mitigation or compensation measures required as part of the proposed development.

2 METHODOLOGY

Desk study

- 2.1 A biodiversity desk study was undertaken in relation to the site in September 2022. The sources consulted and the type of information obtained are summarised in Table 1.

Table 1 – Sources of biodiversity and ecological records.

Source	Information requested (search buffer from site centre/boundary)
South East Wales Biodiversity Records Centre (SEWBRc)	- Protected and priority species (2km) - Sites of local importance/designation (1km)
Multi-Agency Geographic Information for the Countryside (MAGIC) ¹	- International statutory designations (5km) - National statutory designations (2km)

- 2.2 The search buffers are considered to be sufficient to cover the potential zone of influence (Zol²) of the proposed development.
- 2.3 The impact of the proposed development on the biological integrity of any nearby designated protected sites has been fully considered.
- 2.4 No previous survey information was available for the site itself.

Field survey - PEA

- 2.5 A field survey was undertaken on 29 September 2022.
- 2.6 All habitats present within the site with the potential to support rare, protected, or otherwise notable species of flora or fauna (together with any direct signs) were noted.
- 2.7 In the context of this report, rare, protected, or otherwise notable species of flora or fauna were those considered to meet any of the following criteria:
- Species protected by legislation (see Appendix IV);
 - UK Post 2010 UK Biodiversity Framework priority species or Local Biodiversity Action Plan (LBAP) species;
 - Nationally rare or nationally scarce species;
 - Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists).
- 2.8 A PEA habitat map was drawn up incorporating target notes used to highlight features of particular ecological interest (see Appendix I).
- 2.9 The Wildlife and Countryside Act (1981) as amended, makes it an offence to release or allow to escape into the wild any animal, plant or micro-organism not ordinarily resident in the UK (as listed in Schedule 9 of the Act). Plant species listed in Schedule 9 were searched for during the survey. Examples

¹ <http://magic.defra.gov.uk/MagicMap.aspx>

² Zol definition – ‘the areas/resources that may be affected by the biophysical changes caused by activities associated with a project’ (CIEEM, 2018).

include species such as Japanese knotweed (*Fallopia japonica*) and Himalayan balsam (*Impatiens glandulifera*).

Field survey – PRA

- 2.10 A field survey was undertaken on 30 August 2022.
- 2.11 An assessment of the onsite buildings was undertaken in accordance with the latest published best practice guidance (Collins, 2016).
- 2.12 The main school building was externally and internally inspected for bats and their signs with the aid of high-powered lamps and close-focussing binoculars. The small building at the south-west of the site was assessed externally only
- 2.13 The suitability of the buildings to accommodate bats was assessed, along with a systematic search for signs of bats (e.g. droppings, moth wings, scratch marks, staining, etc.) or actual bats that were present. Particular attention was paid to the roof areas, with searches for any crevices or gaps in walls, gaps between beams and joists, droppings stuck to the walls, floors or other surfaces, or feeding remains below beams, in addition to a number of other factors and signs indicative of a bat roost.
- 2.14 In addition, the buildings were classified according to their suitability for bats, based on the presence of features within the structure and / or landscape (see Table 2).

Table 2 – Summary of guidelines for assessing the potential suitability of proposed development sites for bats (from Collins 2016).

Suitability	Description of building, tree, or structure	Number of activity survey visits required ³
Negligible	Negligible habitat features on site likely to be used by roosting bats.	None
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, potential roost sites not suitable for larger numbers or regular use (i.e. maternity or hibernation).	One
Moderate	A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.	Two
High	A structure or tree with one or more potential roost sites obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.	Three
Confirmed roost	Evidence of bats or use by bats found.	Minimum of two – to characterise the roost

³ To provide confidence that bats are absent from the structure

Bat surveys (dusk emergence x2)

- 2.15 Two bat surveys (dusk emergence surveys) were undertaken at the onsite buildings.
- 2.16 The dusk emergence surveys commenced approximately 15 minutes before the time of local sunset (source www.sunrisesunsetmap.com) and continued for approximately 1.5 hours after sunset.
- 2.17 Surveyors were equipped with broadband bat detectors (Elekon BatScanner Stereo). Elekon Batloggers (x2 on each survey) were also deployed to record bat activity across the site. An infrared video camera with infrared torches was also used during the second survey to monitor the small building at the south-west of the site and was subsequently analysed for bat activity.
- 2.18 A note was made of all bat activity recorded including (where appropriate) roost access points, species, time of re-entry, direction of flight, behaviour (foraging or commuting) and use of landscape features (see Appendix III). Minimal lighting was used during the surveys as this can alter the behaviour of the bats emerging from or entering a roost or foraging or commuting over a site.

Surveyor information

- 2.19 The PEA and PRA was undertaken by Amy Williams Schwartz. The bat surveys were led by Amy Williams Schwartz, with assistance from Jack McCormack, Jenny O'Neill, Maddie Anderson, Julie Player, Emma Douglas, and Steven Shutt. See Table 3 for further information.

Table 3 – Surveyor information.

Surveyor	Licences	Ecological experience
Amy Williams Schwartz Ph.D., M.Sc., B.Sc. (Hons.), ACIEEM Ecologist	Bat GCN	Experienced in surveying for a wide range of protected species including great crested newt (GCN), reptiles, and bats within a consultancy and volunteer capacity. PhD in wildlife/road interactions in the UK, and experienced in performing academic ecological research projects, as well as species identification.
Jack McCormack M.Res., B.Sc. (Hons) Seasonal Assistant Ecologist Qualifying CIEEM		Holds a 1 st class honours degree in Zoology and a Master of Research in Biosciences. Experience in undertaking bat surveys and assisting in other protected species surveys gained through working with Wildwood Ecology
Jenny O'Neill B.Sc. (Hons) Assistant Ecologist Qualifying CIEEM	-	Holds a 2:1 honours degree in Ecology. Has field experience through academic and professional training. Experience in undertaking protected species surveys including reptiles, bats, and hazel dormouse from 3 years of seasonal work.
Maddie Anderson M.Sc., B.Sc. (Hons) Assistant Ecologist	-	Holds a 2:1 honours degree in Biology and a Masters in Environmental Biology: Conservation & Resource Management. Experience in undertaking bat surveys and assisting in other protected species surveys gained through working with Wildwood Ecology.

Surveyor	Licences	Ecological experience
Survey assistants Julie Player Emma Douglas Steven Shutt	-	All survey assistants received training in use of bat detectors and survey methodologies. Deemed competent and confident to use bat detectors to observe bats in flight and conduct an emergence/re-entry survey in conjunction with a licenced ecologist. Assistants backed up by experienced surveyors and/or recording detectors where possible.

Limitations and assumptions

- 2.20 The desk study and field survey will not produce a comprehensive list of plants and animals as this will be limited by factors that influence their presence (e.g. activity and dormancy periods). An assessment can however be made of the habitats within the survey area, their nature conservation value and potential to support protected or priority species.
- 2.21 Many species of bat in the UK are crevice dwelling, and bats or signs of bats can be difficult to find within a building. In addition, there may be areas that are inaccessible to the surveyor – the attic space(s) in the building were not safely accessible due to issues with damp.
- 2.22 No other limitations were encountered, or assumptions made during either the desk study or the field surveys and it is considered that with the access gained and recording undertaken sufficient data was able to be collected to allow an accurate assessment of the site's ecological value to be made.

3 RESULTS

Desk study

Designated sites (statutory)

3.1 There were no international statutory designations within 5km of the site and three national statutory designations within 2km (see Table 4).

Designated sites (non-statutory)

3.2 There were 11 local non-statutory designations within 1km of the site (see Table 4).

Table 4 – Summary of designated sites in range of the site.

Site name	Designation	Description / key reason for designation	Distance & direction
B-lines	Local non-statutory	"The B-Lines are a series of 'insect pathways' running through our countryside and towns, along which we are restoring and creating a series of wildflower-rich habitat stepping stones." - Buglife	Site included within designation
Cwm Taf Fechan Woodlands	SSSI	Mixed deciduous woodlands cover steep slopes and spoil from quarries with one of the few Glamorgan stations for <i>Gymnocarpium robertianum</i> . There are interesting plant communities in flushes around tufa springs and luxuriant growths of bryophytes in the splash zone of the river.	<0.1km NE
Cwm Taf Fechan	SINC	The limestone geology gives rise to limestone woodlands, species-rich calcareous grasslands, species-rich neutral grasslands and calcareous scrub. Many species of interest have been recorded from the woodlands which are the designated feature of the SSSI. The neutral and calcareous grasslands of the valley slopes and bottom are typically species-rich. Otter ranges along the Afon Taf Fechan, which also supports a range of native fish species including salmon. Nationally rare and scarce invertebrate and bryophyte species have been recorded from the SSSI.	<0.1km NE
Taf Fechan	Wildlife Trust Reserve (local non-statutory)	Ancient broadleaved woodlands, calcareous grasslands, river, and cliffs. Part of the Cwm Taff Fechan Woodlands SSSI, and a Local Nature Reserve.	<0.1km NE
Cwm Taf Fechan Woodlands	LNR (local non-statutory)	Cwm Taf Fechan Woodlands is of special interest for its mixed deciduous woodlands that cover steep slopes and quarry spoils providing one of the few Glamorgan stations for limestone fern (<i>Gymnocarpium robertianum</i>). There are also plant communities in flushes around tufa springs	<0.1km NE

		and luxuriant growths of bryophytes in the splash zone of the river.	
Y Graig	SINC	Area of fridd habitats dominated by bracken with patches of unimproved acid grassland and dry heathland, particularly around gritstone outcrops. An area of species rich damp neutral and marshy grassland to the west and some wet willow woodland exists to the south. Other habitats include scrub and boulder scree. Associated with the habitats of Cwm Taf Fechan SSSI/SINC to the north, but separated from these by the A465 Heads of the Valleys Road. Regionally rare plant species frequent the woodlands. The damp neutral and marshy grasslands support the regionally scarce plants.	0.1km NE
Cilsanws Common South	SINC	Semi-upland site comprising a complex mosaic of mainly acidic habitats associated with disused quarries and spoil tips. Main habitats are acid grasslands with bracken slopes intermixed with numerous areas of acid flush and marshy grassland. Also present are areas of seminatural woodland, including wet woodland areas, neutral grassland, ponds and streams, a small reedbed and some small areas of species-rich calcareous grassland on a limestone tip.	0.5km N
Cwm Taf Fields & Cefn Coed Tip	SINC	Linear series of fields between the Afon Taf Fawr and the A470, also containing areas of seminatural woodland and a revegetated limestone slag tip from the former Cyfarthfa Ironworks as well as smaller areas of semi-improved acid grassland, scrub, bracken slopes and dry heathland. The fields are a mosaic of damp and dry neutral grasslands with species-rich areas. The woodlands are variable in character, including areas of wet willow woodland, acid oak woodland and some baserich ash woodland near the calcareous tip. The thin soils on the tip plateau support a unique type of calcareous grassland.	0.5km SW
Cwm Taf Fawr	SINC	Section of major river tributary of the Afon Taf. Includes adjacent woodlands, which are relatively undisturbed in the upper reaches and more urban in character further downstream. The upper reaches in particular are of high ecological value, comprising limestone gorge woodland with a rich ground flora. Numerous rare plant species occur here. Further south the riverside woodland is more acid in character, but nevertheless supports a relatively diverse ground. The site also	0.5km SW

		includes some adjacent areas of species-rich calcareous, neutral and acid grasslands. The calcareous grasslands in particular support numerous species which are scarce in the County Borough. Otter ranges along the Afon Taf Fechan, which also supports a range of native fish species including salmon.	
Cwm Ffrwd	SINC	Valley habitats along the Nant Ffrwd, a large stream draining from the uplands in a largely unmodified course, passing through narrow gorges in places. The woodlands have a rich ground flora supporting many ancient woodland indicator species. Regionally rare plant species frequent the steep woodlands.	0.5km SW
Gellideg North Fields	SINC	Series of fields containing species-rich rhos pastures, acid grasslands, marshy grasslands, neutral grasslands and areas of bracken, together with scattered mature trees and sections of dry acid oak woodland and wet alder woodland alongside a small stream. The grasslands support a wide range of regionally scarce insect species.	0.6km SW
Cyfarthfa Park	SINC	Part of an area of mainly ornamental parkland within Merthyr Tydfil. The SINC includes semi-natural woodland and several enclosures of neutral grassland in the eastern half of the park. Also includes small areas of plantation woodland and scrub and several woodland ponds.	0.7km SE
Penmoelallt	SSSI	A mixed woodland of ash, oak, wych elm and small-leaved lime overlying Carboniferous Limestone. The rare Ley's whitebeam grows on a small escarpment within the wood.	1.8km NW
Cwm Glo a Glyndyrys	SSSI	Cwm Glo a Glyndyrys is of special interest for its extensive areas of marshy grassland, species-rich neutral grassland and acid grassland, and for the association of these habitats with others including woodland and heath. It is also of special interest for its outstandingly diverse assemblage of grassland fungi, including 32 species of waxcap <i>Hygrocybe</i> spp, making it one of the best sites in Britain.	1.9km S
Key: SSSI – Site of Special Scientific Interest SINC – Site of Interest for Nature Conservation LNR – Local Nature Reserve			

Priority and protected species

3.3 Table 5 summarises the priority and protected species records found within the local area.

Table 5 – Priority and protected species records found in the vicinity of the site.

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
Bats	Common pipistrelle	-	34	83	Closest record: foraging <0.1km from site. Closest roost: 0.4km from site.
	Soprano pipistrelle	-	20	23	Closest record: foraging <0.1km from site. Closest roost: 0.4km from site.
	Unidentified pipistrelle	-	10	5	Closest record: foraging <0.1km from site. Closest roost: 0.6km from site.
	Brown long-eared bat	-	3	7	Closest record: foraging <0.1km from site. Closest roost: 0.8km from site.
	Noctule	-	1	4	Closest record: commuting 0.4km from site.
	Serotine	-	-	1	Closest record: foraging/commuting 2.0km from site.
	Lesser horseshoe bat	-	5	18	Closest record: roost in quarry face <0.2km from site.
	Greater horseshoe bat	-	-	1	Closest record: commuting 2.8km from site.
	Daubenton's Bat	-	9	4	Closest roost: <0.1km from site.
	Natterer's bat	-	8	2	Closest roost: <0.1km from site.
	TOTALS	-	90 (7+)	148 (9+)	
Mammals (excluding bats)	European badger	-	2	7	Closest record: outlier sett <0.1km from site.
	Eurasian otter	-	5	30	Closest record: spraints <0.1km from site.
	Weasel	-	-	1	Closest record: live sighting 1.4km from site.
	West European hedgehog	1	5	23	Closest record: unspecified record on site.
	TOTALS	1 (1)	12 (3)	63 (5)	

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
Amphibians	Common frog	-	4	26	Closest record: unspecified sighting 0.3km from site.
	Common toad	-	2	24	Closest record: unspecified sighting 0.2km from site.
	Great crested newt	-	-	36	Closest record: unspecified sighting 1.0km from site.
	Palmate newt	-	-	2	Closest record: live sighting 0.6km from site.
	<i>TOTALS</i>	-	6 (2)	88 (4)	
Reptile	Common lizard	-	1	21	Closest record: unspecified sighting 0.4km from site.
	Slow worm	-	3	14	Closest record: live sighting 0.4km from site.
	<i>TOTALS</i>	-	4 (2)	35 (2)	
Birds	Schedule 1	-	13 (7)	128 (21)	Closest record: fieldfare <0.1km from site. Other Schedule 1 species records include barn owl, brambling, corncrake, dotterel, goshawk, green sandpiper, greenshank, hen harrier, hobby, hoopoe, kingfisher, little ringed plover, merlin, osprey, peregrine, red kite, redwing, snow bunting, tundra (Bewick's) swan, and whimbrel.
	Non-schedule 1	-	10 (2)	125 (17)	Closest record: house sparrow 0.2km from site. Other non- Schedule 1 species records include black- headed gull, cuckoo, goldeneye, grasshopper warbler, kestrel, lapwing, lesser redpoll, nightjar, pied flycatcher, reed bunting, ring ouzel,

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
					ringed plover, spotted flycatcher, tree pipit, and wood warbler.
Invertebrates	Totals:	-	41 (21)	243 (56)	Closest record buff ermine, small phoenix, and white ermine 0.1km from site. Other species records include argent & sable, autumnal rustic, beaded chestnut, blood-vein, brindled beauty, broom moth, brown-banded carder bee, brown-spot pinion, cinnabar, dark brocade, dark spinach, dark-barred twin-spot carpet, dingy skipper, dot moth, double dart, dusky brocade, dusky thorn, feathered gothic, flounced chestnut, gallium carpet, garden tiger, ghost moth, goat moth, grass rivulet, grayling, green-brindled crescent, grey dagger, hedge rustic, knot grass, marsh fritillary, minor shoulder-knot, mottled rustic, mouse moth, narrow-bordered bee hawk-moth, neglected rustic, pearl-bordered fritillary, powdered quaker, red-shanked carder bee, rosy minor, rosy rustic, rustic, sallow, shaded broad-bar, shimmering ruby-tail, shoulder-striped wainscot, small blue, small heath, small pearl-bordered fritillary, small phoenix, small square-spot, spinach, sword-grass, tormentil mining bee, v-moth, wall, white ermine, white-letter hairstreak, and white-line dart.

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
Plants	see further info	-	8 (3)	69 (7)	Closest record: bluebell 1.2km from site. Other species records include common fragrant-orchid, globeflower, lesser butterfly-orchid, Ley's whitebeam, small-leaved hawkweed, small-white orchid, stag's-horn clubmoss.
Fish	see further info	-	2 (2)	18 (2)	Closest records: Atlantic salmon and brown/sea trout 0.4km from site.
Lichen	see further info	-	2 (1)	6 (5)	Closest record: witches' whiskers lichen 0.3km from site. Other species records include <i>Punctelia jeckeri</i> , <i>Toninia sedifolia</i> , <i>Usnea articulata</i> , and <i>Vahliella leucophaea</i> .
Fungi and slime moulds	see further info	-	-	2 (1)	Closest record: olive earthtongue 1.5km from site.

Field surveys

Timing and conditions

3.4 Prevailing weather conditions during the field surveys are summarised within Table 6.

Table 6 – Summary of weather conditions during the PEA and PRA surveys.

Survey	Date	Weather conditions			
		Temp [°C]	Cloud cover [Oktas]	Wind speed [Beaufort scale]	Rain
PEA	29/09/2022	15	2	2-3	Nil
PRA	30/08/2022	22	2	2	Nil

Field survey - PEA

- 3.5 The distribution and extent of habitats observed within the site is illustrated in the PEA plan (see Appendix I). An accompanying species list (including scientific names) can be found in Appendix III.
- 3.6 The habitats present onsite are described in detail in Table 7 using the standard Phase 1 survey habitat classification hierarchical alphanumeric reference codes (JNCC, 2010).

- 3.7 The site was classified according to the following habitat types: scattered broad-leaved and coniferous trees, scrub (dense/continuous), poor semi-improved grassland, fence, buildings, and other habitats (hard standing).

Table 7 – Habitats and linear features present onsite.

Habitat type / Linear feature	Species present	Other observations
<i>A3.1 Broad-leaved, parkland and scattered trees</i> Two mature sycamore trees are present on site, along with a few other smaller broad-leaved trees.	Acer, ash, sycamore	Some overhanging limbs/branches are present from the adjacent woodland.
<i>A3.2 Coniferous, parkland and scattered trees</i> A few mature coniferous trees are present around the boundary of the south-west of the site.	Spruce	
<i>A2.1 Scrub (dense/continuous)</i> Some small areas of scrub are present on the western and south-eastern boundaries of the site.	Buddleia, bramble, elder, hawthorn, hazel, holly, box-leaved honeysuckle, nettle, sycamore	
<i>B6 Poor semi-improved grassland</i> Areas of poor semi-improved grassland (likely previously frequently mowed when the school was in use) are present around the south of the site.	Cock's foot, false oatgrass, red fescue, sweet vernal grass. Creeping buttercup, creeping cinquefoil, broad-leaved dock, dandelion, herb Robert, ivy, ribwort plantain, ragwort, red clover, great willowherb, yarrow	
<i>J2.4 Fence</i> The site is surrounded by fencing.	N/A	

Habitat type / Linear feature	Species present	Other observations
<i>J3.6 Buildings</i> Main school building & small building at the south-west of the site.	N/A	
<i>J5 Other habitat</i> Most of the habitat around the building consist of hard standing.	N/A	

Invasive species

3.8 No stands of invasive species were identified onsite.

Onsite fauna

3.9 The presence of the following species was observed or detected around the site during the survey: birds – blue tit, buzzard, goldfinch, jackdaw, red kite, nuthatch, long-tailed tit and woodpigeon.

Field survey - PRA

3.10 A description of the buildings inspected during the PRA can be seen in Table 8.

Table 8 – Onsite building information.

Building reference	Building type	Description	Development plans
A	Former school building	One- and two-storey brick and rendered building with multi-pitched and hipped natural slate roof; some parts of the building had a flat roof. Many windows boarded. Internal: access to the roof space was not possible due to safety concerns.	Demolition
B	Small building	One-storey rendered building with flat roof. All windows boarded up. Signs of damp damage including missing sections of soffit.	Unknown

3.11 The results of the PRA can be seen in Table 9.

Table 9 – PRA results.

Building reference	Use by bats	Use by birds	Bat signs and internal and external Potential Roost Features (PRFs) & access points
A	Moderate suitability	Inactive bird nest present	Wooden soffits had gaps due to rotting. Gaps between roof ridge tiles and lifted/ missing roof tiles.
B	Low suitability	Low suitability	Gaps in soffits – missing sections plus rot damage.

Links to surrounding habitat

3.12 The site is directly adjacent to the Cwm Taf Fechan woodlands. As well as the woodlands themselves providing excellent roosting and foraging opportunities, there are many rocky faces in the valley which have been shown to contain bat roosts.

Bat surveys (dusk emergence x2)

Timing and conditions

3.13 The survey timings and weather conditions during the activity surveys can be seen in Table 10.

Table 10 – Summary of survey timing and conditions during surveys.

Date	Type	Survey Timing			Conditions			
		Start	End	Sunset	Temp [°C]	Cloud Cover [Oktas]	Wind Speed [Beaufort]	Rain
02/09/2022	Dusk emergence	19:44	21:29	19:59	Start: 20 End: 16	Start: 6 End: 4	Start: 1 End: 1	Nil
29/09/2022	Dusk emergence	18:42	20:27	18:57	Start: 13 End: 9	Start: 1 End: 1	Start: 1 End: 1	Nil

3.14 The results of the bat surveys (dusk emergence x2) are summarised in Table 11.

Table 11 – Bat survey results. SS±xx refers to the time in minutes before/after sunset.

Survey type and date	Roosts / points of particular interest	General observations
Dusk emergence Main school building 02/09/2022	- First bat heard at 19:54 (SS-5): a common pipistrelle foraging to the north of the building - At 19:57 (SS-2) a common pipistrelle emerged from below roof tiles in the south-eastern section of the building - At 20:04 (SS+5) a common pipistrelle was seen to emerge from beneath a roof tile in the	- Species observed: brown long-eared bat, common and soprano pipistrelle and noctule - Frequent foraging activity around the trees especially to the south of the buildings.

	eastern section of the building	
Dusk emergence Main school building & small building 29/09/2022	- First bat heard at 18:53 (SS-4): a soprano pipistrelle was detected - No bats were seen to emerge from the buildings	- Species observed: lesser horseshoe bat, Myotis species, noctule and common and soprano pipistrelle - Most activity was along the treeline to the east of the site. - Small building was surveyed using IR camera and Batlogger.

3.15 Bat flight lines in and around the site can be seen in Appendix III.

3.16 Bat roosts were identified during the activity surveys and are summarised in Table 12 (see also Appendix III).

Table 12 - Details of bat roosts identified.

Date	Species (number)	Roost type (number)	Structure reference	Roost location	Access points	Dimensions or description
02/09/2022	Common pipistrelle (2)	Day (2)	A	Roof in the south-eastern section	Gaps between roof tiles	Not known

4 INTERPRETATION AND ASSESSMENT

- 4.1 This section concerns an assessment of ecological impacts resulting from the proposed development.
- 4.2 The following interpretation and assessment is provided to ensure full compliance with legislation (see Appendix IV).

Designated sites

- 4.3 There were both statutory and non-statutory designated sites identified within the vicinity of the site (see Table 4). The closest statutory and non-statutory sites were directly to the north and east of the school.
- 4.4 Given the close proximity of both statutory and non-statutory sites to the proposed demolition and the close proximity of the river Taf Fechan, it is considered that there could be an impact on designated sites (including a SSSI) as a result of the proposals if impacts on the river or surrounding woodland would occur.

Habitat assessment

- 4.5 The mature scattered broad-leaved and coniferous trees within the site may provide suitable foraging and shelter opportunities for wildlife and are not easily replaceable in the short to medium term. The trees are therefore considered to have **local ecological importance**.
- 4.6 The scrub habitat is un-managed, and the species present are common for this habitat type. The scrub habitat onsite may provide suitable foraging and shelter opportunities for wildlife and is considered to be of **site ecological importance**.
- 4.7 The semi-improved grassland habitat is un-managed, and the species present are common for this habitat type. The grassland onsite may provide suitable foraging opportunities for wildlife and is considered to be of **site ecological importance**.
- 4.8 The fence, small building, and hardstanding are considered to have **negligible ecological importance**;
- 4.9 The school building is considered to have **local ecological importance** due to the presence of bat roosts.

Priority and protected habitats

- 4.10 No priority habitats (as listed in Section 7 of the Environment (Wales) Act 2016) were present onsite.

Priority and protected species

- 4.11 The following priority species (as listed in Section 7 of the Environment (Wales) Act 2016) were present or likely to be present onsite: bats and nesting birds.

Bats

- 4.12 The local records search returned 238 records of at least nine bat species in the vicinity with roosts within 100m of the site (see Table 5).
- 4.13 The bat surveys identified two common pipistrelle day roosts (one bat per roost) within the eastern section of the roof.
- 4.14 There will be a negative impact on bats as a result of the proposed development due to loss of roosts (in the absence of mitigation).

Eurasian otter

- 4.15 The local records search returned 35 records of Eurasian otter, the closest being less than 100m from the site (see Table 5).
- 4.16 There are records of otter within the Taf Fechan which runs along the eastern boundary of the site.
- 4.17 Although the site is adjacent to the river, access between the two is very steep, which could limit otter access to the site. There may, however, be other impacts on otter if the site is to have increased lighting levels in future, or if run-off occurs during demolition.
- 4.18 There may be a negative impact on otter as a result of the proposed development.

European badger

- 4.19 The local records search returned nine records of European badger in the vicinity of the site (see Table 5), the closest record was for an outlier sett <0.1km from the site (in woodland around the river valley).
- 4.20 The small amount of grassland and scrub within the site means that foraging habitat for badger is very limited and the fence surrounding the site would provide a barrier to access for badger into the site.
- 4.21 There is unlikely to be a negative impact on European badger as a result of the proposed development.

West European hedgehog

- 4.22 The local records search returned 29 records of West European hedgehog in the vicinity of the site (see Table 5), the closest record was on site.
- 4.23 The dense scrub and semi-improved grassland onsite provide suitable habitat for foraging and sheltering hedgehog, although access to the site was limited due to the perimeter fence.
- 4.24 In the absence of mitigation, there may be a negative impact on West European hedgehog as a result of the proposed development.

Amphibians

- 4.25 The local records search returned 94 records of four amphibian species including great crested newt within the vicinity of the site (see Table 5). The closest record for great crested newt was 1km from the site.

- 4.26 There are no ponds indicated on maps of the area within 500m of the site and given that the site is predominantly hardstanding and buildings it is considered unlikely that amphibians will be present on site.
- 4.27 There will not be a negative impact on amphibian species as a result of the proposed development.

Reptiles

- 4.28 The local records search returned 39 records of two reptile species in the vicinity of the site (see Table 5), the closest begin 400m from the site.
- 4.29 The unmanaged scrub and grassland within the southern section of the site provides suitable habitat for reptiles although it is small in extent.
- 4.30 In the absence of mitigation, there may be a negative impact on reptile species as a result of the proposed development.

Nesting birds

- 4.31 The local records search returned 276 records of bird species in the vicinity of the site, including some Schedule 1 designated species (see Table 5). In addition, several bird species were encountered onsite during the PEA and an inactive nest was seen within the building.
- 4.32 The building, scrub and trees provide suitable nesting habitat for a number of bird species.
- 4.33 In the absence of mitigation, there may be a negative impact on nesting bird species as a result of the proposed development.

Invertebrates

- 4.34 The local records search returned 284 records of invertebrate species in the vicinity of the site (see Table 5).
- 4.35 The small area of grassland, scrub and trees provided limited habitat for foraging invertebrates and contained only common plant species which are likely to be well represented in the local area.
- 4.36 There will not be a negative impact on invertebrate species as a result of the proposed development.

5 CONCLUSIONS AND RECOMMENDATIONS

- 5.1 Wildwood Ecology was commissioned to undertake a Preliminary Ecological Appraisal (PEA), Preliminary Roost Assessment (PRA), and bat emergence surveys of Ysgol y Graig, Cefn Coed y Cymmer.
- 5.2 The site is the subject of a planning application for the demolition of the buildings on site.

Designated sites

- 5.3 The close proximity of designated sites and the River Taf Fechan means that the proposed demolition could have an impact on these sites. In order to minimise any potential effect caused by the demolition works, a Construction Environmental Management Plan (CEMP) should be produced outlining measures to minimise potential impacts prior to and during the proposed demolition works.

Bat surveys

- 5.4 Two common pipistrelle day roosts were confirmed within the onsite building.
- 5.5 In the absence of mitigation, there will be a negative impact on bat species as a result of the proposed development of the site.
- 5.6 A European Protected Species licence (EPSL) for species of bats roosting onsite will need to be obtained in order for the works to the building to be legally undertaken. The EPSL will require a detailed mitigation and compensation strategy to be devised in the form of a method statement. This will aim to ensure that the maintenance of the roosts and local bat populations are maintained at a favourable conservation status.
- 5.7 In support of any application made for an EPSL, licence documents must specify work methods, timescales, and mitigation/ compensation required to ensure that the roost at the site are appropriate and managed/ maintained and that the local bat populations are maintained at the favourable conservation status for the species concerned. A bat box (such as Schwegler 2F Bat Box or Vincent Pro Bat Box), will be placed on a tree within the site at least 3m above the ground and facing in a southerly direction prior to the demolition of the onsite buildings.
- 5.8 In order to prevent an impact on local bat populations, foraging and commuting routes around the site must remain unfragmented. Fragmentation can occur by physical removal of habitats, but also by artificial light spilling onto them.
- 5.9 All UK bats are nocturnal species and light averse (brown long-eared bat and horseshoe bat species particularly so). Artificial lighting of foraging and commuting routes is known to act as a barrier to bats and fragment otherwise suitable habitats, causing a negative impact on their local populations.

- 5.10 Therefore, if there is to be external lighting during the proposed works, there will need to be consideration for bats with dark flight lines maintained (see Appendix IV). The works should be undertaken during daylight hours (considered to be 30 minutes after sunrise) and any 'exterior' lighting proposed post-development should not have a detrimental effect on bats commuting along nearby habitat.
- 5.11 Suggestions for achieving this and for mitigating the light impact on bats are outlined in Guidance Note 08/18 - 'Bats and artificial lighting in the UK; Bats and the built environment series' (The Bat Conservation Trust, BCT, and the Institution of Lighting Professionals, ILP).
- 5.12 Any external security lighting should be set on motion-sensors and short (1 min) timers.
- 5.13 If any major tree works (e.g. felling, removal of major limbs, crown lifting) are planned then these trees must be subject to a preliminary ground level roost assessment to identify any potential roost features (PRFs). Any PRFs identified will require further investigation – a PRF inspection survey (involving tree climbing/endoscopy) prior to works.

Other protected species

- 5.14 Recommendations regarding protected species are shown in Table 13.

Table 13 – Recommendations.

Species	Recommendations
European otter	No further surveys required as otters unlikely to directly use the site. The CEMP will include a section on minimising impacts to otters.
Reptiles	No further surveys required. The CEMP will include a section on minimising impacts to reptiles if vegetation clearance is required during the works. If vegetation clearance to ground-level is to take place then this should avoid the hibernation period for reptiles (November-February inclusive) as clearance to ground-level during this time risks killing/injury to reptiles and triggering legislation.
Nesting birds	The demolition works will take place outside of the bird nesting season. In the event that clearance work has to be undertaken during the nesting season (generally from 1 st March until 31 st August, although birds are known to nest outside of these dates in suitable conditions), a nesting bird check will be required and must be carried out by a suitably qualified person. Any active nests identified should be protected until the young have fledged. Where a Schedule 1 species (as defined in the Wildlife and Countryside Act - http://www.jncc.gov.uk/page-3614) is involved, compensation for impacts, e.g., loss of nesting sites, should be devised and implemented.
West European hedgehog	No further surveys required. The CEMP will include mitigation to prevent killing or injury to this species particularly if any of the onsite vegetation is to be

	removed during the works. Any excavations left overnight should be covered or fitted with a means of escape.
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Overall conclusion

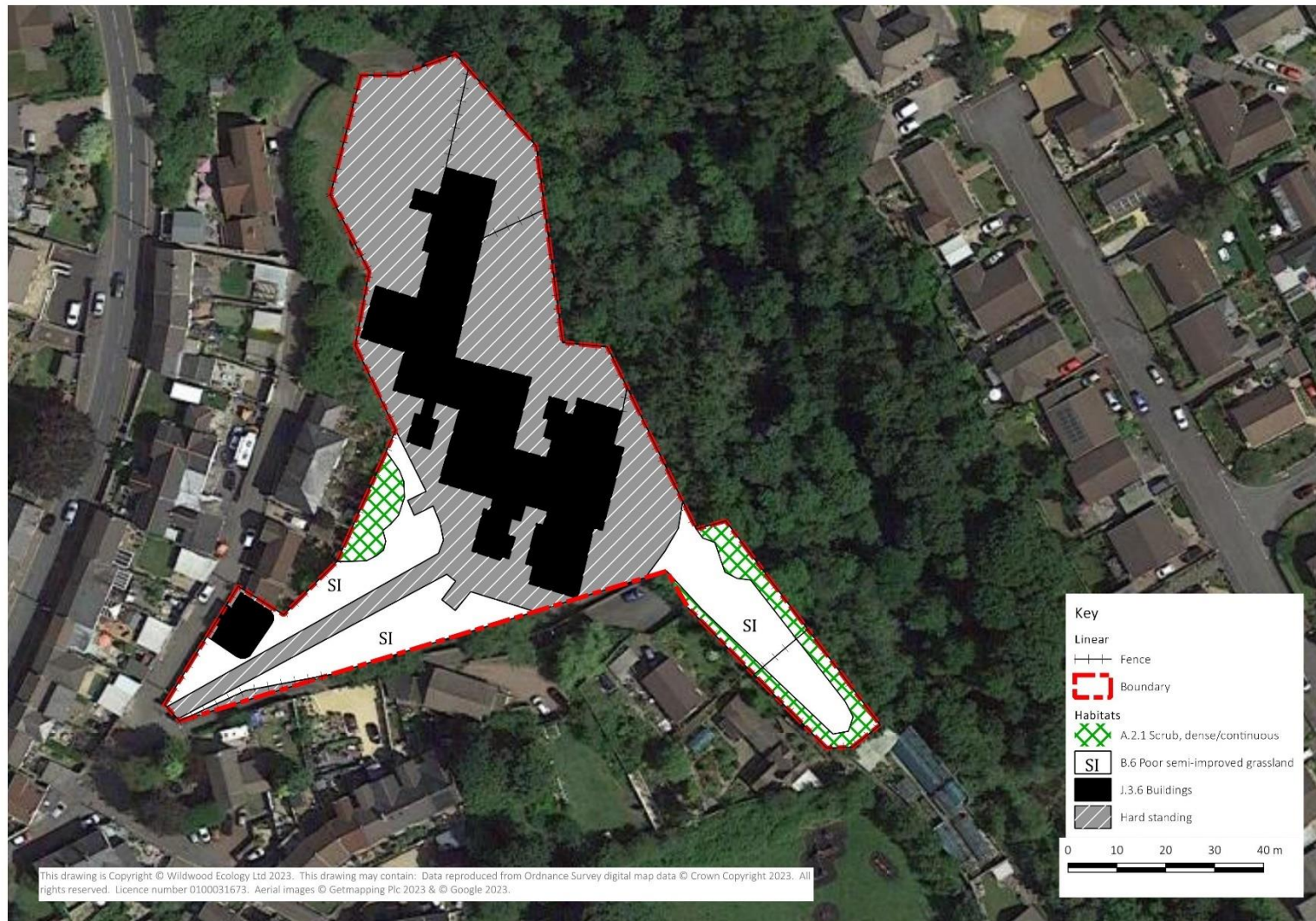
- 5.15 Providing that the recommendations outlined within this report are successfully implemented, it should be possible for the proposed development to proceed and for there to be no long-term impacts upon the key protected species present at the site.

This ecological report will remain valid for a period of 18 months from the date of the last survey - i.e. until March 2024. Further surveys may be required to update the site information if planning is not obtained or works do not commence within this time period.

6 REFERENCES

- Bat Conservation Trust and the Institution of Lighting Professionals (2018) Bats and artificial lighting in the UK; *Bats and the Built Environment* series (Guidance Note 08/18), The Bat Conservation Trust, London.
- CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (ed.) (2016) Bat surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.
- Institute for Environmental Assessment (1995). Guidelines for Baseline Ecological Assessment. E & FN Spon, Hong Kong.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey; A technique for environmental audit. Reprinted by JNCC, Peterborough.

APPENDIX I: PHASE 1 SURVEY PLAN



APPENDIX II: SURVEY IMAGES



Figure 3 – Typical view inside classroom.



Figure 4 – Another typical view inside a room.



Figure 5 – Attic access was usually left open but not accessed due to damp concerns.



Figure 6 – Building main entrance.



Figure 7 – North-west section of building.



Figure 8 – Looking south towards the centre of the building.



Figure 9 – Frequent slipped/missing tiles.



Figure 10 – South-western corner of building, showing rotting timbers under flat roof.



Figure 11 – View across the building, looking north-east.



Figure 12 – Small area of scrub at the south-west of site.



Figure 13 – View across grassland looking towards building, looking north-east.

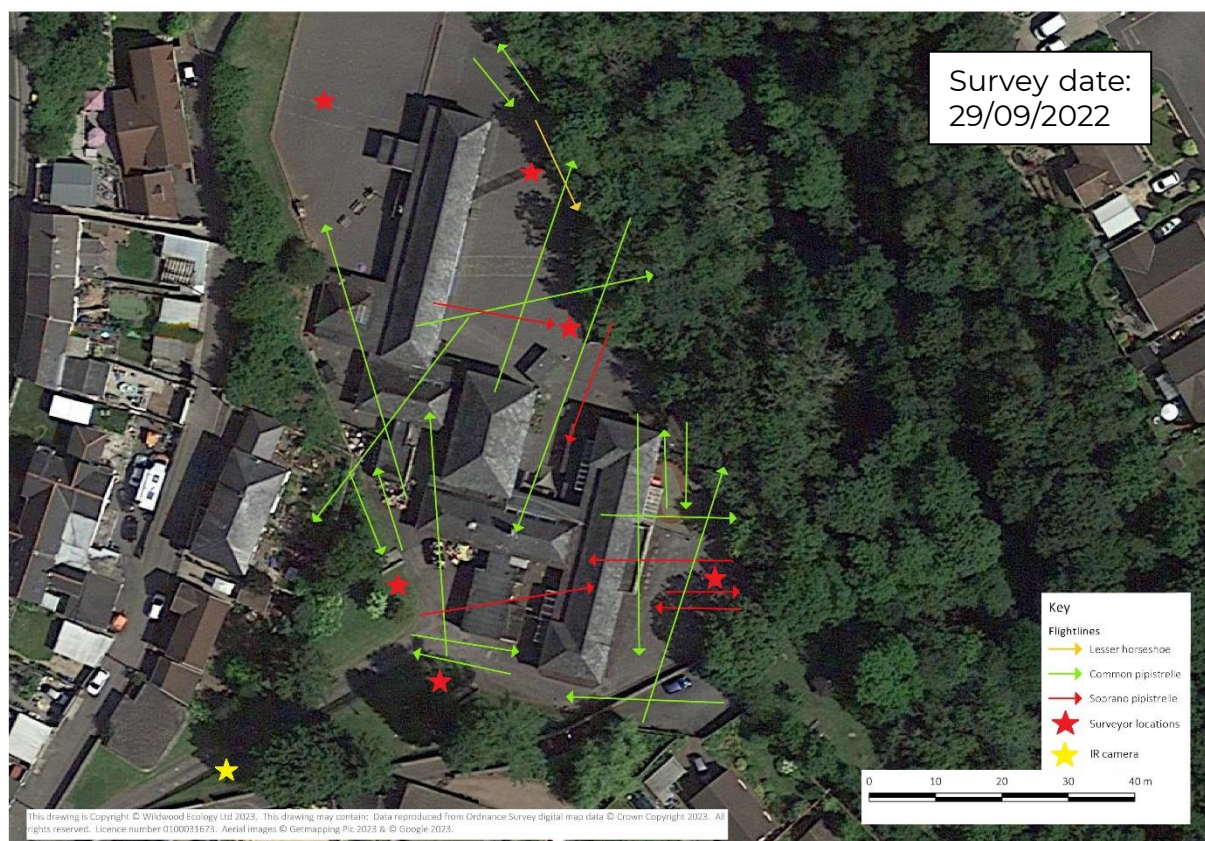
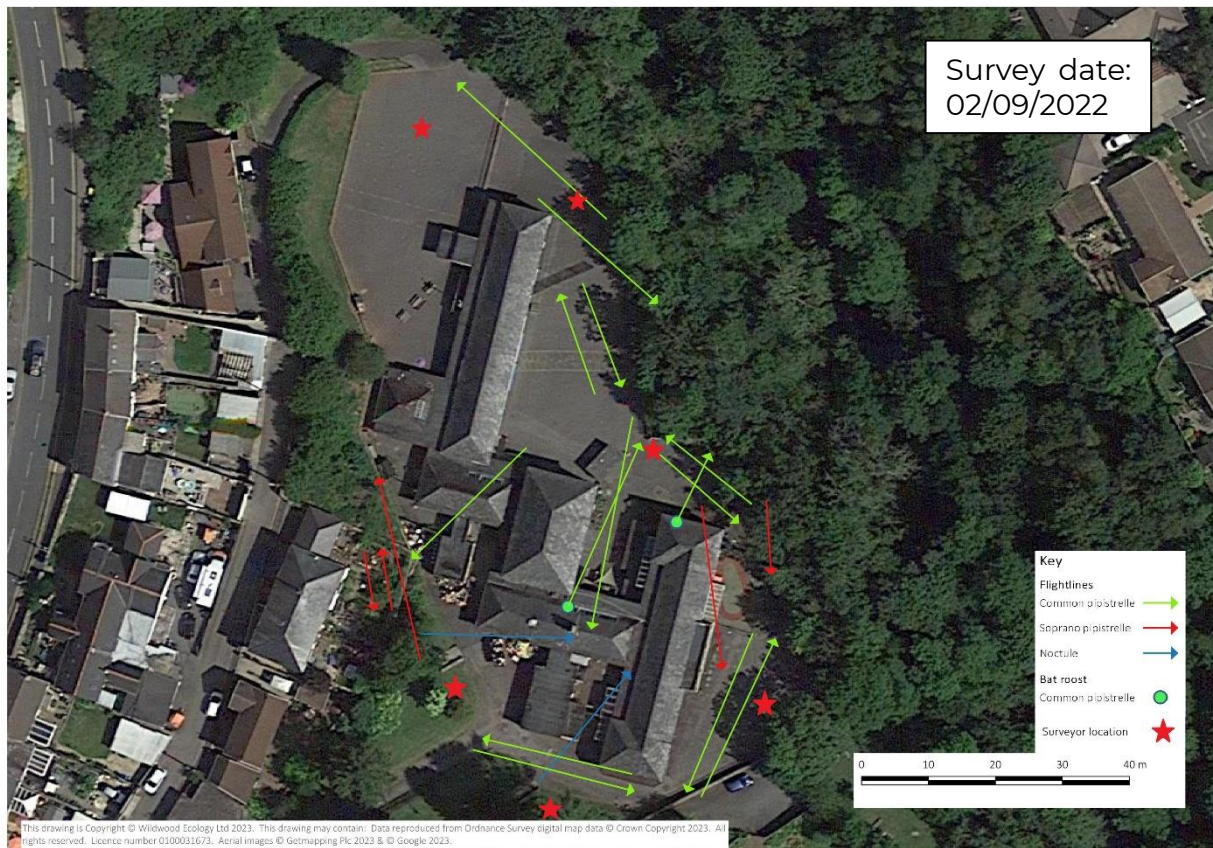


Figure 14 – South-eastern corner of site, looking towards building.



Figure 15 - Small building at south-west of site with gaps in soffit.

APPENDIX III: BAT SURVEY RESULTS



APPENDIX IV: SPECIES LIST

To be submitted to the appropriate Local Records Centre

Site Name: Ysgol y Graig, Cefn Coed y Cymmer **Provided by:** Wildwood Ecology Ltd

Grid ref: SO 03380 08026 **Verified by:** Amy Williams Schwartz

Common name	Scientific Name	Number	Comment
Bats			
Brown long-eared bat	<i>Plecotus auritus</i>		
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>		
Myotis species	<i>Myotis</i> sp.		
Noctule	<i>Nyctalus noctula</i>		
Common pipistrelle	<i>Pipistrellus pipistrellus</i>		Two day roosts
Soprano pipistrelle	<i>P. pygmaeus</i>		
Birds			
Blue tit	<i>Cyanistes caeruleus</i>		
Buzzard	<i>Buteo buteo</i>		
Goldfinch	<i>Carduelis carduelis</i>		
Jackdaw	<i>Corvus monedula</i>		
Red kite	<i>Milvus milvus</i>		
Nuthatch	<i>Sitta europaea</i>		
Long-tailed tit	<i>Aegithalos caudatus</i>		
Woodpigeon	<i>Columba palumbus</i>		
Trees/ Shrubs			
Acer	<i>Acer</i> sp.		
Ash	<i>Fraxinus excelsior</i>		
Bramble	<i>Rubus fruticosus</i> agg.		
Buddleia	<i>Buddleja davidii</i>		
Elder	<i>Sambucus nigra</i>		
Hawthorn	<i>Crataegus monogyna</i>		
Hazel	<i>Corylus avellana</i>		
Holly	<i>Ilex</i> sp.		
Box-leaved honeysuckle	<i>Lonicera nitida</i>		
Spruce	<i>Picea</i> sp.		
Sycamore	<i>Acer pseudoplatanus</i>		
Grasses			
Cock's foot	<i>Dactylis glomerata</i>		
False oatgrass	<i>Arrhenatherum elatius</i>		
Red fescue	<i>Festuca rubra</i>		
Sweet vernal grass	<i>Anthoxanthum odoratum</i>		
Forbs			
Creeping buttercup	<i>Ranunculus repens</i>		
Creeping cinquefoil	<i>Potentilla reptans</i>		
Broad-leaved dock	<i>Rumex obtusifolius</i>		

Dandelion	<i>Taraxacum officinale</i>		
Herb Robert	<i>Geranium robertianum</i>		
Ivy	<i>Hedera</i> sp.		
Ribwort plantain	<i>Plantago lanceolata</i>		
Ragwort	<i>Jacobaea vulgaris</i>		
Red clover	<i>Trifolium pratense</i>		
Great willowherb	<i>Epilobium hirsutum</i>		
Yarrow	<i>Achillea millefolium</i>		

APPENDIX V: PLANNING POLICY AND LEGISLATION

The following local and national planning policy and legislation relating to nature conservation and biodiversity status are considered of relevance to the current proposal.

Planning and biodiversity

Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following planning policies.

Planning Policy Wales (2021) and Technical Advice Note 5 (2009)

Planning Policy Wales (Edition 11, February 2021) sets out the land use planning policies of the Welsh Government, integrating with the Environment (Wales) Act (2016). The advice contained within Planning Policy Wales (PPW) is supplemented for some subjects by Technical Advice Notes (TANs).

TAN 5 (Welsh Government, 2009) specifically provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The TAN provides advice for local planning authorities on the key principles of positive planning for nature conservation; nature conservation and Local Development Plans; nature conservation in development management procedures; development affecting protected internationally and nationally designated sites and habitats; and development affecting protected and priority habitats and species.

Under Section 2.4 within the TAN 5, 'when deciding planning applications that may affect nature conservation local planning authorities should':

- Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective;
- Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment;
- Promote the conservation and enhancement of statutorily designated areas and undeveloped coast;
- Ensure that appropriate weight is attached to designated sites of international, national and local importance;
- Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans;
- Ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation;
- Ensure that the range and population of protected species is sustained;

- Adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered;

Legislation and biodiversity

Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2017 (as amended). These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

Other relevant legislation and policy documents that have been consulted include – The Environment (Wales) Act 2016; The Countryside and Rights of Way Act 2000; The Hedgerow Regulations 1997; Biodiversity Action Plans, both UK-wide (UKBAP) and Local plans (LBAPs), and The National Planning Policy Framework (NPPF).

There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Environment (Wales) Act 2016

Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

Section 7 replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act deals with the protection of wildlife.

Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (as amended) (see below), but

some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. Signal Crayfish and American Mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and *Rhododendron ponticum*) or otherwise deliberately causing them to grow in the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.

There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.

Licensing: certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994.

These regulations provide for the:

- protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts, and otters;
- designation and protection of domestic and European Sites - e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]; and
- adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application.

There is no defence that an act was the incidental and unavoidable result of a lawful activity.

Licensing: it is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Species protection

The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Bats

All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:

- Deliberately kill, injure or capture a bat;
- Deliberately disturb bats;
- Damage or destroy a breeding site or resting place of a bat.

In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- Obstruct access to any structure or place which any bat uses for shelter or protection; or
- Disturb any bat while occupying a structure or place which it uses for that purpose.

If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.

Birds

In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 (as amended). All wild birds, their nests and eggs are protected it an offence to:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any such bird whilst it is in use or being built; or
- take or destroying an egg of any such wild bird.

The law covers all species of wild birds including common, pest or opportunistic species.

Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

Otters

The European Otter, *Lutra lutra* is a European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:

- deliberately capture, injure or kill any wild otter;
- deliberately disturb wild otters;
- damage or destroy a breeding site or resting place of an otter.

In addition, the otter is listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- disturbs an otter while it is occupying a structure or place which it uses for shelter or protection; or
- obstructs access to such a place.

If proposed development work is likely to destroy or disturb otters or their resting places, then a licence will need to be obtained from Natural Resource Wales, which would be subject to appropriate measures to safeguard otters.

Reptiles

Adders, slow worms, grass snakes and common lizards are protected against killing and injuring under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile. As a result, reptiles must be removed from areas of development and relocated onto suitable release sites before any site works can commence.

Smooth snakes and sand lizards are European Protected Species under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). This makes it illegal to carry out the following activities:

- Deliberately or recklessly disturb, capture or kill these animals;
- Deliberately or recklessly take or destroy eggs of these animals;
- Damage or destroy a breeding site or resting place of such a wild animal; or

Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from such a wild animal.