

GOULD ECOLOGY

Ecological Consultants

Proposed Redevelopment at

121 Heol Cae Gurnen

**Gwaun Cae Gurnen
Ammanford
Neath Port Talbot
SA18 1PD**

Bat Survey

October 2022

(Version 1 - Final)



Document Information

Report Type	Bat Survey		
Project Details	Site Location	Commissioned By	Date
Redevelopment requiring demolition of existing building	121 Heol Cae Gurnen, Gwaun Cae Gurnen, Ammanford, Neath Port Talbot SA18 1PD Grid Ref. SN 70393 11624	PropSource Ltd	July 2022

Fieldwork	Personnel	Date
Bat Scoping Survey	Richard Gould ACIEEM MA BSc (NRW Bat Survey Licence: S090349/2)	7 th July 2022
Dusk Emergence Survey	Richard Gould, Lois Thomas MSc, James Silbers & Dina Kingsnorth BSc	3 rd August 2022
Dawn Re-Entry Survey	Richard Gould, Kirsten Dick & Lois Thomas	30 th August 2022
Dusk Emergence Survey	Richard Gould, Kirsten Dick and Simeon Jones PhD MCIEEM	16 th September 2022

Document Version	Details	By	Date
1 - Draft	Prepared by	Richard Gould	4 th Oct 2022
	Checked by	Richard Gould	4 th Oct 2022
	Issued to Client		4 th Oct 2022
1 - Final	Client approved		11 th Oct 2022

Disclosure

"The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. I confirm that the opinions expressed are our true and professional bona fide opinions"

Signed



Richard Gould

Executive Summary

Bat Survey for a proposed redevelopment at 121 Heol Cae Gurnen, Gwaun Cae Gurnen, Ammanford, Neath Port Talbot SA18 1PD, including demolition of the existing building at the site.

The site was a large, derelict club building set within a small plot comprising vegetated hard-surfaces/ compressed stone.

Survey Work

The survey work comprised a **walkover and bat scoping survey** conducted on 7th July 2022, 2 x **dusk emergence surveys** on 3rd August and 16th September 2022 and a **dawn re-entry survey** on 30th August 2022.

Key Findings

No bat roosting activity was recorded within the building. Low numbers of pipistrelle species bats were recorded foraging in the vicinity, including occasional flights within the building (which contained multiple openings and was missing much of the roof to the rear).

The building and dense vegetation on the plot margins had potential suitability for nesting birds.

The plot generally had low or negligible suitability for protected species. There was a low risk of common lizard and hedgehog occurring within the plot.

Several small specimens of wall cotoneaster (a Schedule 9 invasive species) were noted within the plot

Appraisal

The proposed demolition of the building would have a *negligible* risk of causing adverse impacts to bats or bat roosts. However, precautionary measures are recommended due to the low levels of flight activity observed within/near to the building.

The proposed demolition of the building, or removal of any dense woody vegetation on the plot margins would risk disturbing active bird nests if conducted during the nesting season (mid Feb - end August).

The proposed development would carry a low risk of killing or injuring reptiles (such as common lizard) or hedgehog during works. Risks could be minimised by adopting careful working practices;

The proposed development would risk transporting wall cotoneaster off site - potentially a legal offence. This could be avoided by implementing suitable working methods and controls.

Recommendations Summary (Refer to Section 7 for Full Details)

Mitigation and Enhancement

Areas of the building offering potential bat roost features shall be demolished carefully. Contractors shall be briefed on measures to take in the unlikely event that a bat is encountered.

Demolition works shall be conducted outside of the bird nesting season, or the building must be checked and confirmed clear of active nests prior to proceeding.

Vegetation within the site shall be cleared sequentially and any potential refuges dismantled by hand in order to minimise its suitability for reptiles, hedgehog and other fauna prior to commencing excavation works.

Wall cotoneaster shall be processed on site or removed using a licensed waste carrier.

A designated habitat area shall be created within the plot to benefit biodiversity at the site in the long term.

Further ecological enhancement could be delivered by installing build-in bat boxes and bird nest boxes within buildings.

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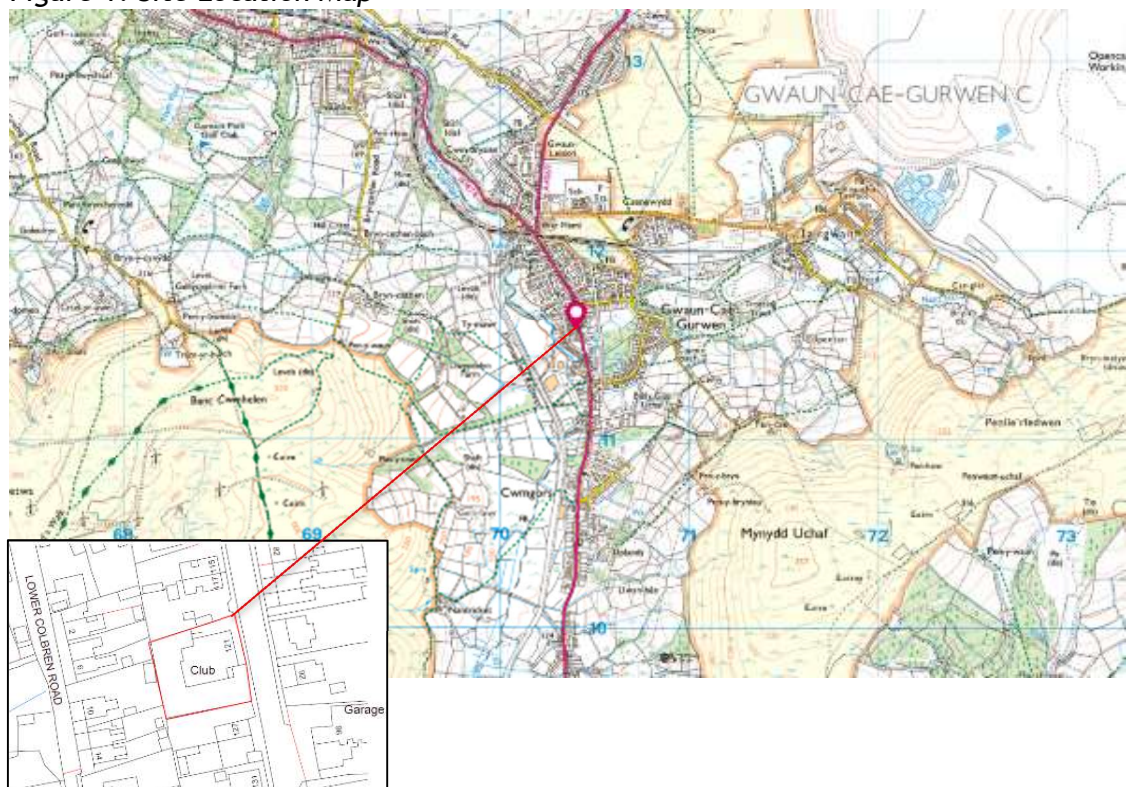
1 Introduction & Background

- 1.1 In July 2022, Gould Ecology were commissioned to carry out a walkover survey and bat survey at 121 Heol Cae Gurnen, Gwaun Cae Gurnen, Ammanford, Neath Port Talbot SA18 1PD.
- 1.2 The purpose of the survey was to accompany a planning application for a proposed redevelopment of the site, which would require demolition of the existing building.
- 1.3 The aims of this report were:
- To determine the likely presence/absence of bats at the site (in line with current good practice guidance);
 - Where bats are present, to characterise bat roosting activity and assess any potentially adverse impacts in relation to the proposals;
 - To assess the actual or potential presence of nesting birds, protected species and invasive species;
 - To provide recommendations for measures to avoid, minimise or compensate for any adverse impacts to bats or other wildlife, and to deliver an appropriate scale of ecological enhancement.

Site Location

- 1.4 The site was located on North Road, within the settlement of Cwm Cae Gurnen, adjacent to the A474, approximately 7km east of Ammanford as shown in Figure 1, below.

Figure 1: Site Location Map



Personnel

- 1.5 This report has been prepared by Richard Gould ACIEEEM MA, BSc (Hons). Richard is licenced to survey bats in England and Wales. He holds a current Bat Survey Licence from Natural Resources Wales (S090349/2).
- 1.6 Richard Gould has over 17 years' experience as a consultant ecologist and is experienced at conducting bat surveys and providing bat mitigation for a range of projects within West Wales, including a range of barn conversions, building extensions and renovations.
- 1.7 The dusk emergence and dawn re-entry surveys were led by Richard Gould, with assistance from Kirsten Dick, Lois Thomas, Simeon Jones, James Silbers and Dina Kingsnorth.
- 1.8 Kirsten Dick is an experienced survey assistant who has undertaken voluntary bat monitoring since 2014 and has been working on commercial bat surveys with Gould Ecology and Ecoleg Wern since 2016 where she has assisted on numerous bat surveys for barn conversions, house extensions and other projects. Kirsten undertakes voluntary work as a bat carer has a certificate in bat care from the Sussex bat group.
- 1.9 Simeon Jones PhD MCIEEM holds a current NRW bat survey licence (S087471/2), and is experienced at conducting bat survey work, having conducted numerous commercial bat surveys (since 2015) as well as bat monitoring programmes with Carmarthenshire Bat Group. Simeon has also coordinated the conservation and monitoring of greater horseshoe bats within Pembrey County Park since 2012. He has a certificate in bat care from the Sussex bat group, and is a registered bat carer with the Bat Conservation Trust.
- 1.10 Lois Thomas MSc has a Master's degree in Environmental Biology and a Bachelor's degree in Zoology from Swansea University. Lois has experience in assisting with bat survey fieldwork from her university courses and previous voluntary experience. She began working in commercial consultancy with Gould Ecology in 2021, and has received training from Richard Gould on several prior projects. Lois currently works as an LPA ecologist in Carmarthenshire.
- 1.11 James Silbers is an experienced bat surveyor who has regularly worked on commercial bat surveys with Gould Ecology and Ecoleg Wern since 2018 where he has assisted on numerous bat surveys for barn conversions, house extensions and other projects.
- 1.12 Dina Kingsnorth BSc(Hons) has a degree in biological sciences and has worked as bat survey assistant with Gould Ecology since May 2022.

2 Legislative and Planning Policy Context

- 2.1 The following paragraphs summarise the key aspects of current UK wildlife legislation which are relevant to the project.

The Conservation of Habitats and Species Regulations 2017 (as amended by the Conservation of Habitats and Species regulations (Amendment) (EU Exit) Regulations 2019

- 2.2 The **Conservation of Habitat and Species Regulations** provide for the designation and protection of 'European sites' and the protection of 'European protected species (EPS). All **UK bat species** are included within this legislation.

- 2.3 Following Britain's exit from the EU, the legal protection afforded to European Protected Sites and Species (including bats) through the Habitat Regulations still continues to apply.

- 2.4 Aspects of this legislation relevant to development projects mean that it is an offence to:

- Deliberately capture, injure or kill an EPS (i.e. a bat);
- Deliberately disturb an EPS;
- Damage or destroy a breeding site or resting place of an EPS (e.g. a bat roost).

- 2.5 In particular, the term '*disturbance*' relates to any action which is likely to impair their ability 'to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.' This includes obstructing access to any place used by bats for shelter (i.e. a roost) whether they are present or not at the time.

- 2.6 It should also be noted that to damage or destroy a breeding site or resting place of an EPS (such as a bat roost) is an offence, whether or not the action was deliberate.

- 2.7 In some cases, otherwise illegal actions may be permitted through gaining a **derogation licence** from the statutory nature conservation body (in Wales, this is **Natural Resources Wales (NRW)**). This process is often used for development projects where disturbance to (or destruction of) a bat roost is likely to be caused by the proposed works. Further details of licensing requirements are provided in Appendix B.

The Wildlife and Countryside Act (1981, as amended)

- 2.8 Much of the protection previously afforded to bats under the **Wildlife and Countryside Act (WACA)** is now superseded by the Conservation of Habitats and Species Regulations (2017).

- 2.9 However, the WACA specifically protects against:

- Intentional or reckless obstruction of access (of a bat) to a structure or places used for shelter or protection (i.e. blocking of **bat access** to roosts);
- Intentional or reckless disturbance of a bat when occupying a place of shelter or protections.

- 2.10 These acts are would cause an offence under the WACA, unless the act was ‘*the incidental result of a lawful operation and could not have reasonably been avoided*’.
- 2.11 The Wildlife and Countryside Act also affords legal protection to nesting birds, including to:
- Intentionally kill, injure or take any wild bird (*certain authorised persons are permitted to kill or take certain species using permitted methods under licence*);
 - **Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built** (unless it can be demonstrated that the act was ‘*the incidental result of a lawful operation and could not have reasonably been avoided*’);
 - Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The Environment (Wales) Act 2016

- 2.12 **Section 6 of the *Environment Act*** includes a ‘Biodiversity and Resilience of Ecosystems Duty’, which places a duty on planning authorities to “maintain and enhance biodiversity” where it is within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”
- 2.13 **Section 7 of the *Environment Act*** contains a list of species and habitats of principal importance in Wales. All habitats and species on this list are treated as a ‘material consideration’ within the planning process, and planning is unlikely to be granted where adverse impacts to any of these are expected.
- 2.14 Currently, the Section 7 list includes the following bat species: barbastelle, common and soprano pipistrelle, brown long eared, Bechstein’s, noctule, greater and lesser horseshoe bats.

Planning Policy

- 2.14 A summary of **Local and National Planning Policy Guidance which relates to bats and biodiversity** is provided in **Appendix C**. The main implications of the guidance are summarised in the following paragraphs.
- 2.15 Development projects with the potential to cause significant adverse ecological effects or to breach the legislation are required to submit sufficient information to ensure that such risks are assessed. This will be based on site surveys which describe the existing ‘baseline’ ecological conditions.
- 2.16 Where the risk of causing a significant adverse ecological effect has been identified, the project design must incorporate appropriate impact avoidance, mitigation or compensation measures, as required under UK legislation and planning policy.
- 2.17 The LDP requires development proposals to enhance biodiversity wherever possible. A planning application should include information on measures that will enhance, restore and/or create new habitats and improve the built environment for wildlife in addition to any measures for protecting existing wildlife and habitats on site.

3 Methodology

Desk Study

- 3.1 Ordnance survey maps and overhead photography (Google Earth Pro) were used to assess the site's context within the wider area.
- 3.2 The MAGIC interactive map (magic.defra.gov.uk) was used to search for all statutory designated sites within 2km of the development and for bat and bird related designated sites within 10km
- 3.3 A search for records of protected and priority species within 2km of the site was ordered from South-East Wales Biological Records Centre

Bat Scoping Survey methodology

- 3.4 The building was inspected for evidence of use by bats and buildings assessed for their potential to support roosting bats by Richard Gould, in line with the methodology provided within the Bat Conservation Trust (2016) '*Bat Surveys for Professional Ecologists - Good Practice Guidance*' document.
- 3.5 A thorough and systematic inspection was made of the external building faces and features and the interior space, paying particular attention to areas where signs might be expected to occur.
- 3.6 All building features with 'bat roost potential' were identified, and the habitat quality of the site and surrounding area were noted. These details were used in order to provide an assessment of the overall suitability of the site for bats, and to inform any further survey requirements, with reference to the guidance provided in BCT (2016).
- 3.7 Live or dead bats, signs of their presence or habitat features which could support bats were noted. Indications of bat presence include bat droppings (this is the most commonly encountered sign), as well as urine staining, staining around crevices, cobweb-free holes and flying spaces, and feeding remains.

Walkover Survey Methodology

- 3.8 The habitats within the site were identified according to Phase 1 Habitat Survey methodology and valued in order to assess any potentially significant impacts.
- 3.9 Habitats were also assessed for their potential to support protected or priority species, including nesting birds, otter, water vole, dormouse, badger, reptiles, amphibians, invertebrates or plants. Evidence of the presence of non-native invasive species were also noted.

Dusk Emergence Surveys - 3rd August 2022 and 16th September 2022

- 3.10 **The dusk emergence surveys** were begun 15 minutes before sunset and lasted for at least 1.25 hours after sunset.

- 3.11 Weather conditions were suitable for bat survey on both visits
- 3.12 Four surveyors were used on the first visit in order so that there was adequate coverage of all building elevations with potential bat roost/access features. Three surveyors were used on the second visit due to the low levels of bat activity seen on previous visits.
- 3.13 The surveyors watched for any bat emergence activity. General bat activity at the site was also noted.
- 3.14 The surveyors used a Elekon Batlogger M and Wildlife Acoustics EchoMeter Pro ultrasonic bat detectors which provide audio feedback on bat calls at all frequencies, and which record full spectrum bat calls for later analysis.
- 3.15 Further details on weather conditions, surveyor locations and equipment used are provided in *Appendix D: Survey Results Forms*.

Dawn Re-Entry Survey - 30th August 2022

- 3.16 ***The dawn re-entry survey*** was begun 1.75 hours before sunrise and lasted until 15 minutes after sunrise
- 3.17 Weather conditions were suitable for bat survey.
- 3.18 Three surveyors were used so that all building elevations with potential bat roost/access features could be monitored for bat activity indicative of roost return. General bat activity at the site was also noted.
- 3.19 The surveyors used Elekon Batlogger M bat detectors which provide audio feedback on bat calls at all frequencies, and which record full spectrum bat calls for later analysis.
- 3.20 Further details on weather conditions, surveyor locations and equipment used are provided in *Appendix D: Survey Results Forms*.

4 Results

Desk Study

Designated Sites

- 4.1 The following table summarises the statutory designated sites within 2km of the proposed development, and the bat-related Special Areas of Conservation (SAC) and SSSIs within 10km.

Table 1: Designated Sites

Name of Designated Site	Distance from Development Site	Reason for designation
Tairgwaith SSSI	840m east (nearest point)	Species-rich grasslands and associated rare plants

- 4.2 The Tairgwaith SSSI, of value for species-rich grassland habitats and associated species, occurred 840m from the site.

Existing Records

- 4.3 The following paragraphs summarise the records of protected and priority species (relevant to the proposals) within 2km of the site held by SEWBREC.

Bats

- 4.4 There were 13 records for bats within the search area, which included common pipistrelle, soprano pipistrelle and unidentified bat species. Noctule, myotis and brown long-eared bats were recorded just over 2km from the site.
- 4.5 The nearest bat records comprised a record for bat droppings in a loft 295m from the site (2017), common and soprano pipistrelle bats 390m from the site (2012), a common pipistrelle bat maternity roost 812m from the site (2006) and small numbers of roosting pipistrelle bats 976m from the site (2012).

Terrestrial Mammals (other than bats)

- 4.6 There were 16 records for hedgehog in the search area, with some in the near vicinity of the site, with the nearest record 42m from the site (2011).
- 4.7 The nearest record for badger was just over 1.2km from the site.
- 4.8 Brown hare have been recorded at just over 1.8km from the site. Otter and dormouse have been recorded just over 2km from the site.

Reptiles and Amphibians

- 4.9 There were 9 records for reptiles within the search area. Slow worm, common lizard and grass snake were recorded at a disused factory 874m south of the site (2012). No other reptile species were recorded.
- 4.10 Common frog have been recorded within the search area, with the nearest record 1.1km from the site. No other amphibian species have been recorded.

Birds

- 4.11 There were 116 records for birds within 2km of the site. Bird records within 500m of the site included grey wagtail, long-tailed tit, starling, house sparrow, bullfinch, cuckoo and meadow pipit.

Invertebrates

- 4.12 Marsh fritillary butterfly have been recorded in two locations between 160 and 360m of the site (2018).
- 4.13 Other priority invertebrate species recorded within 1km of the site included small heath, broom moth, grey mountain carpet moth and small pearl-bordered fritillary.

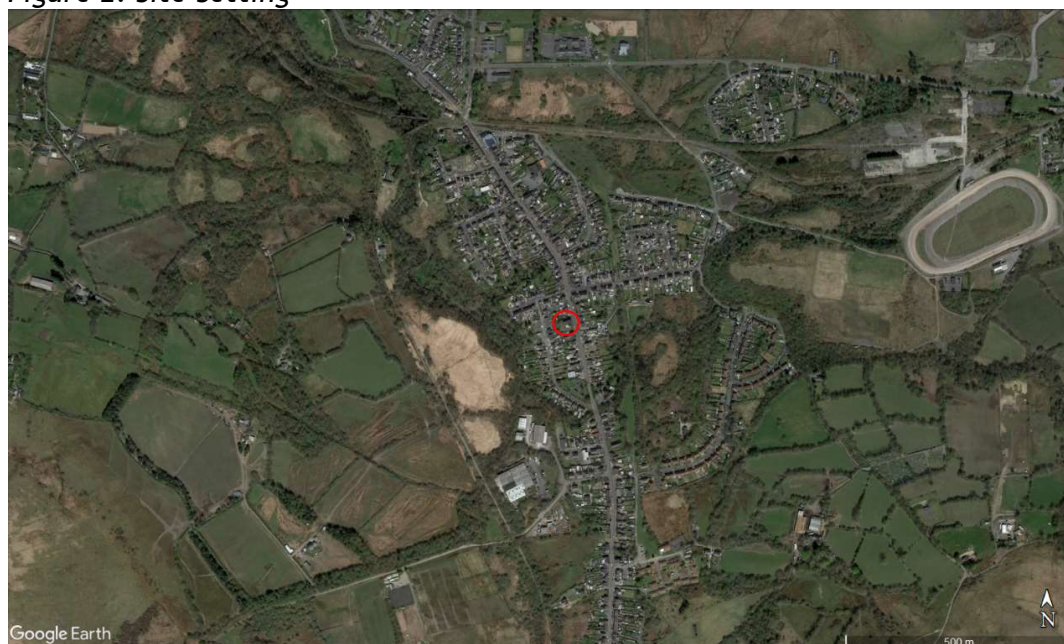
Plants

- 4.14 Japanese knotweed, Himalayan balsam, *Montbretia crocosmia* and wall cotoneaster (Schedule 9 listed non-native invasive species) have been recorded within the search area, with the nearest records 150m from the site.
- 4.15 The only protected/ priority plant species recorded within the search area comprised native bluebell which has been recorded in several locations, with the nearest record 150m from the site.

Site Setting

- 4.16 The site was a large, derelict club building comprising a main section at the front with rear extensions. It was set within a small plot comprising vegetated hard-surfaces adjacent to the A474 and surrounded by residential houses with small gardens.
- 4.17 Habitats in the wider area included watercourses, woodland, marshy grassland and agricultural grassland.

Figure 2: Site Setting



Bat Scoping and Inspection Survey

- 4.18 The following paragraphs describe the buildings on site, with an assessment of the extent and quality of any features with potential for bat roosting. Photographs are provided in Appendix A.

External Inspection

- 4.19 The roof of the main building was of slate, but only the front (eastern) elevation had a complete roof, with slates missing from the majority of the rear sections.
- 4.20 The front (east) elevation was generally well sealed, with rendered wall and boarded doors and windows. Gaps were noted at the corners of the fascia, and beneath flashing where dormer windows joined the main roof.
- 4.21 The southern elevation comprised a series of roof elevations and extensions. The majority of the main roof was open, and large gaps were noted around soffits on the single-storey extensions.
- 4.22 The rear (west) extension comprised two storey extensions with missing roofs and doorway/ window openings. Occasional gaps were noted in rotting timber fascias and in soffits.
- 4.23 The north elevation was generally well sealed, with no potential bat access points and cement sealed wall tops. A small outbuilding / external cellar occurred on the northern elevation with a doorway opening and corrugated metal roof. The feature was overgrown with dense vegetation and was flooded internally. No potential bat roost features were noted in this area.

Internal Inspection

- 4.24 The main internal space of the building was derelict and damp. The lower floors were unused with rendered walls and timber ceilings. Upper floors were in poor condition with roofs partially or completely open. Occasional small gaps were noted in the roof frame and between roof timbers and walls.
- 4.25 A small, flooded basement occurred on the southern elevation. No potential crevice roost features were noted in this area.
- 4.26 No evidence of bats was noted in any part of the building

Bat scoping Survey Summary and Interpretation

- 4.27 The building was very open and contained numerous doorway and window openings on the western and southern elevations, as well as a largely open roof. Small cavities were noted beneath soffits and fascias on external walls, and small gaps and cavities were noted around the roof frame and walls internally.
- 4.28 Basement areas were flooded and were not found to contain crevice roost features. They were considered likely to be too small and open to provide suitable hibernation roost potential.

- 4.29 The setting of the site was considered to have lower suitability for bats, due to the developed nature of surrounding areas, including night time lighting associated with the A474 and nearby houses.
- 4.30 Overall, the building was considered to have *moderate* bat roost suitability due to the number of openings and small crevice roosting opportunities. Due to the abundance of openings in the building and the potential challenges with observing associated bat movements, three further dusk / dawn surveys were conducted in order to provide a suitable assessment of bat presence/ absence.

Dusk and Dawn Bat Survey Results

- 4.31 Table 2, below, summarises the results of the dusk emergence and dawn re-entry surveys conducted at the site. Survey data is provided in Appendix B

Table 2: Dusk and Dawn Survey Results Summary

<i>Survey 1</i>	<i>DUSK EMERGENCE SURVEY</i>		
<i>Survey Date</i>	3 rd August 2022	<i>Sunset Time</i>	21:01
<i>Bat Species recorded</i>	Soprano pipistrelle and common pipistrelle bats were recorded.		
<i>Bat Roosting Activity</i>	No bat roost emergence activity was recorded from the building At 21:01, a single common pipistrelle bat flew from the east past the southern elevation of the site. The early time of the observation indicates a roost to the east.		
<i>Bat Foraging and Commuting</i>	Individual common pipistrelle and soprano pipistrelle bats were occasionally recorded foraging in the vicinity of the site, but bat activity was generally low.		
<i>Survey 2</i>	<i>DAWN RE-ENTRY SURVEY</i>		
<i>Survey Date</i>	30 th August 2022	<i>Sunrise Time</i>	06:25
<i>Bat Species recorded</i>	Soprano pipistrelle and common pipistrelle bats were recorded.		
<i>Bat Roosting Activity</i>	No bat roosting activity was recorded in association with the building At 05:56, a common pipistrelle bat flew into the building interior during foraging, before emerging and flying off to the east at 06:02 (indicating a possible return to roost in that direction).		
<i>Bat Foraging and Commuting</i>	Bat activity was generally low, with occasional pipistrelle bat passes recorded. At 05:56, a single common pipistrelle bat briefly foraged to the rear of the building, including entering the upper floor area.		

Survey 3	DUSK EMERGENCE SURVEY		
Survey Date	16 th Sept 2022	Sunset Time	19:29
Bat Species recorded	Common pipistrelle bats were recorded.		
Bat Roosting Activity	No bat roost emergence activity was recorded from the building At 19:45, a single common pipistrelle bat flew from the east, and passed close over the site from east to west (indicating a roost to the east)		
Bat Foraging and Commuting	Bat activity was very low, with three common pipistrelle bat passes recorded during the survey (19:45, 20:00 and 20:16).		

Bat Survey Results Summary and Interpretation

Roosting

- 4.32 No bat roosts were recorded at the site.
- 4.33 A single common pipistrelle bat appeared to roost to the east of the site, and the bat was recorded entering the building and flying close over the building during survey visits.

Foraging and Commuting

- 4.34 Bat activity was generally low in the vicinity of the site. Individual common and soprano pipistrelle bats were recorded foraging in the vicinity of the site during dusk and dawn surveys. No other bat species were recorded.

Walkover Survey - Habitats, Protected and Invasive Species

- 4.35 The following paragraphs describe the results of the walkover survey, which included consideration of habitats present at the site, and its potential suitability for protected and priority species (excluding bats, which are discussed above).

Habitats within the site

- 4.36 Habitats within the plot comprised hard surfaces (tarmac and compacted stone) which had become vegetated with a range of grasses and herbs tolerant of poor soil (Ephemeral / short perennial habitat according to Phase 1 Habitat Survey classifications).
- 4.37 Species recorded included including sweet vernal grass, Yorkshire fog, false oat-grass, crested dogtail, fescue species, ribwort plantain, greater plantain, St. John's wort, hop trefoil, broad-leaved dock, red clover, white clover, meadow buttercup, orange hawkbit and self-heal. Bramble was frequent within the plot, along with occasional goat willow saplings and wall cotoneaster (a Schedule 9 listed invasive species).
- 4.38 The plot supported a relatively diverse range of plant species associated with poor soils and neglected hard surfaces. The grasses and herbs potentially support a moderate diversity of invertebrate species, but offered limited shelter or foraging opportunities for other species groups.
- 4.39 Due to the relatively low value of habitats in the vicinity (comprising residential development), it was considered to have ecological value at the *local* scale.

Site Margins

- 4.40 A Leyland Cypress hedge bordered the site to the west, and a garden privet hedge bordered the site to the north. These features represented species-poor garden planting with lower ecological value (supporting a low diversity of invertebrates, potentially offering nesting sites for small birds). They were considered to have ecological value at the scale of the *site* only.

Protected and Priority Species Scoping (excluding Bats)

Dormouse

- 4.41 Habitats at the site had *negligible* suitability for dormice.

Otter and Water vole

- 4.42 No watercourses were present in the area and habitats at the site were of negligible value to otter or water vole.

Badger

- 4.43 No evidence of badger was seen at the site or within the wider area. Habitats at the site and the vicinity were considered to have low value to badger.

Priority Mammals

- 4.44 Hedgehog have been recorded in the near vicinity of the site, and individuals could potentially occur within the site whilst foraging or dispersing. Areas of dense vegetation on the margins could potentially offer refuge and dispersal routes for the species.
- 4.45 The site had very limited suitability to other priority mammals.

Nesting Birds

- 4.46 The club building and dense hedges on the site margins could potentially be used by nesting birds. Jackdaw were noted roosting on the building during the site visit, and could potentially nest within/on the building.

Reptiles and Amphibians

- 4.47 Habitats at the site were potentially suitable for common lizard. However, the site was surrounded on all sides by developed habitats of low value to reptiles. The site probably had very low or negligible suitability to any other reptile species.
- 4.48 An individual common frog was noted within the site during two survey visits, but the plot was considered likely to have low value to protected or priority amphibian species.

Invertebrates

- 4.49 The range of plant species within the plot could provide suitable habitat for a moderate diversity of invertebrate species, but was considered unlikely to support significant populations of protected or priority species. Habitats at the site were not suitable for the protected marsh fritillary butterfly (recorded in the vicinity)

Invasive Species

- 4.50 Several small specimens of Wall Cotoneaster (an invasive cotoneaster species, listed on Schedule 9 of the Wildlife and Countryside Act) were noted throughout the plot.
- 4.51 No other invasive species were recorded at the site.

Walkover Survey Summary and Interpretation

- 4.52 The club building and boundary hedgerows have potential to be used by nesting birds during the breeding season.
- 4.53 Habitats at the site had some suitability for common lizard. However, the probability of reptiles occurring within the site was considered to be relatively low due to the isolation of the site and low value of surrounding habitats.
- 4.54 Hedgehog have been recorded in the near vicinity of the site, and could potentially occur within the plot on an occasional basis.
- 4.55 Habitats at the site are likely to support a moderate range of invertebrate species
- 4.56 An invasive cotoneaster species listed on Schedule 9 of the Wildlife and Countryside Act (1981) occurred frequently throughout the plot.

5 Survey Limitations

Bat Survey

- 5.1 The interior of the building was unsafe in some areas, and not all parts of the upper floors could be thoroughly searched.
- 5.2 Visibility of bat movements during dusk and dawn surveys was partially limited due to the height of the building and number of openings in the roof. However, this difficulty was addressed by conducting three activity survey visits.
- 5.3 Bat evidence within exposed or damp areas of the building would not be expected to persist for more than a few months due to the action of weather.
- 5.4 The bat survey was based upon survey visits in July, August and September 2022. This represents only sample of bat activity over the year. However, the survey information was deemed sufficient to complete the impact assessment.
- 5.5 The condition of buildings (and hence suitability for bat roosting) may change over time. Hence, a follow-up check may be required if there is a delay of over 2 years between the date of survey and commencement of works.

Walkover Survey

- 5.6 The walkover survey was based on Extended Phase 1 Habitat Survey methodology which provides an assessment of the broad habitat types in the area, along with an appraisal of the habitat suitability, and presence of field signs, for protected or notable species.
- 5.7 Various species of flora and fauna may only be apparent at certain times of year and, in some cases, may not be apparent every year. Zero observation of a species during a single site visit cannot therefore confirm absence. The Extended Phase 1

Habitat survey can only provide an indication of habitat suitability for the species assessed, and to inform further survey requirements.

Season

- 5.8 The walkover survey was conducted in July 2022. The season was therefore optimal window for botanical recording.

Data Search

- 5.9 Data from the local Biological Records Centre provides evidence of historical records within the search area. Absence of records in an area does not necessarily indicate absence of a species, but could reflect a paucity of recording effort.

Invasive species

- 5.10 Japanese knotweed, Himalayan balsam and other invasive species are usually likely to be detected during a walkover survey, if present. However, under some circumstances invasive plants may not be detected.
- 5.11 For instance, it is possible for the presence of invasive species to be concealed by management practices (such as regular cutting and removal of stems), or invasive species seeds or rhizomes may remain undetected within soil until being triggered to grow due to changes in management practices.
- 5.12 Therefore a Preliminary Ecological Appraisal alone should not be used as evidence to confirm absence of invasive species.

6 Ecological Appraisal

Designated sites

- 6.1 No adverse impacts to designated sites were anticipated, due to separation of the project site and intervening areas of urban development.

Bats - Roosting

- 6.2 No bat roosts were recorded at the site, and the survey effort was deemed sufficient to conclude that bat roosts are likely absent.
- 6.3 Therefore demolition of the building would be likely to have a *negligible* risk of disturbing bats or their roosts.
- 6.4 However, the building was on a flight route used by a common pipistrelle bat, which was seen flying within the building on one occasion. Precautionary working methods are therefore recommended as a contingency against the possibility of bats occurring within the building at a future time.

Bats - Foraging and Commuting

- 6.5 Small numbers of common pipistrelle and soprano pipistrelle bats were recorded flying past the site, but activity was generally low. Redevelopment at the site would be unlikely to cause significant impacts to bat foraging or commuting habitats.

- 6.6 The site and surrounding area was already subject to significant levels of night time illumination. However, the project proposals could increase the overall night time illumination of the site which could lead to minor adverse impacts to the small numbers of bats using the area.
- 6.7 The risk of causing adverse impacts to bats could be minimised by ensuring that the lighting is designed according to the ILP/BCT Guidance Note 08 - Bats and External Lighting in the UK.

Licensing Considerations

- 6.8 As no bat roosts were recorded at the property, no bat derogation licence is likely to be required for the proposed demolition works.

Habitats

- 6.9 Vegetation clearance would cause the loss of habitat valued at the *local* scale. However, designation of a habitat area could be used to support a range of wildlife friendly plant species (of benefit to birds and invertebrates).

Nesting Birds

- 6.10 Demolition of the building, or clearance of dense bramble or hedgerow vegetation would potentially risk disturbing nesting birds if conducted during the breeding season (mid-March to end-August). This could potentially result in a legal offence under the Wildlife and Countryside Act (1981) as amended.
- 6.11 This risk could be avoided by working outside of the nesting season, or by checking suitable features prior to working.

Reptiles, Hedgehog and other fauna

- 6.12 Site clearance works would represent a low risk of killing or injuring reptiles (i.e. common lizard), hedgehog (a priority mammal species) or other fauna such as common frog.
- 6.13 Killing or injuring reptiles would potentially cause a legal offence under the Wildlife and Countryside Act (1981) as amended. Priority mammals such as hedgehog are protected within Planning Policy as directed by the Environment (Wales) Act (2016).
- 6.14 Due to the generally low suitability of the site, these risks could be adequately avoided or minimised by implementing precautionary working methods
- 6.15 In the long term, designation of a habitat area on the margin of the plot could be used to provide connectivity, refuge and foraging opportunities for local fauna.

Invasive Species

- 6.16 Site clearance or excavation works could potentially cause Wall cotoneaster, a Schedule 9 invasive species, to spread off-site (potentially a legal offence under the Wildlife and Countryside Act (1981), as amended).
- 6.17 This could be avoided by ensuring that appropriate controls are implemented.

7 Recommendations

Mitigation

Bats

- 7.1 As a precaution, building features with potential suitability for bat roosting (such as roof slates, wall tops, fascias, flashing, and spaces around the wall frame) shall be dismantled carefully and checked for bats before discarding.
- 7.2 Construction personnel shall be informed of what to do in the unlikely event that a bat is encountered:
- If a bat is found, works in the vicinity shall halt and a bat licensed ecologist shall be called for advice on bat welfare and licensing considerations.
 - The bat must not be handled or moved unless there is an immediate threat to its life (in which case it may be moved to a place of safety - the handler must wear gloves for protection against bites).

External Lighting

- 7.3 Any new external lighting should be designed in accordance with the BCT/ILP *Guidance Note 8 'Bats and External Lighting in the UK'*).
- 7.4 Key points of this document are summarised below:

External Lighting:

- Shall only be used where necessary;
- Shall be of the minimum brightness required for the task;
- Shall illuminate only the area required - should be cowled and directed downwards;
- Shall avoid illuminating bat roosts, hedgerows, trees or other vegetation;
- Should not contain ultra-violet (UV) elements (such as metal halide lamps);
- Shall be on only when necessary - for instance on PIR sensors or timers;
- LED lighting is generally preferred for its controllability, energy efficiency and lack of UV element.

Nesting Birds

- 7.5 Preferentially, the building shall be demolished (and any areas of dense vegetation cleared) outside of the bird nesting season (i.e. not between mid March and end August).
- 7.6 If works must be commenced during the breeding season, the building shall be checked for active nests prior to proceeding. Any nests found must be protected from disturbance until chicks have fledged.

Reptiles, Hedgehog and other fauna

- 7.7 Prior to commencing works on site, a protected habitat area shall be demarcated within the site. This area shall be used as a refuge for any fauna encountered during site clearance, and as an area of new habitat of benefit to wildlife in the long term.
- 7.8 As a precaution to avoid the low risk of killing or injuring reptiles (such as common lizard), hedgehog or other fauna during site clearance, vegetation shall cut down sequentially prior to bringing large vehicles, machinery or materials on to site.
- 7.9 Vegetation shall be cut down 15cm above ground level using hand-held tools and working from the centre of the site outwards. All arisings (cut vegetation) shall be removed from the construction zone.
- 7.10 Within 24 - 48 hours, a second cut of vegetation to 5 - 10cm above ground level shall be implemented using the same process.
- 7.11 Any loose materials, rocks, debris, etc, that could potentially provide a refuge for wildlife shall be dismantled by hand and removed from site.
- 7.12 In the event that common lizard are encountered in large numbers (>10) or if any other protected species are encountered, works shall halt and a consultant ecologist shall be called for advice before proceeding.

Habitats

- 7.13 A designated habitat area shall be created at the edge of the plot. This area shall be planted with a range of native species of known value to wildlife (refer to Appendix E for examples). In addition, at least 1 x habitat piles of potential benefit to hedgehog, reptiles and other fauna shall be created using stone, inert rubble and/or cut wood.

Invasive Species

- 7.14 Prior to commencing excavation works, the cotoneaster growing within the plot shall be removed and chipped or burnt on site. Alternatively, the plant may be transported to a licensed landfill as controlled waste.
- 7.15 The plant is spread by seeds contained within the berries. Therefore, all topsoil within the plot could potentially contain seeds of the plant. Topsoil should be retained on site or transported off site as controlled waste.

Ecological Enhancement

- 7.16 The creation of a habitat area planted with a range of native species will benefit wildlife at the local scale.
- 7.17 In addition, ecological enhancements could be delivered by installing integrated bird and bat boxes in appropriate locations within the new buildings.
- 7.18 Integrated bat boxes should be installed in darker areas near to the site margins, just beneath eaves height or beneath the apex of gable walls. Recommended

models include the Schwegler 2FR bat tube or the Vivara Pro Build-in Woodstone Bat Box.

- 7.19 Bird nest boxes should be chosen to support species likely to occur in the local area, such as house sparrow, robin or blue-tit. In addition, swift bricks and/or house martin cups could be installed on buildings at height (just beneath eaves level).
- 7.20 Recommended bat and bird box models are provided in Appendix E.

8 Conclusions

- 8.1 Provided all of the recommendations contained within Section 7 of this report are implemented, the proposed works can be conducted with *negligible* risks of adverse ecological impacts. Proposals for delivering a net benefit to biodiversity have been provided.

References

Bat Conservation Trust (2016) Bat Surveys for Professional Ecologists - Good Practice Guidelines (3rd Ed). Bat Conservation Trust. London

Bat Conservation Trust / Institute of Lighting Professionals (2018) - Guidance Note 8 - Bats and External Lighting in the UK - <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

CIEEM (2016) *Guidelines for Ecological Impact Assessment in the United Kingdom 3rd Ed.* Chartered Institute of Ecology and Environmental Management. Winchester.

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Gunnel, K., Williams, C. & Murphy, B. (2013) *Designing for Biodiversity - a Technical Guide for New and Existing Buildings.* RIBA Publishing. London.

Mitchell-Jones, A. J. & McLeish, A P. (1999). *The Bat Workers' Manual.* JNCC Peterborough.

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Appendix A: Photographs

Image 1: Front (east) and south facing elevations of building



Image 4: Single storey extensions to south - gaps around soffits



Image 2: Front (east) and north elevations of building



Image 5: Roof - viewed from south - large gaps



Image 3: South elevation of building



Image 6: Rear (west) elevations - numerous window openings and open roof



Image 7: Flooded basement / cellar



Image 10: First floor room to rear of building



Image 8: Ground floor of building - northern area



Image 11: View of roof - main section of building



Image 9: Ground floor - southern and rear areas



Image 12: Open roof to rear of building



Image 12: Land to south of building, looking east to road



Image 16: Example of cotoneaster frequently occurring within the site



Image 13: Land to west of building, looking north



Image 14: Flooded shed / basement to north of building



Appendix B: Bat Licensing Information

In some cases, actions which would otherwise be illegal under the Conservation of Species and Habitats Regulations (2017) may be permitted through gaining a derogation licence from the statutory nature conservation body (in Wales, this is Natural Resources Wales / NRW). This process is often used for development projects where disturbance to (or destruction of) a bat roost is likely to be caused by proposed works to buildings and other structures.

In order for a licence to be granted, the proposed development must demonstrate that it meets the *three tests*, as follows:

- That the development is 'in the **interests of public health and public safety**, or for other **imperative reasons of overriding public interest**, including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- That there is '**no satisfactory alternative**';
- That the derogation (i.e. any permission/licence granted) is 'not detrimental to the maintenance of the populations of the species concerned at a **favourable conservation status** in their natural range'.

Where the need for a derogation licence has been identified, an application must be made to NRW **following the granting of planning consent** (where this is applicable), and prior to site works commencing.

The application will need to demonstrate that the project meets the three tests (listed in above), and will need to be submitted with a **Method Statement** prepared by a consultant ecologist which provides detailed information on the status of bats at the site, the likely impacts to bats and the proposed mitigation measures. A consultation form completed by the Planning Officer will also be required.

Further details on bat licensing and relevant forms and guidance are available at <https://naturalresources.wales/permits-and-permissions/protected-species-licensing/european-protected-species-licensing/bat-licensing/?lang=en>

Appendix C - Summary of Planning Policy Guidance Relating to Bats and Biodiversity

National Planning Policy

Planning Policy Wales provides a framework and guidelines for Local planning policies drawn up by Local authorities. It is supplemented by 21 topic based Technical Advice Notes (TANs).

Technical Advice Note (TAN) 5- Nature Conservation and Planning (2009) is a key TAN in relation to nature conservation and biodiversity. 'This TAN demonstrates how local planning authorities, developers and key stakeholders in conservation can work together to deliver more sustainable developments that does not result in losses from natural heritage but instead takes every opportunity to enhance it'.

TAN 5 states that: 'The town and country planning system in Wales should:

- work to achieve nature conservation objectives through a partnership between local planning authorities, NRW, voluntary organisations, developers, landowners and other key stakeholders;
- integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time;
- ensure that the UK's international and national obligations for site, species and habitat protection are fully met in all planning decisions;
- look for development to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally;
- help to ensure that development does not damage, or restrict access to, or the study of, geological sites and features or impede the evolution of natural processes and systems especially on rivers and the coast.'

Appendix D: Bat Survey Results Forms

Survey Details	DUSK EMERGENCE SURVEY 121 Heol Cae Gurnen, Gwaun Cae Gurnen		
Date of Survey	3 rd August 2022	Sunset time	21:01
Time Start and Finish	20:46 - 22:15	Wind (Beaufort Scale)	1
Temperature °C (start - finish)	18 - 16	Cloud Cover/ Precipitation	70% / None

Surveyor	Experience	Location	Equipment
Richard Gould	Experienced, licensed surveyor	1	Elekon Batlogger M2
Lois Thomas	Experienced surveyor	2	Elekon Batlogger M
James Silbers	Experienced surveyor	3	Elekon Batlogger M
Dina Kingsnorth	Survey assistant	4	Elekon Batlogger M

Key Activity from All Surveyor Locations - Dusk Survey 1

Time	Species	Number	Surveyor Location	Notes
21:01	Common pipistrelle	1	1, 2, 3	Flew past south elevation of building from east to west
21:05	Soprano pipistrelle	1	3	Not seen
21:07	Soprano pipistrelle	1	3	Not seen
21:19	Common pipistrelle	1	2	Flew over adjacent garden wall
21:20	Soprano pipistrelle	1	3	Not seen
21:29	Common pipistrelle	1	3, 4	Flew past north elevation of house from west - east
21:31 - 45	Common pipistrelle	1	2	Continual foraging to south of site
21:58	Soprano pipistrelle	1	1, 2	Flew past building from north
22:00	Soprano pipistrelle	1	4	Not seen
22:00	Common pipistrelle	1	3	Not seen
22:08	Soprano pipistrelle	1	3	Not seen

Summary

No bat roost emergence from building. 1 x common pipistrelle bat flew past site from east early in survey period

Bat activity generally low - occasional passes and brief bouts of foraging from individual common pipistrelle and soprano pipistrelle bats.

Dusk Survey 1 - Plan Showing Surveyor Locations and Key Bat Activity**KEY**

- Surveyor 1
- Surveyor 2
- Surveyor 3
- Surveyor 4
- Site location
- ➔ Main bat flight / foraging areas

Survey Details	DAWN RE-ENTRY SURVEY 121 Heol Cae Gurnen		
Date of Survey	30 th August 2022	Sunset time	06:25
Time Start and Finish	04:45 - 06:40	Wind (Beaufort Scale)	1
Temperature °C (start - finish)	11	Cloud Cover/ Precipitation	0% / None

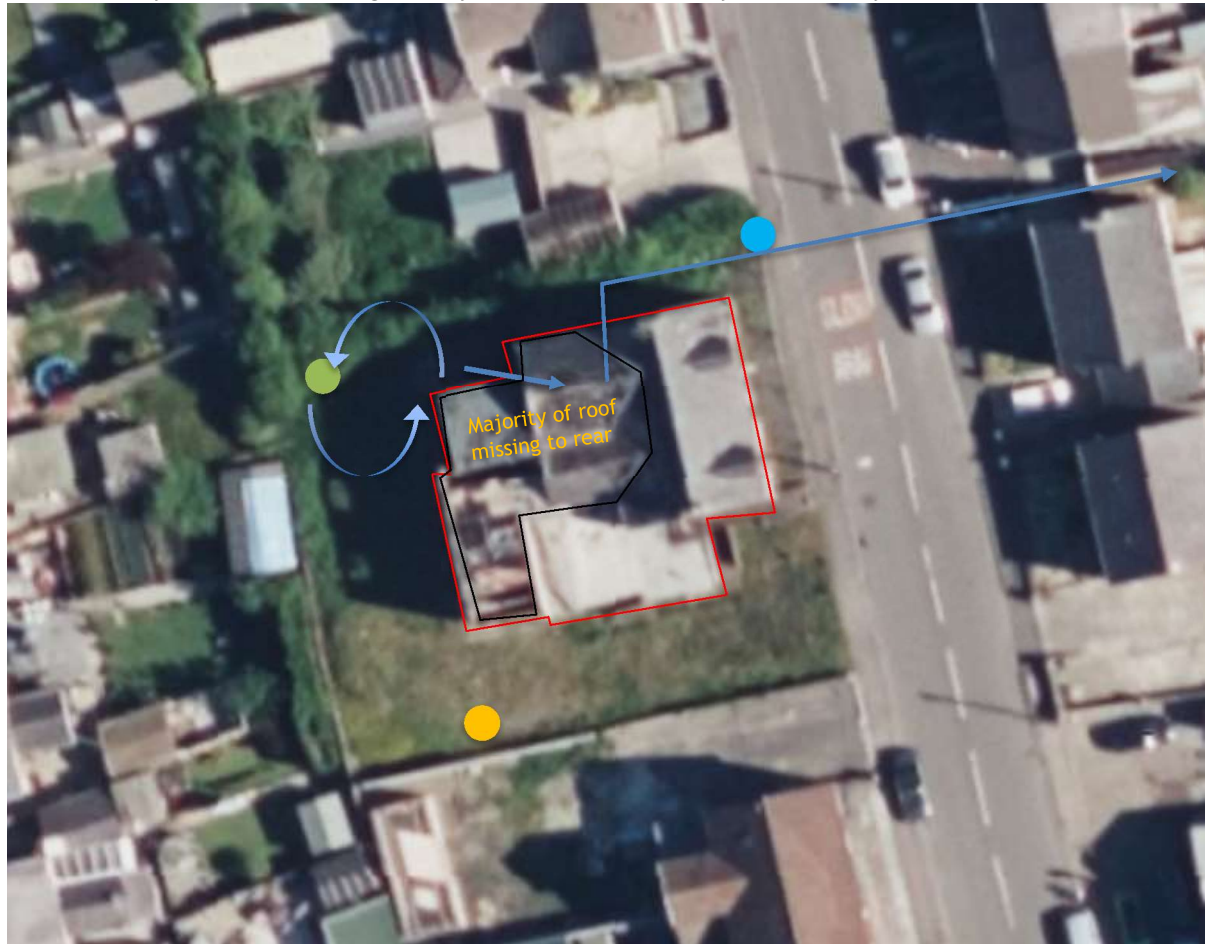
Surveyor	Experience	Location	Equipment
Richard Gould	Experienced, licensed surveyor	1	Elekon Batlogger M2
Lois Thomas	Experienced surveyor	2	Elekon Batlogger M
Kirsten Dick	Experienced surveyor	3	Elekon Batlogger M

Key Activity from All Surveyor Locations - Dawn Re-entry Survey

Time	Species	Number	Surveyor Location	Notes
04:58	Soprano pipistrelle	1	3	Not seen
05:21	Common pipistrelle	1	2	Not seen
05:38	Common pipistrelle	1	2	Flew past south elevation of site towards road
05:45	Common pipistrelle	1	2 and 3	Foraging to rear (west) of building
05:56	Soprano pipistrelle	1	1	Flew from east, across road and past north elevation of site
05:56	Common pipistrelle	1	3	Foraging around rear (west) of building, then flew into first floor area via doorway opening
06:02	Common pipistrelle	1	1 and 3	Exited building via roof and flew past north elevation of site across road to east

Summary

Bat activity relatively low. 1 x common pipistrelle bat entered the building during foraging, before exiting and flying towards the east

Dawn Survey 2 - Plan Showing Surveyor Locations and Key Bat Activity**KEY**

- Surveyor 1
- Surveyor 2
- Surveyor 3
- Site location
- Main bat flight / foraging areas

Survey Details	DUSK EMERGENCE SURVEY 121 Heol Cae Gurnen		
Date of Survey	16 th September 2022	Sunset time	19:29
Time Start and Finish	19:14	Wind (Beaufort Scale)	0
Temperature °C (start - finish)	15	Cloud Cover/ Precipitation	0% / None

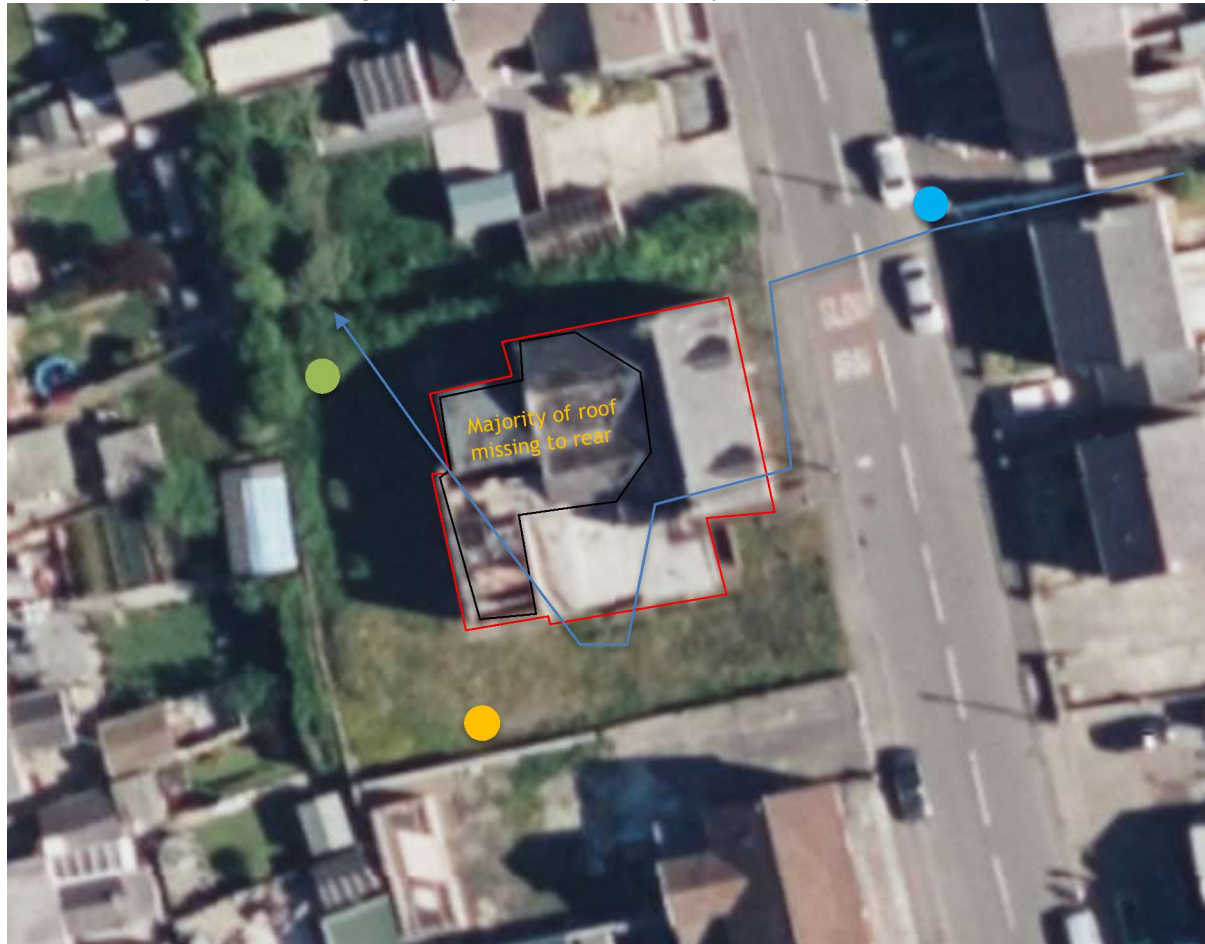
Surveyor	Experience	Location	Equipment
Richard Gould	Experienced, licensed surveyor	1	Elekon Batlogger M2
Simeon Jones	Experienced, licensed surveyor	2	Elekon Batlogger M
Kirsten Dick	Experienced surveyor	3	Elekon Batlogger M

Key Activity from All Surveyor Locations - Dusk Emergence Survey

Time	Species	Number	Surveyor Location	Notes
19:45	Common pipistrelle	1	1, 2, 3	Flew from east, between houses and across the road, looping south past front elevation, flying over roof to south, then off to north-west close over building
20:00	Common pipistrelle	1	1, 2, 3	Flew south to west past rear of building, then along north elevation
20:16	Common pipistrelle	1	1, 3	Not seen

Summary

1 x common pipistrelle bat flew from the east and over the site early in the survey period.
Bat activity generally low

Dusk Survey 3 - Plan Showing Surveyor Locations and Key Bat Activity**KEY**

● Surveyor 1 ● Surveyor 2 ● Surveyor 3

□ Site location

→ Main bat flight / foraging areas

Appendix E: Ecological Enhancement Resources

Integrated Bat Box Examples

Schwegler 2FR Bat Tube



Vivara Pro Woodstone Bat Tube



Example of Linked Bat Tubes



Integrated Bird Box Examples

Schwegler Swift Box



Terraced Sparrow Best-Brick



Woodstone Build-in Open Nest Box



Build-in Bird Box



House martin nest cup



Wildlife Friendly Species for Garden Planting / Habitat Area**Trees / hedging**

- Sessile oak (*Quercus petraea*)
- Willow species (e.g. *Salix cinerea*)
- Barberry (*Berberis vulgaris*)
- Birch (*Betula pendula*, *Betula pubescens*)
- Rowan (*Sorbus aucuparia*)
- Hawthorn (*Crataegus monogyna*)
- Hazel (*Corylus avellana*)
- Dogwood (*Cornus sanguinea*)
- Guelder rose (*Viburnum opulus*)
- Wayfaring tree (*Viburnum lantana*)
- Elder (*Sambucus nigra*)
- Apple / Crab apple (*Malus spp*)
- Bullace / Damson (*Prunus spp*)
- Juneberry (*Amelanchier canadensis*)

Climbers for growing on fences

- Rose species e.g. Dog rose (*Rosa canina*, *Rosa arvensis*)
- Wild honeysuckle (*Lonicera periclymenum*)
- Wild clematis (*Clematis vitalba*)
- Ivy (*Hedera helix*)
- Passion flower (*Passiflora species*)
- Jasmine (*Jasminum species*)
- Wisteria species.

Perennial or self-seeding herbs (good for bees and pollinators)

- Yarrow (*Achillea millefolium*)
- Michaelmas daisy (*Aster novi-belgii*)
- Ox-eye daisy (*Leucanthemum vulgare*)
- St John's wort (*Hypericum perforata*)
- Chives (*Allium schoenoprasum*)
- Foxglove (*Digitalis purpurea*)
- Lavender (*Lavandula officinalis*)
- Rosemary (*Rosemarinus officinalis*)
- Marigold (*Calendula officinalis*)
- Marjoram / Oregano (*Oreganum spp.*)
- Honesty (*Launaria annua*)
- Thyme (*Thymus spp.*)
- Borage (*Borago officinalis*)
- Vervain / Verbena species
- Welsh poppy (*Meconopsis cambrica*)
- Mints (*Mentha spp.*)
- Lungwort (*Pulmonaria officinalis*)
- Orpine *Sedum telephium*
- Comfrey *Symphytum officinale*
- Echinacea *purpurea*
- Snowdrop *Galanthus spp.*
- Native bluebell *Hyacinthoides non-scriptus*
- Autumn & Spring flowering Croci