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PRELIMINARY ROOST ASSESSMENT REPORT

8 CEFN COED ROAD, ROATH

SCIMITAR HOMES

DOCUMENT REF: WWE18181 PRA REV A | 04/09/2018

Client:	Scimitar Homes
Site/Job:	8 Cefn Coed Road, Roath
Report title:	Preliminary Roost Assessment Report
Report reference:	WWE18181 PRA Rev A

Grid Reference:	ST 18778 79428
Survey date(s):	Preliminary Roost Assessment: 22/08/2018 Bat Activity Survey: 29/08/2018
Surveyed by:	Preliminary Roost Assessment: Dr Alex Pollard Bat Activity Survey: Charlotte Poole and Emma Douglas
Architect/Agent:	Sam Courtney, LRM Planning
Planning reference:	n/a

VERSIONING AND QUALITY ASSURANCE

Rev	Status	Date	Author(s)	Reviewed by	Approved by
A	Draft	13/09/2018	Alex Pollard MCIEEM Principal Ecologist	Matt Davies MCIEEM Senior Ecologist	

DISCLAIMER

This document has been prepared by Wildwood Ecology Limited for Scimitar Homes solely as a Preliminary Roost Assessment Report. Wildwood Ecology Limited accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

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 Scimitar Homes (the client) to undertake a Preliminary Roost Assessment (PRA) of 8 Cefn Coed Road, Roath • The site is the subject of a planning application for demolition and redevelopment for residential apartments.
Work undertaken	• A PRA was undertaken consisting of a desk study and field survey undertaken in August 2018 following best practice guidelines (Collins 2016). • Following the recommendations of this PRA survey, a single bat activity survey was carried out in August 2018.
Key issues	• Nesting birds (pigeons) are within the attic space of the property. • Bats were utilising treelines and vegetation to commute and forage.
Recommendations	• Demolition to be undertaken prior to or after the bird breeding season. • Inclusion of bat features (integrated Schwegler bat tubes (1FR) or similar) within the new build. • Retention of dark site boundaries to prevent habitat fragmentation is also recommended.
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 2 years from the date of the last survey – i.e. until August 2020.

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1 INTRODUCTION

Wildwood Ecology was commissioned by Scimitar Homes (the client) to undertake a Preliminary Roost Assessment (PRA) of 8 Cefn Coed Road, Roath (the site) centred at grid reference ST 18778 79428.

Following this survey, the property was found to have some limited features which were suitable for bat use, and as such, it was categorised as having a low suitability to support bats. One dusk bat activity survey was recommended and subsequently carried out.

1.1

1.2 Site description

The site (Figure 1) is located in Roath, Cardiff and consists of a large residential building with two small parcels of land to the north and west. The site is surrounded by residential properties and their accompanying gardens (many with mature trees and large landscaped areas) together with access roads.

1.3

The wider area surrounding the site (Figure 2) includes Roath park 0.01km west of the site, further residential properties to the north and east and a large allotment 0.03km to the south.

1.4

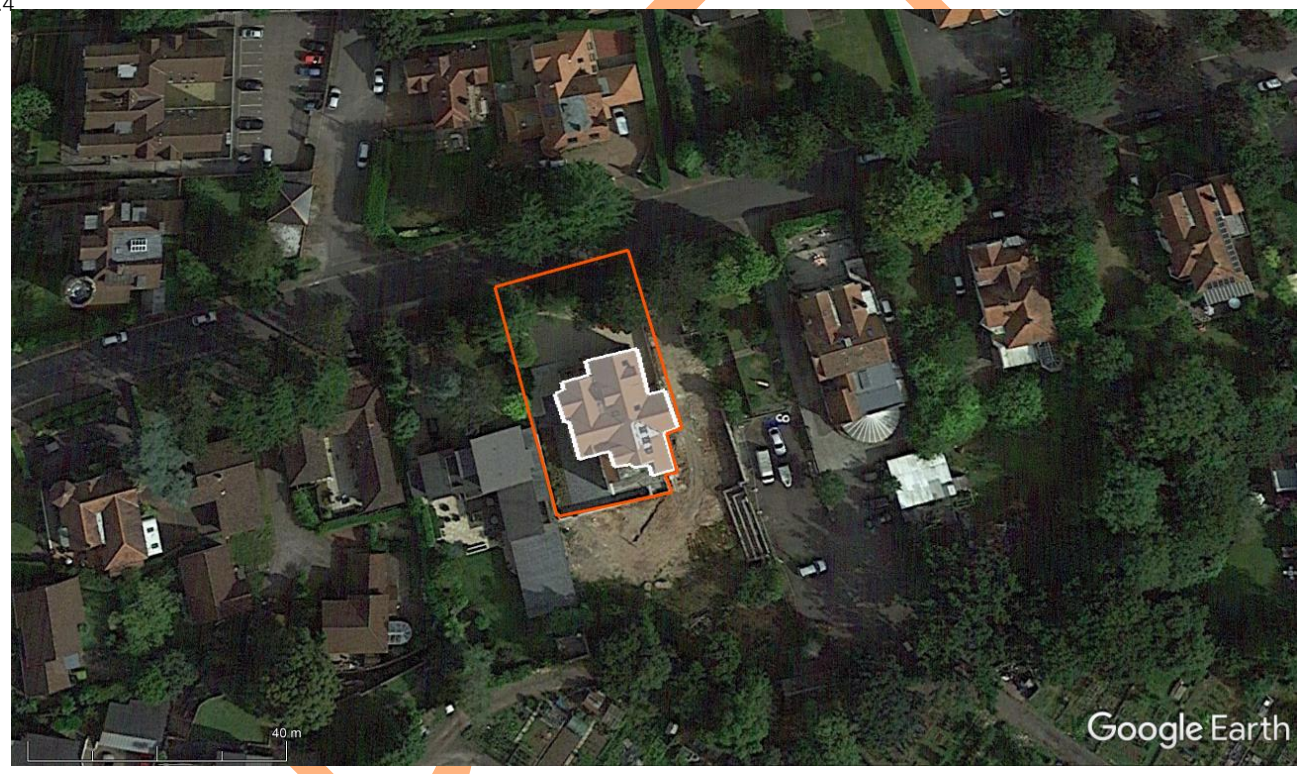

Figure 1 – Aerial image of the site (orange line shows the site boundary and white line shows extent of the building). Image used under licence (©2018 Google). Imagery date 16/08/2016.

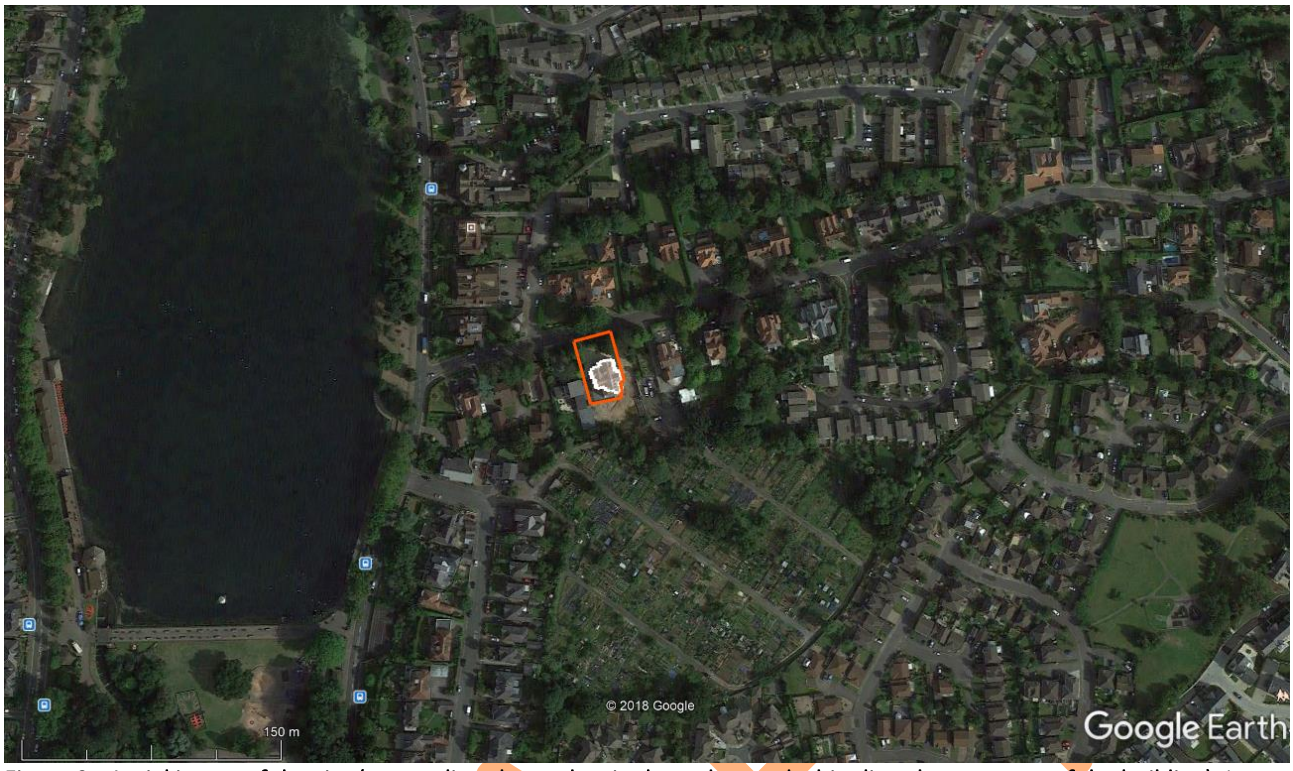

Figure 2 - Aerial image of the site (orange line shows the site boundary and white line shows extent of the building). Image used under licence (©2018 Google). Imagery date 16/08/2016.

Proposed development

1.5 The site is the subject of a planning application proposing the demolition of the onsite property and the construction of residential apartments.

Purpose of this report

1.6 The purpose of this report is to provide enough information for the local planning authority to fully assess the potential ecological impacts of the proposed development, or to identify what further

1.7 information is required before a full assessment can be made.

The result of the PRA and bat survey 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

A biodiversity desk study was undertaken in relation to the site in August 2018. The sources consulted, and the type of information obtained are summarised in Table 1.

Table 1 – Sources of biodiversity and ecological records.

2

Source	Information requested (search buffer from site centre/boundary)
South East Wales Biodiversity Records Centre (SEWBReC)	• Bats and roof-nesting birds only: ○ Bats (2km) ○ Roof nesting birds (0.15km)
Multi-Agency Geographic Information for the Countryside (MAGIC)[1]	• International statutory designations (5km) • National statutory designations (2km)

The search buffers are sufficient to cover the potential zone of influence (ZoI[2]) of the proposed development.

2.2 The impact of the proposed development on the biological integrity of any nearby designated

2.3 protected sites has been fully considered.

Data for bats and birds only was obtained from South East Wales Biodiversity Records Centre

2.4 (SEWBReC) as the proposals will only impact on the building, hence data for other species would be irrelevant.

2.5 No previous survey information was available for the site itself.

Preliminary roost assessment

2.6 A field survey was undertaken on 22/08/2018.

2.7 An assessment of the onsite building was undertaken in accordance with the latest published best

2.8 practice guidance (Collins, 2016).

The building was externally and internally inspected for bats and their signs with the aid of high-

2.9 powered lamps and close-focussing binoculars.

The suitability of the building 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. Attention was paid to the roof areas, with searches for any crevices or gaps in walls, gaps

2.10 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.

In addition, the building was classified according to its suitability for bats, based on the presence of

2.11 features within the structure and / or landscape (see Table 2).

2.12

Bat activity survey

A single bat activity survey (dusk emergence survey) was undertaken at the site.

The dusk emergence survey commenced approximately 15 minutes before the time of local sunset (source www.sunrisesunsetmap.com) and continued for approximately 1.5 hours after sunset.

[1] http://magic.defra.gov.uk/MagicMap.aspx
[2] ZoI definition – 'the areas/resources that may be affected by the biophysical changes caused by activities associated with a project' (CIEEM, 2016).

Surveyors were equipped with broadband bat detectors (Elekon BatScanner Stereo). Elekon Batloggers was also deployed to record bat activity across the site.

2.13 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. 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.

2.14

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

Surveyor information

2.15 The PRA was undertaken by Alex Pollard and the bat activity survey was undertaken by Charlotte Poole and Emma Douglas. See Table 3 for further information.

Table 3 – Surveyor information.

Surveyor	Licences	Ecological experience
Alex Pollard Ph.D., B.Sc. (Hons.), MCIEEM Principal Ecologist	Bat Dormouse Barn owl	Holds a Ph.D (Visual constraints in bird behaviour). Experienced in undertaking ornithological surveys, and bat surveys. Is a licensed bat and dormouse ecologist in England and Wales. Supervisor and advisor to undergraduate and postgraduate ecological research projects.
Charlotte Poole M.Sc., B.Sc. (Hons) Assistant Ecologist	-	Holds a 2:1 Honours degree in Biology and a Masters (Conservation and Geographical Information Systems). Experience of working with ecological consultancies and local authorities as a surveyor of bats and newts.
Emma Douglas Seasonal Ecologist	-	Holds a HNC in Field Ecology. Over four years' experience as both a volunteer and independent contractor carrying out bat and reptile surveys. Along with experience gained through professional training in surveying great crested newts, sand lizards, otters and small mammals including dormice.

2.16

Limitations and assumptions

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.

[3] To provide confidence that bats are absent from the structure

No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological value has been made.

2.17

3 RESULTS

Desk study

Designated sites (statutory)

There was one international statutory designation within 5km of the site and two national statutory designations within 2km (see Table 4). The closest statutory designated site was Penylan Quarry approximately 1.1km south-east of the site designated for its geological exposures.

3.1 *Designated sites (non-statutory)*

There were five non-statutory designations within 1km of the site (see Table 4), with the closest being the Roath Park Lake SINC to the west.

3.2 The site is situated within the boundary of Roath Park Lake and Gardens Conservation Area.

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

3.3

Site name	Designation	Description / key reason for designation	Distance & direction
Roath Park Lake	SINC	○ No information available	0.01km W
Roath Brook	SINC	○ No information available	0.3km SW
Cathays Cemetery	SINC	○ No information available	0.49km W
Cefn Onn Amenity Grasslands	SINC	○ No information available	0.6km S
Roath Park Wild Gardens	SINC	○ No information available	0.6km NW
Penylan Quarry	SSSI	○ Geological exposures	1.1km SE
Argloddiau Cronfeyedd Dwr Llanisien a Llys-Faen/ Llanishen and Lisvane Reservoir Embankments	SSSI	○ Grassland fungi	2.0km N
Severn Estuary	SSSI/Ramsar/SPA	○ Estuary processes ○ Intertidal mud and sand ○ Rocky shores ○ Saltmarsh ○ Reeds and swamp ○ Eel grass beds ○ Assemblage of birds ○ Assemblage of fish ○ Assemblage of invertebrates ○ Flood plain grazing marsh	3.8km SE

Protected species

Table 5 summarises the priority and protected species records found within the local area within the last 10 years.

Table 5 – Bat and roof-nesting bird species records found near the site.

Protected & priority		# of records (# species)			Further information
Groups	Species	Onsite	<500m	>500m	
Bats	Brown long-eared bat	-	1	3	Records of bat passes within last five years
	Common pipistrelle	-	4	33	Roost 1.0km from the site dated 2011.
	Nathusius's pipistrelle	-	-	1	Records of bat passes within last five years
	Natterer's bat	-	1	1	Bat pass 1.9km from the site dated 2012.
	Noctule	-	4	19	Records of bat passes within last five years
	Soprano pipistrelle	-	10	-	Roost 1.6km from the site dated 2016.
	Whiskered bat	-	1	-	Historic bat pass
	Unidentified pipistrelle	-	2	102	Roost (maternity) from 0.7km away from 2017
	Unidentified bat	-	6	39	Roost 0.4km from the site dated 2009
	TOTALS	-	*29 (6)*	*198 (5)*	
Birds (Schedule 1)		-	2 (2)	- (-)	Barn owl and black redstart
Birds (non-Schedule 1)		-	226 (12)	- (-)	Herring gull, house martin, house sparrow, jackdaw, kestrel, lesser black-backed gull, pied wagtail, redstart, starling, swift and wren.

3.6 There is one protected area (Ruperra Castle and Woodlands SSSI) designated for its bat populations within 10km of the site.

There are barn owl records within 0-1km of the site.

Field survey – Preliminary Ecological Appraisal

A description of the building inspected during the PRA can be seen in Table 6.

Table 6 – Onsite building information.

Building	Building Section	Description	Development plans
8 Cefn Coed Road, Roath	Internal	The building is divided into several residences, over three storeys. The property is partially renovated with the lower floors more finished than the upper floors. A mezzanine level into the roof void is present which is well illuminated by daylight via roof lights and windows. Two windows were open allowing access for several domestic pigeons. There was considerable evidence of use of the roof void and upper floor by pigeons (droppings, feathers). The roof is internally sarked or has breathable membrane present. No signs of bats were seen.	Demolish and rebuild
	External	The exterior is generally well maintained, with recent works to the roof and walls. There was a small section of soffit on the south-east aspect and a missing hanging tile on the south-west aspect. No signs of bats were seen.	

Links to surrounding habitat

Mature trees within the gardens of the site and adjacent properties provide good linkages towards the allotments and Roath Lake nearby.

Field survey – Bat activity surveys (dusk emergence)

Timing and conditions

The survey timings and weather conditions during the activity surveys can be seen in Table 7.

Table 7 – Summary of survey timing and conditions during activity surveys.

Date	Type	Survey Timing			Conditions			
		Start	End	Sunset / Sunrise	Temp [°C]	Cloud Cover [Oktas]	Wind Speed [Beaufort]	Rain
28/08/2018	Dusk emergence	19:51	21:36	20:06	*Start: 17* *End: 18*	*Start: 2* *End: 6*	*Start: 0* *End: 0*	-

The results of the bat activity survey (dusk emergence) are summarised in Table 8.

Table 8 – Bat activity survey results. SS±xx refers to the time in minutes before/after sunset and SR±xx refers to the time in minutes before/after sunrise.

Survey type and date	Roosts / points of particular interest	General observations
Dusk emergence 28/08/2018	o Common pipistrelle heard at SS+ 14. o No roosts were identified onsite	o Common pipistrelle observed commuting east across the site at SS+14, o Common pipistrelle and *Myotis* foraging above the trees in the north of the site from SS+17 o Common pipistrelle also observed commuting west and south across the site from SS+23. o Soprano pipistrelle heard during the survey from SS+57. o Noctule heard overhead at SS+58

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

3.11

4 INTERPRETATION AND ASSESSMENT

The following interpretation and assessment is provided to ensure full compliance with both UK and European legislation and both local and national planning policy (see Appendix IV).

Designated sites

4.1 There were both statutory and non-statutory designated sites identified within the vicinity of the site (see Table 4). The closest statutory site was Penylan Quarry SSSI at 1.1km away and the closest non-statutory site was Roath Park Lake at 0.01km away.

4.2 Ruperra Castle and Woodlands SSSI, designated for its bat populations, is found 7.5km to the north-west of the site.

4.3 Given the scale of the proposed development, and the lack of likely impacts beyond the site boundary, the nearby designated sites are sufficiently well separated so that no impacts on their designated

4.4 features are anticipated because of the works.

Preliminary roost assessment (PRA) for bats and nesting birds

Based on the results of the PRA, an assessment of the potential suitability of the onsite buildings/trees

4.5 for bats and nesting birds could be made (see Table 9).

Table 9 – Onsite building suitability for bats and nesting birds.

Building	Suitability / confirmed use	
	Bats	Nesting birds
8 Cefn Coed Road	Low	Confirmed

Bats

4.6 The low suitability of the onsite building for roosting bats together with the local records for bat species near the site means there may be a negative impact on bat species because of the proposed

4.7 development.

As such a single bat activity survey (dusk emergence) survey was recommended and carried out. This

4.8 survey found that that whilst bats use the treelines and vegetation surrounding the site to forage and commute, there were no bat roosts within the structure itself.

The levels of activity and timing suggest that there is likely to be a roost within one of the nearby

4.9 neighbouring properties to the south, with bats (common pipistrelle) arriving onsite from this direction at the start of the survey.

It is unlikely that the demolition will impact on local bat populations given the lack of roosts onsite,

4.10 though if vegetation and trees are removed, there will be impacts on bat commuting and foraging routes.

Nesting birds

4.11 The onsite building had suitability for nesting birds with extensive signs of domestic pigeon use within the roof void and upper floor. There are also suitable nesting opportunities within the vegetation (trees and scrub) for nesting birds.

There will be a negative impact on nesting birds because of the proposed development.

5 CONCLUSIONS AND RECOMMENDATIONS

Wildwood Ecology was commissioned to undertake a Preliminary Roost Assessment (PRA) of 8 Cefn Coed Road, Roath

The site is the subject of a planning application to demolish the existing structure and rebuild new residential apartments onsite.

5.1

Designated sites

5.2

Designated sites near the site (see Table 4) are sufficiently well separated so that no impacts on their designated features are anticipated as a result of the proposed development.

5.3 Protected species

Recommendations regarding protected species are shown in Table 10.

Table 10 – Recommendations.

5.4

Species	Recommendations
Bats	No further surveys required. Retention of the northern treeline is recommended to allow for continued flight line use. Schwegler bat tubes are advised to be installed within the new build (x2) on the southern and western elevations at eaves height. Any lighting proposed for the new build and site will need to show consideration for bats. 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). These include: • All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. • LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. • A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component. • Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012). • Internal luminaires can be recessed (rather than choosing a pendant fitting) where installed in proximity to windows to reduce glare and light spill. • The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by a lighting professional. • Column heights should be carefully considered to minimise light spill. • Only luminaires with an upward light ratio of 0% and with good optical control should be used – See ILP Guidance for the Reduction of Obtrusive Light. • Luminaires should always be mounted on the horizontal, i.e., no upward tilt. • Any external security lighting should be set on motion-sensors and short (1min) timers. • As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.
Nesting birds	Building works / vegetation clearance will take place outside of the bird nesting season. If clearance work must be undertaken during the nesting season (generally from 1st March until

	31st August, although birds are known to nest outside of these dates in suitable conditions), a breeding bird survey 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. The pigeons present may use the building year-round to shelter within but may only nest for a portion of this time. It may be therefore possible to close the windows during the winter (i.e., November-late January) period once the birds have vacated to prevent nesting later in the year.

Biodiversity enhancement

5.5 Local Authorities have a duty (known as the 'Biodiversity and resilience of ecosystems duty') under the Environment (Wales) Act 2016 to seek to maintain and *enhance* biodiversity in the exercise of their functions.

5.6 Where possible the existing onsite habitat will be retained to ensure that species are not adversely affected by the development. Native species of local provenance will be used for any new planting on the site to support The Action Plan for Pollinators in Wales, 2013 (http://gov.wales/docs/desh/publications/130723pollinator-action-plan-en.pdf).

5.7 Bird nesting boxes will be incorporated within the proposed building and boundary features. A range of types should be used to cover a variety of species. Many designs are available, and we would suggest the following for this site:

- House Sparrow - http://www.nhbs.com/1sp_schwegler_sparrow_terrace_tefno_174850.html
- General open fronted - http://www.nhbs.com/2hw_schwegler_nest_box_tefno_177926.html (suitable for redstart, thrushes, flycatchers).

5.8 Overall conclusion

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 2 years from the date of the last survey - i.e. until September 2020. Further surveys may be required to update the site information if planning is not obtained or works do not commence within this time.

6 REFERENCES

Bat Conservation Trust and the Institution of Lighting Professionals (2018) Guidance Note 08/18 - 'Bats and artificial lighting in the UK; Bats and the built environment series'.

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

Mitchell-Jones, A.J, & McLeish, A.P. Ed., (2004) 3rd Edition Bat Workers' Manual. Joint Nature Conservation Committee, Peterborough.

Mitchell-Jones, A.J. (2004) Bat Mitigation Guidelines. Natural England, Peterborough.

SITE PLAN WITH FLIGHTLINES

AP

Figure 3 - Dusk emergence survey (28/08/2018). Red line shows common pipistrelle activity, blue line shows soprano pipistrelle activity, green line shows *Myotis* activity. Black numbers denote surveyor position.

SURVEY IMAGES

AP

Figure 4 – View to north-east in the interior of the upper floor.

Figure 5 – Open window within same room as Figure 4.

Figure 6 – Roof void with pigeon droppings on boarding

Figure 7 – View of ladder access into roof void with sarked roof sections and breathable membrane.

Figure 8 – Well-lit roof void by series of windows

Figure 9 – Open window to south-west

Figure 10 – Roof exterior

Figure 11 – Roosting pigeons

Figure 12 – Exterior of the southern corner of the building

Figure 13 – Gap in soffits circled.

Figure 14 – No gaps present under fascia boards

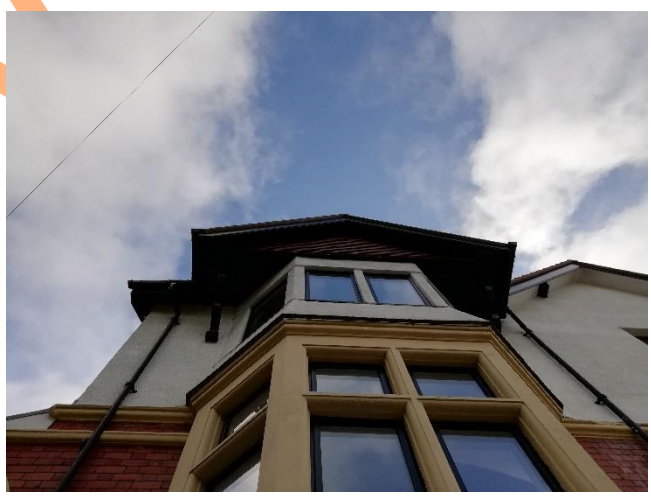

Figure 15 – View towards area of hanging tiles on south-western aspect

Figure 16 – View along south-western boundary

Figure 17 – North-western aspect of the property

Figure 18 – Area around north-eastern aspect entry

Figure 19 – View of the property from Cefn Coed Road

Figure 20 – View towards Roath Park Lake from the same position as Figure 19

Figure 21 – Missing hanging tile circled

SPECIES LIST

To be submitted to the appropriate Local Records Centre

Site Name: 8 Cefn Coed Road, Roath
Grid Ref: ST 18778 79428

Provided by: Wildwood Ecology Ltd
Verified by: Alex Pollard

APPENDIX III

Common name	Scientific Name (if known)	Number	Comment
Common pipistrelle	*Pipistrellus pipustrellus*		Passes, foraging and commuting
Soprano pipistrelle	*Pipistrellus pygmaeus*		Passes, foraging and commuting
Unspecified *Myotis*	*Myotis sp*		Passes, foraging and commuting
Domestic pigeon	*Columba livia domestica*	4+	Roost/nest in house
Noctule	*Nyctalus noctula*		Passes, foraging and commuting

PLANNING POLICY AND LEGISLATION

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

APPENDIX B:

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 (2016) and Technical Advice Note 5 (2009)

Planning Policy Wales (Edition 9, November 2016) sets out the land use planning policies of the Welsh Government, with Chapter 5 dealing with Conserving and Improving Natural Heritage and the Coast. The advice contained within Planning Policy Wales (PPW) is supplemented for some subjects by Technical Advice Notes (TAN's).

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. 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 (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 reasonable 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

The Conservation of Habitats and Species Regulations 2017 (which are the principal means by which the EC Habitats Directive is transposed in England and Wales) 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, 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 Resources Wales, 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. 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.