ECOLOGICAL ASSESSMENT

At:

Blentarn, Conwy

Consultant Report on behalf of **Alun Jones**

Ecoscope ltd.

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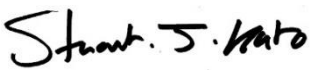
REPORT STATUS AND QUALITY CONTROL

	Issue	Date
Project ID	ECO_1190	
Report Ref.	ECO_1190-01EcoA_A	
Prepared by	Mark Morgan BSc MCIEEM	26/09/2024
Signature		
Reviewed/Approved by	Stuart Kato (Director)	27/09/2024
Signature		

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EXECUTIVE SUMMARY

EcoScope Ltd was commissioned to undertake an Ecological Assessment to assess the potential impact of proposals on ecological features at Blentarn, Cadnant Park, Conwy, LL32 8PE. The proposals seek to demolish an existing dwelling and create 12no. new dwellings with associated accesses and landscaping

The below table summarises the ecological receptors at the Site, the potential impact in relation to the proposals, and recommendations, where necessary, to avoid, mitigate, and/or compensation, in accordance with the relevant legislation and guidance.

Table 1 – Summary of likely impacts from proposals and recommendations

Ecological Feature	Recommendation / Comments
Badger	No badger evidence observed. Potential for badgers to colonise the Site in the future. Pre-commencement survey recommended.
Bats	Bats are likely absent. Construction and operational lighting to not illuminate natural habitat or bat features. Undertake works during winter. Presence of licenced bat ecologist during roof strip and RAMs. Enhancements required for bats with roosting opportunity and bat habitat.
Breeding birds	Remove breeding habitat outside 1st March – 31st August.
Enhancements	Additional enhancements are recommended in the form of bat and bird boxes across the Site. Recommended landscape proposals with native species. Maintain connectivity to wider landscape.

1. INTRODUCTION

1.1 BACKGROUND

1.1.1 EcoScope Ltd was commissioned by Alun Jones ('the Client'), to undertake an Ecological Assessment in relation to proposals at Blentarn, Cadnant Park, Conwy, LL32 8PE, hereafter referred to as 'the Site'(central grid reference: SH77527766). The Site location is shown in Figure 1.

1.2 PROPOSALS

1.2.1 The proposals seek to demolish an existing dwelling and create 12no. new dwellings with associated accesses and landscaping. Refer to Figure 2.

1.3 REGULATORY FRAMEWORK

1.3.1 This report has been prepared taking relevant statutory instruments into account; including domestic legislation such as Acts of Parliament, and Regulations to comply with European Directives. This is described in full in Appendix 7.1, and in summary as follows:

Legislation & Policy

- Environment (Wales) Act 2016
- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Wildlife and Countryside Act 1981 (as amended)
- Protection of Badgers Act 1992
- Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment and Rural Communities (NERC) Act 2006
- Planning Policy Wales (Edition 12, February 2024)
- Local Policy (refer to 3.4)

Figure 1: ***Site Location***

Legend

Refer to original drawing by saer architects:

CPS-SAL_01-ZZ-DR-A-0001

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Client	Alun Jones
Project title	Project ID
Blentarn	ECO_1190
Subject	
Ecological Assessment	
Drawing number	
ECO1190-02EcoA_A	
Drawing date	25/09/24
Drawn by	MM

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Legend

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Client	Alun Jones
Project title	Blentarn
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Figure 2: ***Proposals***

2. METHODOLOGY

2.1 DESK STUDY

2.1.1 The desk study involved collecting records from the North Wales biodiversity records centre, Cofnod, and included a 1km Area of Search (Aos) from the Site boundaries. Records included:

- Protected and notable species
- Non-designated sites
- Ancient woodland
- Priority Ecological Networks
- Priority habitats
- Designated sites

Ecological Assessment

2.1.2 This Assessment follows guidance from CIEEM (2018[1]) and complies with recommendations in BS42020[2] and BS8683[3].

2.2 FIELD SURVEY

Phase I Habitat Survey

2.2.1 A site visit was undertaken on the 18th September 2024, carried out by Dr Richard Birch CEcol, an experienced botanist and Technical Advisor at Ecoscope Ltd.

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[1] **Chartered Institute for Ecology and Environmental Managers (2018)** Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine v1.2 (April 2022). Chartered Institute of Ecology and Environmental Management, Winchester.

[2] **The British Standards Institution 2013** BS 42020:2013 Biodiversity - Code of practice for planning and development. Published by BSI Standards Limited 2013. ISBN 978 0 580 77917 6

[3] **The British Standards Institution 2021** BS 8683 Process for designing and implementing Biodiversity Net Gain – specification. Published by BSI Standards Limited 2021. ISBN 978 0 539 01986 5

2.2.2 The survey involved identifying and mapping the dominant habitat types following the Phase I habitat survey methodology in accordance with JNCC 2010[4]. Dominant plant species were noted (including aliens), as were any uncommon species or species indicative of habitat types, but not all species would have been visible and there was no attempt to compile exhaustive species lists. The survey included at least 30m from the boundary to ensure badgers will not be affected.

2.2.3 Dominant plant species were noted (including aliens), as were any uncommon species or species indicative of habitat types, but not all species would have been visible and there was no attempt to compile exhaustive species lists. The survey included at least 30m from the boundary where possible to ensure badgers will not be affected.

2.2.4 During this field survey, attention was paid to habitats and features that may provide opportunities for protected species to be present at other times of year and thus inform the recommendations for further survey where appropriate.

Preliminary Roost Assessment

2.2.5 A Preliminary Roost Assessment (PRA) was undertaken on the 12th September 2024 in accordance with Collins 2023[5] and included an assessment of buildings at the Site that have potential to support roosting bats. The survey was undertaken by Stuart Kato MCIEEM and Director at Ecoscope Ltd.

Bat Emergence Surveys

2.2.6 A bat emergence survey was undertaken in accordance with Collins 2023[5] and involved experienced bat surveyors covering all aspects of the building(s) that have potential to support roosting bats and/or provide potential ingress/egress for roosting bats. Each

[4] **Joint Nature Conservation Committee 2010** Handbook for Phase I habitat survey: a technique for environmental audit. JNCC, Peterborough.

[5] **Collins, J. (ed.) 2023.** Bat Surveys for Professional Ecologist: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

surveyor was equipped with Echometer Touch Pro 2 full-spectrum detectors and Nightfox Whisker night vision binoculars. In addition, some surveyors used a Bat Scanner.

2.2.7 The survey was undertaken in September and began approximately 15 minutes before sunset lasting up to 1.5hours after sunset in suitable conditions.

Table 2 – Personnel

Name	Contribution	Qualifications
Mark Morgan	Reporting	Principal Ecologist. BSc. (Hons) (First-Class degree in Plant Biology), MCIEEM
Dr Richard Birch	Phase I survey	Qualified horticulturalist with 1st class degree in Botany and Ph.D in tropical mycology. 28 years practising ecologist. NRW Licences for bats & Great Crested newts in Wales. Chartered since 2016. Competent ornithologist with additional skills in aquatic invertebrates, marine intertidal and geological conservation.
Stuart Kato	PRA/ bat survey	Stuart Kato is the Managing director of Ecoscope Ltd. with over 18 years' experience as a consultant ecologist. Stuart holds **NRW licence No. SO91678/1** for bats as well as NRW licences for Dormice and Great Crested Newts. He regularly holds bat development licences and has experience rehabilitating bats. Stuart holds a M. Sc., in Ecology with distinction – his thesis looked at the roost preferences of the Lesser Horseshoe bat in North Wales.
Rebecka Beresford	Bat survey lead	Experienced bat surveyor.
Nick Shaw	Bat surveyor	Experienced bat surveyor.
Mark Webster	Bat surveyor	Experienced bat surveyor.
Rosie Barratt	Bat surveyor	Experienced bat surveyor.
Jennifer Storr	Bat surveyor	Experienced bat surveyor.

2.3 CONSTRAINTS

2.3.1 The preliminary roost assessment resulted in the building being graded as 'low' suitability to potential roosting bats. Guidelines stipulate that 'low' suitability structures should be surveyed at least once between May – August. A single bat survey was undertaken on the 12th September 2024, outside the optimum survey window. However, the conditions were suitable for survey and multiple bats were observed being active

3. DESK STUDY RESULTS

3.1 SITES

Designated Sites

3.1.1 There are four designated sites within 1km of the proposals, as detailed below and shown in Figure 3.

- Cadnant SSSI
- Aber Afon Conwy SSSI
- Benarth Wood SSSI
- Bodlondeb Wood LNR

3.1.2 All sites are considered to be located sufficiently far away, and the size and nature of the proposals deemed unlikely to impact designated sites.

Non-designated Sites

3.1.3 A single candidate local wildlife site is within 1km of the proposals; Coed Bodlondeb.

3.1.4 The candidate wildlife site is unlikely to be impacted by proposals.

3.2 HABTIATS

3.2.1 The following Priority Habitats are within 1km of the Site:

- Ancient woodland: situated c.80m to the north
- Lowland deciduous woodland

3.3 SPECIES RECORDS

Cofnod returned a total of 464 species records within the data trawl from the past 10 years and excluding those with less than a six-figure grid reference . No records for bats have been recorded in the past 10 years. Most records relate to records associated with the coast and estuary c.600m to the east and north of the Site and are of little relevance. Full records can be provided upon request. Species considered relevant to the proposals include:

Birds

- Lesser redpoll *Acanthis cabaret*
- Blue tit *Cyanistes caeruleus*
- Greater spotted woodpecker *Dendrocopos major*
- Linnet *Linaria cannabina*
- Great tit *Parus major*
- Chiffchaff *Phylloscopus collybita*
- Dunnock *Prunella modularis*
- Fieldfare *Turdus pilaris*

Mammals

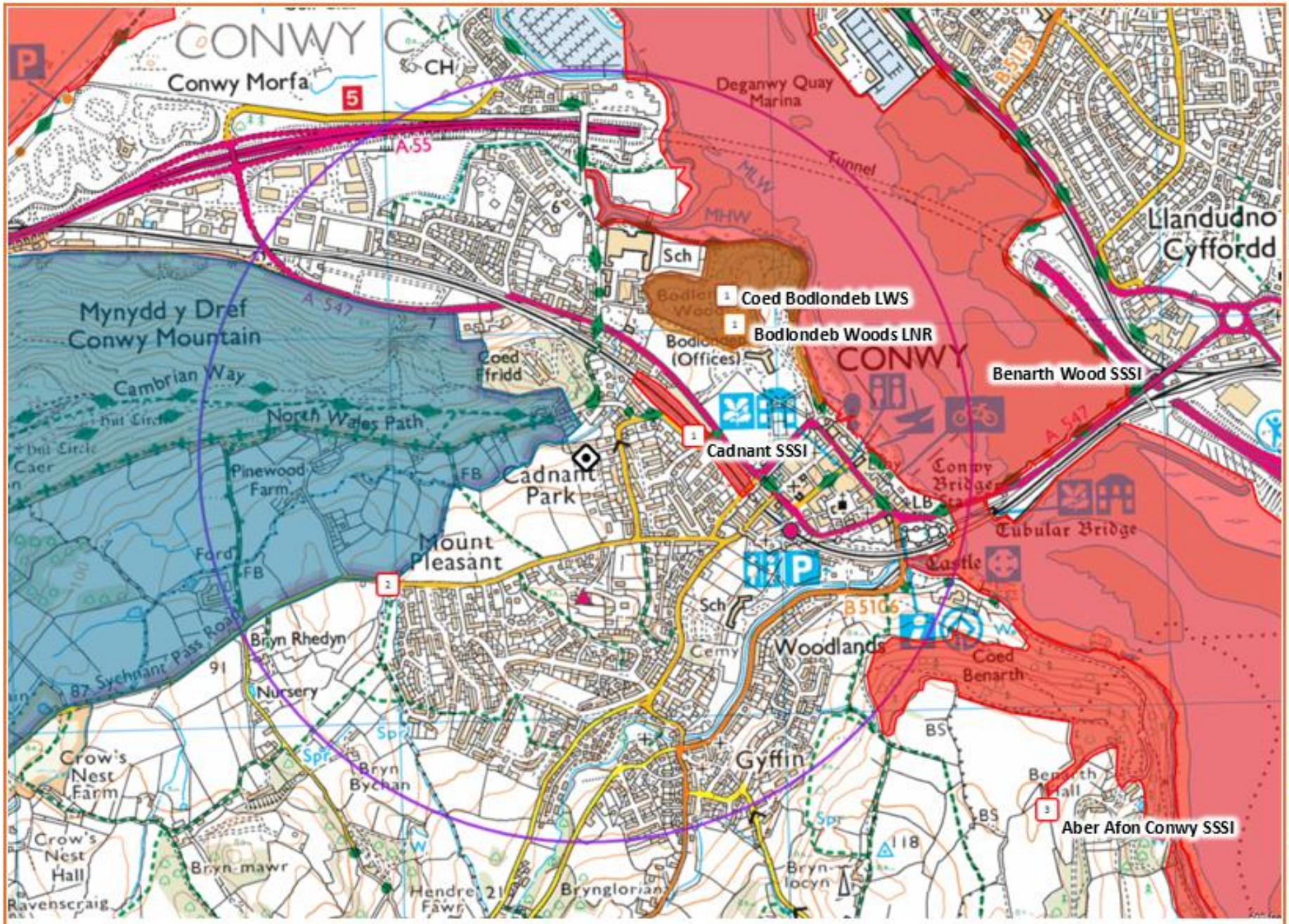
- Hedgehog *Erinaceus europaeus*
- Badger *Meles meles*
- Grey squirrel *Sciurus carolinensis*

Amphibians

- Common frog *Rana temporaria*
- Slow worm *Anguis fragilis*

Plants

- Bluebell *Hyacinthoides non-scripta*
- Three cornered garlic *Allium triquetrum*



Client Alun Jones

Project title Blentarn

Project ID ECO_1190

Subject Ecological Assessment

Drawing number ECO1190-05EcoA_A

Drawing date 25/09/24

Drawn by MM

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Figure 3: ***Sites within 1km***

3.4 LOCAL POLICY

3.4.1 The local planning authority is Conwy County Borough Council. The current local plan was adopted in 2013. The below polices are of significance to the proposals:

- Strategic policy NTE/1 – The Natural Environment
- Strategic policy NTE/2 – Green wedges and meeting the development need of the community
- Strategic policy NTE/ - Biodiversity

3.4.2 In addition, the following Supplementary Planning Guidance documents are relevant to this assessment:

- LDP5 Biodiversity Adopted November 2014

4. FIELD STUDY RESULTS

4.1 PHASE I HABITAT SURVEY

Site Summary

4.1.1 The Site is comprised of a private property and garden with planted broadleaved woodland to the north, a planted coniferous wooded belt to the southern boundary, amenity grassland, scattered trees and ornamental planting. A number of hedgerows are present around the Site and a large building with an outdoor swimming pool and associated hardstanding access, parking and patio.

4.1.2 A Phase I map is shown in Figure 4, with target notes in Table 3 and a species list in Table 4. Photographs are provided in Table 5.

A1.1.2 Broadleaved Woodland - Plantation

4.1.3 A broadleaved wooded plantation belt is present to the northern portion of the Site and comprises sycamore, hazel and Lawson's cypress.

A1.2.2 Coniferous Woodland - Plantation

4.1.4 A planted coniferous belt exists along the southern boundary and comprises Lawson's cypress and Japanese cedar. The trees are generally of a young age class lacking any potential roosting opportunities for bats.

A1.3.1 Scattered Broadleaved Trees

4.1.5 Scattered broadleaved trees extend along the western boundary and partially along the southern portion of the Site within the amenity grassland and extending from boundary hedgerows. The trees are generally of a young age class lacking any potential roosting opportunities for bats.

G1 Standing Water – Swimming Pool

4.1.6 A manmade swimming pool is located immediately south of the existing building near the eastern boundary, of negligible ecological value.

J1.2 Amenity Grassland

4.1.7 Amenity grassland dominates the central portion of the Site. The grassland is regularly mown to a short sward height.

J2.3 Hedgerow with Trees

4.1.8 A series of hedgerows are situated across the Site. Hedgerows are well-managed and comprised of beech and privet.

J3.6 Building

4.1.9 A large property is located near the centre of the Site. It has been subject to a bat assessment, described further below.

J4 Bare Ground

4.1.10 Bare ground habitats surrounded the property (patio and parking) and form the access to the Site from Cadnant Park road to the east.

Table 3 – Target notes and descriptions

Target note	Description
1	Beech hedge to 2m.
2	Semi-mature *Davidia involucrata*.
3	Folly and sunken garden.
4	Mixed planted woodland with Sycamore *Acer pseudoplatanus*, Hazel *Corylus avellana* and Lawson's Cypress *Chamaecyparis lawsoniana.*
5	Dry ditch and raised boundary bank with dense Bracken *Pteridium aquilinum*, Foxglove *Digitalis purpurea* and Bramble *Rubus fruticosus*.
6	Mixed trees and shrubs including *Laburnum cf alpinum*, Laurustinius *Viburnum tinus*, Copper Beech, Whitebeam *Sorbus aria* and *Philadelphus sp.*
7	Standard conifers *Chamaecyparis lawsoniana* (3) and *cf Cryptomeria japonica* (1).
8	Boundary hedge - large-leaved Privet.
9	Ornamental shrub bed with *Viburnum ebbingei*, New Zealand *Flax Phormium tenax*, *Berberis darwinii, Pittosporum tenuifolium, Olive Olea europea* and mature Flowering Cherry.
10	Herbaceous / Shrub Border containing Pieris 'Forest Flame', Dogwood *Cornus sanguineum, Magnolia x soulangeana, Rhododendron japonicum and Rosa sp*., with herbaceous *Bergenia cordifolia*, Pampas Grass *Cortaderia selloana, Gunnera manicata* and *Primula* sp.
11	Ornamental garden
12	Location of former mature Walnut *Juglans regia*

Table 4 – Species list for on-site habitats

Common name	Latin name
Beech	*Fagus sylvatica*
Sycamore	*Acer pseudoplatanus*
Hazel	*Corylus avellana*
Lawson's cypress	*Chamaecyparis lawsoniana*
Bracken	*Pteridium aquilinum*
Foxglove	*Digitalis purpurea*
Bramble	*Rubus fruticosus agg*
Laburnum	*Laburnum cf alpinum*
Laurustinius	*Viburnum tinus*
Copper beach	*Fagus sylvatica purpurea*
Whitebeam	*Sorbus aria*
Philadelphus sp	*Philadelphus sp*
Japanese cedar	*Cryptomeria japonica*
Privet	*Ligustrum ovalifolium*
New Zealand flax	*Phormium tenax*
Darwin's barberry	*Berberis darwinii*
Kohuhu	*Pittosporum tenuifolium*
Olive	*Olea europea*
Flowering cherry	*Prunus sp.*
Pieris 'forest flame'	*Pieris japonica*
Dogwood	*Cornus sanguinea*
Magnolia	*Magnolia x soulangeana*
Rhododendron sp	*Rhododendron japonicum*
Rosa sp	*Rosa sp*
Bergenia	*Bergenia cordifolia*
Pampas grass	*Cortaderia selloana*
Giant rhubarb	*Gunnera manicata*
Primrose sp	*Primula sp*

Figure 4: ***Phase I Map***

Table 5 – Site photographs

	
Photograph 1: Scattered trees within amenity grassland	**Photograph 2: Conifer plantation to the south**
	
Photograph 3: Ornamental shrub	**Photograph 4:Swimming pool and hard standing patio**
	
Photograph 5: Existing dwelling (B1, centre) with garage (B2, left)	**Photograph 6: Privet hedgerow**

4.2 PRELIMINARY ROOST ASSESSMENT

B1

External

4.2.1 B1 is a two- storey brick-built Tudor-style dwelling with a multiple pitched roof. It is a large Georgian building with tall windows and multiple chimney stacks. The building is generally in an excellent state of repairs throughout with few features observed suitable to bats. A small number of slightly raised slate tiles were noted across the building.

Internal

4.2.2 Internally, a large roof void is present with exposed timbers (joists, ridge, and purlins) and is partially covered with a modified timber boarding. The floor is covered with rockwool insulation. Lighting is present throughout the loft space.

4.2.3 A thorough examination of the roof void did not find any evidence of roosting bats (e.g. droppings, urine stains, feeding remains etc.).

4.2.4 B1 was considered to be of 'low' suitability to roosting bats.

B2

4.2.5 A small garage to the immediate northwest of the garage (near TN12) was externally and internally assessed. It is a small single-storey building with a pitched slate roof, in an excellent state of repair.

4.2.6 B2 was considered to offer 'negligible' bat roosting potential.

Table 6 – Survey evidence and roost locations

	
Photograph 1: B1, a large Tudor-style property of 'low' suitability to bats	**Photograph 2:** internal loft space with lighting
	
Photograph 3: partially exposed purlins, joists and slates.	**Photograph 4:** loft insulation is present throughout
	
Photograph 5: B1 (left) and B2 (right)	**Photograph 6:** B2, single-storey garage of 'negligible' potential to bats

4.3 BAT EMERGENCE SURVEYS

Summary

4.3.1 A total of 1.no survey was undertaken at B1 during September 2024.

4.3.2 The following species were recorded foraging and/or commuting near to the property:

- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared *Plecotus auratus*
- Noctule *Nyctalus noctule*
- Lesser horseshoe *Rhinolophus hipposideros*

4.3.3 Results indicate that bats are likely absent from B1 (however please note constraints).

4.3.4 The following tables detail survey parameters, surveyor locations and survey notes detailing any bat activity.

Table 7 – Survey parameters – Survey #1

LOCATION	Blentarn (B1)
SURVEY DATE	12/09/2024
SURVEYORS	5no. surveyors
Surveyor #1	R. Beresford
Surveyor #2	R. Barratt
Surveyor #3	N. Shaw
Surveyor #4	M. Webster
Surveyor #5	J. Storr
TEMP AT START	11.6^{o}C
CONDITIONS	Cool, gentle breeze and mostly overcast
SUNSET	19:40
START	19:20
FINISH	21:10
LAYOUT / SURVEYOR POSITIONS	

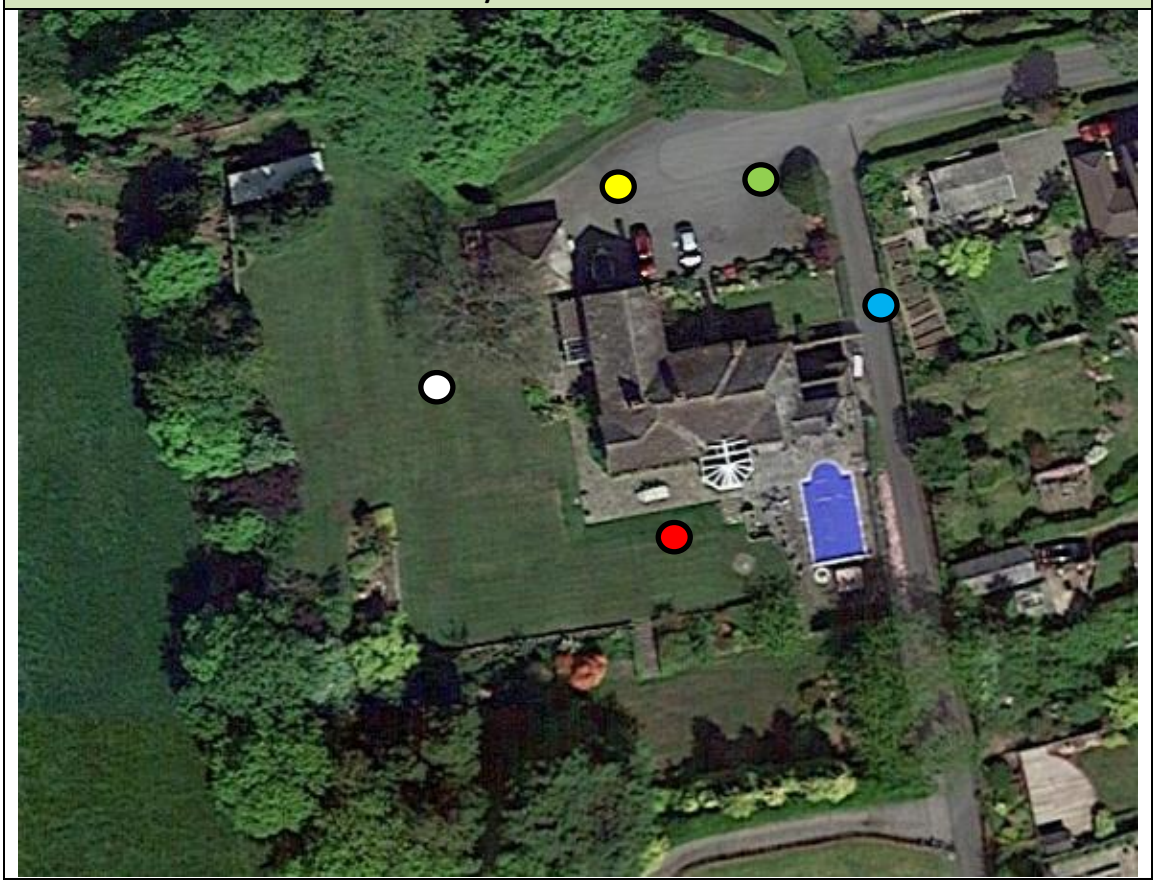

Table 8 – Surveyor notes – Survey #1

SURVEYOR	#1	
TIME	**SPECIES**	**NOTES**
20:02	Soprano pipistrelle	Along hedgerow east to west
20:07	Brown long-eared	Heard not seen
20:08 – 20:30	Common pipistrelle	Foraging along hedgerow and lawn continuously for c. 20 mins
20:13	Soprano pipistrelle	Foraging at bottom of garden
20:29	Soprano pipistrelle	Foraging west to east
20:29	Soprano pipistrelle	Continuous foraging along hedgerow
20:32	Noctule	Heard not seen
20:44	Common pipistrelle	Heard not seen
21:10	**END**	
SURVEYOR	**#2**	
TIME	**SPECIES**	**NOTES**
20:00	Soprano pipistrelle	Heard not seen
20:02	Common pipistrelle	Heard not seen
20:07	Soprano pipistrelle	Heard not seen
20:06 – 20:12	Soprano pipistrelle	Foraging over garden and over house
20:12 – 20:17	Soprano pipistrelle	Foraging along hedge and scattered trees
20:20	Common pipistrelle	Heard not seen
20:29 – 20:32	Soprano pipistrelle	Heard not seen, foraging to east
20:30	Myotis	Heard not seen
20:41	Soprano pipistrelle	Heard not seen
20:44	Common pipistrelle	Heard not seen, foraging
20:45	Brown long-eared	Heard not seen, commuting to east
20:50	Brown long-eared	Heard not seen, foraging to east
20:53	Common pipistrelle	Heard not seen
20:54	Common pipistrelle	Heard not seen
21:01	Common pipistrelle	Heard not seen
21:03	Common pipistrelle	Heard not seen
21:10	**END**	
SURVEYOR	**#3**	
TIME	**SPECIES**	**NOTES**
20:31	Common pipistrelle	Heard not seen, commuting
20:32	Noctule	Heard not seen, commuting
20:25	Common pipistrelle	Heard not seen, commuting
20:50	Common pipistrelle	Heard not seen, commuting
21:01	Common pipistrelle	Heard not seen, foraging
21:10	**END**	

SURVEYOR	#4	
TIME	**SPECIES**	**NOTES**
20:06	Soprano pipistrelle	Heard not seen
20:21	Common pipistrelle	Foraging around west of B1
20:36	Brown long-eared	Foraging very low southwest to east
20:39	Common pipistrelle	Commuting from southwest to northeast
20:50	Unknown	Close pass by surveyor.
20:54	Brown long-eared	Commuting near conservatory
20:54	Common pipistrelle	Heard not seen
20:55	Common pipistrelle	Heard not seen
20:57	Common pipistrelle	Foraging west to east first floor level
21:01	Common pipistrelle	Foraging west to east first floor level
21:10	**END**	
SURVEYOR	**#5**	
TIME	**SPECIES**	**NOTES**
19:51	Soprano pipistrelle	Foraging to west of building within garden
19:55	Common pipistrelle	Foraging to west of building within garden
20:02	Soprano pipistrelle	Heard not seen
20:04	Common pipistrelle	Foraging to west of building within garden
20:06	Soprano pipistrelle	Foraging to west of building within garden
20:15	Common pipistrelle	Foraging to west of building within garden
20:20	Lesser horseshoe	Heard not seen
20:24	Soprano pipistrelle	Foraging to west of building within garden
20:47	Noctule	Heard not seen
20:50	Soprano pipistrelle	Heard not seen
20:50	Brown long-eared	Heard not seen
21:10	**END**	

5. ECOLOGICAL ASSESSMENT

5.1 SUMMARY OF ECOLOGICAL IMPACTS

5.1.1 A summary of ecological receptors which may be affected by proposals is provided in Table 9, below. Where a receptor within the table is highly unlikely to be impacted by proposals, it is excluded from further assessment.

Table 9 – Summary of ecological receptors and their likely impacts from proposals

Ecological Feature	Recommendation / Comments
Designated sites	No sites near to the Site.
Non-designated sites	No sites near to the Site.
Priority habitat	No habitats near to the Site.
Badger	No badger evidence observed. Potential for badgers to colonise the Site in the future. Pre-commencement survey recommended.
Bats	Bats are likely absent. Construction and operational lighting to not illuminate natural habitat or bat features. Enhancements required for bats with roosting opportunity and bat habitat.
Breeding birds	Remove breeding habitat outside 1st March – 31st August.
Amphibians	Site is unsuitable for amphibians.
Reptiles	Site is unsuitable for reptiles.
Enhancements	Additional enhancements are recommended in the form of bat and bird boxes across the Site. Recommended landscape proposals with native species. Maintain connectivity to wider landscape.

5.2 BADGER

Status

5.2.1 No evidence of badger evidence was observed at or near the Site. However, the Site is suitable for badger occupation and foraging and may colonise the site in the future.

5.2.2 Records for badger exist in the wider landscape.

Unmitigated Impact

5.2.3 A badger sett may be damaged, destroyed or blocked by construction. A badger that is occupying the sett may disturbed by construction works. A badger may be injured or killed by construction works.

Recommendations

5.2.4 A pre-commencement badger survey should be undertaken by a suitably qualified ecologist within 6-months of construction works commencing on site.

5.3 BATS

Status

5.3.1 Bat surveys resulted in confirmation of likely absence of roosting bats. While there were timing constraints to the emergence survey, conditions were suitable and numerous bats (numbers and species) were recorded during the survey.

5.3.2 Moderate quality foraging and commuting opportunity exists at the Site, particularly along the boundaries.

Unmitigated Impact

5.3.3 Foraging and commuting bats may be deterred by the unnecessary illumination during the construction and operational phases.

5.3.4 There may be an overall loss of potential bat roosting habitat.

Recommendations

5.3.5 Construction and operational lighting should be designed in accordance with 'Bats and Artificial Lighting at Night – Guidance Note GN 08/23'[6]. In particular, natural habitats and proposed bat roosting features should remain unilluminated.

5.3.6 Given that the survey was undertaken outside the optimum period for survey, additional mitigative measures are recommended to support the works, these measures could be reduced if further survey effort is undertaken which confirms absence:

- Works impacting the roof should be undertaken during the winter period (1st December – 1st March, inclusive).

[6] **ILP & BCT, 2023**. Bats and Artificial Lighting at Night. *Guidance note GN08/23.*

- A licensed bat ecologist should be present during the initial roof strip to reduce potential impacts to bats. These roof strip works should be supported by Reasonable Avoidance Measures.

5.3.7 The following bat features should be incorporated into each building on site:

Crevice Dwelling

5.3.8 Crevice opportunity can be provided in various forms and in a variety of areas/conditions. A **minimum of 2no. features** from the options below will be incorporated into the building design, occupying a range of aspects:

- **Roof & ridge tile gaps:**
  - Gaps can be as small as 15-20 mm high x 20-50 mm wide (although UK Bat Mitigation Guidelines recommends creating gaps in excess of 50 mm). Roof tile gaps can be created by raising roof tiles with mortar to the dimensions above. Ridge tile gaps may be created by removing wet mortar (e.g. with a finger) when laying the tiles or cutting out gaps into the tiles. Alternatively, bat access tiles may be installed.

- **Raised lead flashing:**
  - Raised lead flashing crevices can be created by lifting secure sections of lead to the dimensions above.

- **Soffit gaps:**
  - Soffit gaps can be created by providing scattered or continuous gaps between the wall and soffits to the dimensions mentioned above.

Maternity Roosting

5.3.9 Maternity roost opportunity can be provided in various forms and in a variety of areas/conditions. The following features will be provided on to the newly constructed building:

- **Bat Boxes / Bat Tubes:**
  - A minimum of 1no. bat box will be incorporated into each building. Bat boxes may be external features such as the Schwegler type 1FF (or similar WoodCrete design), or ideally, integrated such as the Schwegler Bat Tube 1FR (or similar WoodCrete design).

Bat boxes will be installed between 4m-6m preferbly in sunny locations. Grouped bat features will vary in position and location.

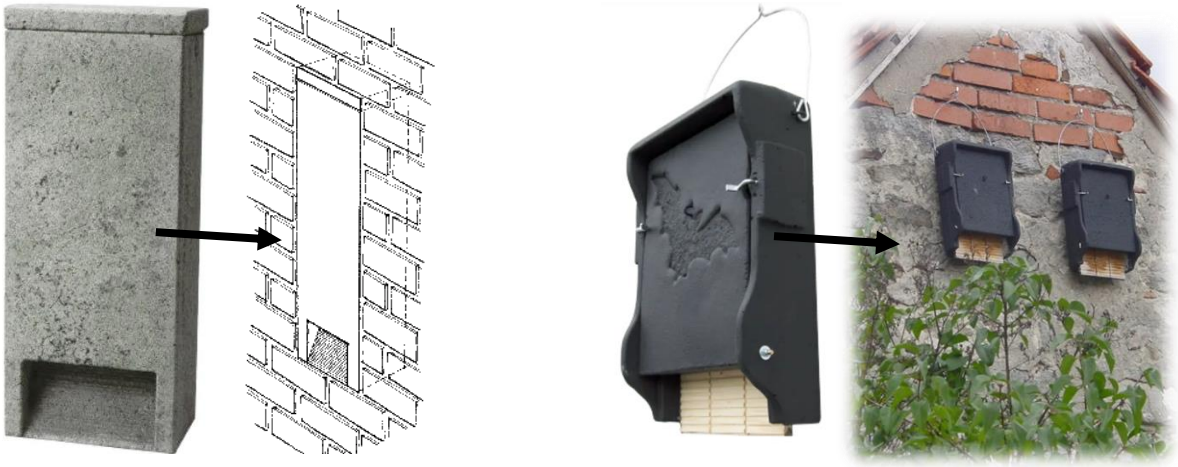

Figure 5: ***Recommended bat boxes. Schwegler Bat Tube 1FR (left), Schwegler Bat Box 1FF (right)***

Foraging and Commuting Habitat

5.3.10 Foraging and commuting habitat is essential to bats and opportunity to provide this within close proximity to roosting opportunity is present at the Site.

5.3.11 The following principles should be followed in creating foraging and commuting habitat, the planting will be shown on a land scaping plan:

- Habitat should be established close to roosting opportunities.
- Habitat (retained and/or created) should not be fragmented, especially linear features, and will maximise the use of native species, where possible.
- Treelines and hedgerows are recommended at the boundaries, where possible. These should eventually aim to reach between 3m-5m in height and be the maximum width as is reasonably possible. Planting fast-growing trees at an early stage of the development is recommended.
- Avoid illuminating natural habitats.

5.4 BREEDING BIRDS

Status

5.4.1 Aerial nesting opportunity exists within the scrub and trees across the Site, particularly at the boundaries.

Unmitigated Impact

5.4.2 An active bird's nest or eggs may be damaged or destroyed or its young injured during construction should grassland become rank.

Recommendations

5.4.3 Should ground nesting bird habitat establish at the Site through decreased grazing then works should remove nesting bird habitat outside the active bird breeding period (1st March – 31st August), or;

5.4.4 A suitably qualified ecologist should survey the area of impact immediately prior to the commencement of works. Should an active nest be found then the area should be cordoned off and left until bird's area confirmed as no longer breeding and any young have fully fledged.

5.4.5 The area could be enhanced by providing bird boxes within the adjacent trees or to new structures. The following bird boxes are recommended:

- 2no. Schwegler 1B 32mm nest box (or similar).
- 2no. Schwegler 1B 26mm nest box (or similar).

5.4.6 Bat boxes will be installed between 2m-4m in height within sheltered locations and close or within natural habitat such as trees or shrubs.

5.5 BIODIVERSITY ENHANCEMENTS

5.5.1 In addition to the wildlife boxes proposed for bats and birds, it is recommended that a landscape proposal is provided. While the properties to be developed will be for private use and private gardens, the following principles should be followed for habitat creation:

- Created habitats should maximise the inclusion of native species.
- Created habitats should maximise the diversity of native species within mixes.
- Continuous linear habitat (hedgerow and/or trees) should be provided (retained or created) around the entire Site boundary.
- Retained and created habitat should aim to remain unilluminated, where possible.

6. SUMMARY OF RECOMMENDATIONS

6.1.1 The following recommendations are made in respect of the proposals:

- A badger survey should be undertaken within 6-months of works commencing.
- Bat roosting opportunity to be provided with bat boxes and crevice opportunities.
- Works impacting the roof should be undertaken between 1st December – 1st March, inclusive).
- A licensed bat ecologist should be present during the initial roof strip and those works to be supported by RAMs.
- Bird boxes to be incorporated on site.
- A landscape plan is recommended which should:
    - Maximise native species
    - Maximise species diversity
    - Create linear habitat around the entirety of the site boundaries.
    - Aim to keep habitats unilluminated.

7. APPENDICES

7.1 APPENDIX I: LEGISLATION

The Environment Act (Wales) 2016

7.1.1 Puts in place legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way includes:

- Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty) requiring that public bodies must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in doing so, promote the resilience of ecosystems.

- 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.

- Sustainable Management of Natural Resources: sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory principles of SMNR defined within the Act. The three main components include:

    - The State of Natural Resources Report (SoNaRR): Sets out the state of Wales' natural resources).

    - Natural Resources Policy (NRP): Produced by Welsh Government, sets out priorities, risks and opportunities for the sustainable management of natural resources taking into account the findings of the SoNaRR report.

    - Area Statements: Produced by NRW to implement one or more of the priorities and opportunities outlined in the NRP at an appropriate spatial scale. They translate the high level strategic priorities while taking into account local needs, opportunities and pressures.

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Conservation of Habitats and Species Regulations 2017 (as amended)

7.1.2 These Regulations consolidate the Conservation (Natural Habitats, &c.) Regulations 1994 and amend the 2010 Regulations, and together they transpose the European Habitats Directive into domestic law. The Regulations provide for the designation and protection of 'European sites' (referred to in this assessment as international or designated sites), the protection of 'European protected species', and the adaptation of planning and other controls for the protection of such.

7.1.3 Under the Regulations, UK competent authorities have a general duty to have regard to the EC Habitats and Birds Directives. They require competent authorities to consider or review planning permission, applied for or granted, affecting a European site, and, subject to certain exceptions, restrict or revoke permission where the integrity of the site would be adversely affected. Under Regulation 63, where any proposed plan or project is likely to have an effect on a Natural 2000 site or qualifying feature for a site, then the competent authority (normally the local planning authority) will carry out an Appropriate Assessment of those effects, referred to as a Habitats Regulations Assessment (HRA).

Species

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

Well-being of Future Generations (Wales) Act

7.1.5 Wales also has a key piece of overarching legislation called the Well-being of Future Generations (Wales) Act, introduced in 2015, that requires national government, local government, local health boards and other specified public bodies to carry out sustainable development and work towards objectives that contribute to seven well-being goals. Sustainable development in the Act means "the process of improving the economic, social, environmental and cultural wellbeing of Wales by taking action, in accordance with the sustainable development principle (i.e. not compromising the ability of future generations to meet their needs), aimed at achieving the well-being goals. The seven wellbeing goals are:

- A Prosperous Wales
- Resilient Wales
- Healthier Wales
- More Equal Wales
- Cohesive Communities
- Vibrant Culture and Thriving Welsh Language
- Globally Responsible Wales

Wildlife and Countryside Act 1981

7.1.6 The principle statutory instrument that governs nature conservation in England is the Wildlife and Countryside Act 1981 as amended (WCA 1981).

7.1.7 The WCA 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and the Birds Directive in Great Britain. It is complimented by the Wildlife and Countryside (Service of Notices) Act 1985, which relates to notices served under the 1981 Act, and the Habitats Regulations 2017 (as amended), which implement the Habitats Directive.

7.1.8 Containing four Parts and seventeen Schedules, the Act covers protection of wildlife (birds, and some animals and plants), the countryside, National Parks, and the designation of protected areas, and public rights of way.

7.1.9 Amendments to the Act have been made and there is a statutory quinquennial review of Schedules 5 and 8 (protected wild animals and plant respectively), undertaken by the country agencies and co-ordinated by the Joint Nature Conservation Committee. There have been 6 reviews with the 7th commenced in 2021.

Protection of Badgers Act 1992

7.1.10 There are very few Acts of Parliament that are dedicated to one species with conservation as part of the aim. This Act supplements the WCA 1981 by affording protection to badgers against disturbance and their setts against unlawful damage and destruction. It provides a licensing system to allow works to proceed in a sensitive manner.

Countryside and Rights of Way (CRoW) Act 2000

7.1.11 The CRoW Act 2000 places a duty on Government Departments and the National Assembly for Wales to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the 1992 Rio Convention on Biological Diversity. The Act makes various amendments to the WCA 1981 including increasing SSSI protection, management and policing.