

Report Title	Proposed Residential Extension & Associated Works, Five Oaks, Legacy, Wrexham, LL14 4ER – Ecological Appraisal
Date issued	10th September 2021
Authors	Max Ellson & Lucy Boyett
Report Version	C457/ 1.0
Client	Mr Geraint Davies
Contract Ref.	C457

this report was produced by

marches ecology

**Unit 23, The Malthouse Business Centre,
Regent Street, Llangollen, Denbighshire, LL20 8HS
01978 860889**

with assistance from



Marches Ecology is the trading name of Marches Ecology LLP, Partnership No. OC362423, Registered in England and Wales. Registered address: Unit 23, The Malthouse Business Centre, Regent Street, Llangollen, Denbighshire, LL20 8HS.

Quality Assurance

Survey/ Assessment Work Schedule		
Survey/Assessment Type	Surveyors/ Author	Date
Extended Phase 1 Habitat Survey	Max Ellson	29/07/21
Ecological background data search	Max Ellson	July 2021
Preliminary (bat) Roost Assessment	Lucy Boyett (Enfys Ecology Ltd)	29/07/21
Bat emergence survey	Lucy Boyett, Sophie Johnson & Mandy Cartwright (Enfys Ecology Ltd)	04/08/21

Review Schedule				
Issue	Date	Author	Reviewed by	Approved by
1.0	10/09/21	Max Ellson	Tom Knight	Tom Knight

This report has been prepared by Marches Ecology with all reasonable skill, care and diligence within the terms of the Contract with the client.

The terms of this Contract have been fulfilled by Marches Ecology in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The evaluation and assessment provided in this report is specific to the iteration of the proposal detailed in *Section 1*. It would no longer be valid should the layout be changed in anyway, should the report be used for a different proposal at the same site or should it be used a maximum of 12 months after the date of issue.

CONTENTS

1	INTRODUCTION.....	4
1.1	PROJECT BACKGROUND	4
1.2	REPORT AUTHOR	4
1.3	SITE DESCRIPTION AND CONTEXT	4
1.4	THE DEVELOPMENT.....	5
1.5	PLANNING POLICY	5
1.6	LEGISLATION.....	9
2	METHODOLOGY.....	11
2.1	DESK STUDY.....	11
2.2	FIELD SURVEY	11
2.3	SURVEY LIMITATIONS.....	12
2.4	EVALUATION.....	13
3	BASELINE ECOLOGICAL CONDITIONS	14
3.1	PROTECTED SITES	14
3.2	HABITATS AND FLORA.....	14
3.3	SPECIES/ SPECIES GROUPS.....	17
4	EVALUATION, ASSESSMENT AND RECOMMENDATIONS	27
4.1	INTRODUCTION.....	27
4.2	EVALUATION, ASSESSMENT AND RECOMMENDATIONS.....	27
5	SUMMARY CONCLUSIONS	33
6	TARGET NOTES	34
7	REFERENCES.....	35
8	DATA.....	37
9	APPENDIX 1 - SPECIES-SPECIFIC LEGISLATION.....	38
10	APPENDIX 2 – DATA SUPPLIED BY COFNOD (PUBLIC VERSION)	40

Figure 1 – Extended Phase 1 Habitat Survey

1 INTRODUCTION

1.1 Project Background

1.1.1 Marches Ecology was commissioned by Mr Geraint Davies to undertake an Ecological Appraisal of Five Oaks, Legacy, Wrexham, LL14 4ER (approximate OS Grid Ref. SJ 2926 4769). This Ecological Appraisal (EA) comprised an ecological background data search, Extended Phase 1 Habitat Survey, Preliminary (bat) roost Assessment (PRA) of the existing domestic dwelling, and a subsequent single bat emergence survey. This report is provided as supporting information to a planning application to Wrexham County Borough Council (WCBC) for an extension to/ remodelling of an existing domestic (bungalow) dwelling.

1.1.2 This report has three key aims:

- to provide an initial appraisal of the ecological value of the site and local ecological resource and thereby identify ecological constraints relevant to the proposal;
- to identify further surveys that may be required; and
- to identify potential mitigation/ compensation measures where possible along with opportunities to deliver ecological enhancement.

The structure of this Ecological Appraisal is based on the guidance provided in the Chartered Institute of Ecology and Environmental Management (CIEEM) documents CIEEM (2017a) and CIEEM (2017b).

1.2 Report Author

1.2.1 This report was produced by Max Ellson of Marches Ecology. Max Ellson is an ecologist with over twenty years of consultancy experience and has undertaken Extended Phase 1 Habitat Surveys on a wide range of sites. His relevant academic qualifications and professional memberships are as follows:

- Chartered Environmentalist (Society for the Environment).
- Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).
- MSc Vegetation Survey and Assessment.
- BSc (Hons) Environmental Biology.

1.2.2 The bat survey/ reporting was led by Enfys Ecology Ltd. Reporting by Lucy Boyett, reviewed by Keymar Wake.

1.3 Site Description and Context

1.3.1 The survey site extends to approximately 0.2 hectares (ha); it is understood this reflects the 'redline planning boundary' (refer to *Section 1.4*). This comprises the existing domestic dwelling and associated garden curtilage of Five Oaks. It is located in a rural location, on the corner of Allt-y-Gwyn and Llwn Einion (B5097) roads, approximately 1.1 km north of the centre of Rhosllanerchrugog. The road abuts the survey site to the north and west. Another domestic dwelling/ garden is located to the east; further domestic dwellings are also located on the opposite side of the road to the west. An improved grassland agricultural field is located to the south. The boundaries of the survey site are defined by hedges/ fences and or the road.

1.4 The Development

1.4.1 The proposed development comprises extension to/ remodelling of the domestic bungalow, and is illustrated on a series of Frame Architects plans as follows:

- Drawing no. 21-01_A001, dated 13.01.21 and entitled '*Location Plan*' (this indicates the redline planning boundary);
- Drawing no. 21-01_A002_RevA, dated 13.01.21 and entitled '*Existing Site Plan*';
- Drawing no. 21-01_A101_RevB, dated 18.03.21 and entitled '*Proposed Site Plan*';
- Drawing no. 21-01_A102_RevB, 14.01.21 and entitled '*Proposed Ground Floor Plan*';
- Drawing no. 21-01_A103_RevA, 14.01.21 and entitled '*Proposed Loft and Roof Plan*';
- Drawing no. 21-01_A200_RevA, 17.01.21 and entitled '*Proposed Sections*';
- Drawing no. 21-01_A300_RevA, 13.01.21 and entitled '*Proposed East and West Elevations*';
- Drawing no. 21-01_A301_RevA, 13.01.21 and entitled '*Proposed North and South Elevations*'; and
- Drawing no. 21-01_A600_RevA, 25.01.21 and entitled '*3D Views*'.

1.4.2 These plans indicate the proposals in detail. The footprint of the proposals appears to be largely confined to the existing residential dwelling and associated existing hard-standing/ bare ground areas. It includes the addition of a first-floor level, within the existing loft space, a basement games room, and associated detached garage.

1.4.3 No details on the approximate time scale/ duration of the construction phase have been provided to inform this report. No further detail with regards the proposed development has been provided at this stage.

1.5 Planning Policy

Introduction

1.5.1 This section provides a brief summary of key national and local planning policies. It is not a comprehensive review of all such planning policy, the intention being to identify those considered to be of most relevance to ecology and provide context for the proposal.

Wales

Planning Policy Wales

1.5.2 Planning Policy Wales (PPW) sets out national land use planning policies (Welsh Government 2021). Chapter 6 is of particular relevance (though it is complementary to other themes within the document) and is entitled 'Distinctive and Natural Places'.

With specific reference to development proposals the following key statement is made:

'Development plan strategies, policies and development proposals must consider the need to:

- *support the conservation of biodiversity, in particular the conservation of wildlife and habitats;*
- *ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;*

- *ensure statutorily and non-statutorily designated sites are properly protected and managed;*
- *safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and*
- *secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks’.*

Furthermore, it states that:

- *‘It is important that biodiversity and resilience considerations are taken into account at an early stage in both development plan preparation and when proposing or considering development proposals’.*
- *‘All reasonable steps must be taken to maintain and enhance biodiversity and promote the resilience of ecosystems and these should be balanced with the wider economic and social needs of business and local communities. Where adverse effects on the environment cannot be avoided or mitigated, it will be necessary to refuse planning permission’.*

Use of the mitigation hierarchy is emphasised:

‘Planning authorities must follow a stepwise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible’.

- 1.5.3 Areas that Chapter 6 covers include biodiversity and resilience of ecosystems duty, designated sites, maintaining and enhancing biodiversity, protected species, specific habitats/ areas, sustainable drainage systems (SuDS), green infrastructure, air quality, lighting, and de-risking development.

Technical Advice Note 5

- 1.5.4 PPW is supplemented by a series of Technical Advice Notes (TAN). TAN 5 covers 'Nature Conservation and Planning' (Welsh Government 2009). It provides advice to local planning authorities on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. It includes chapters covering the key principles of planning for nature conservation; the preparation and review of development plans; nature conservation in development control procedures; the conservation of internationally and nationally designated sites, habitats and local sites; and the conservation of protected and priority habitats and species.

- 1.5.5 In paragraph 2.4 it states that *‘...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 (PPW 2.2.1¹);*

¹ References to the relevant part of PPW.

- *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 (PPW 2.3.2);*
- *promote the conservation and enhancement of statutorily designated areas and undeveloped coast (PPW 2.3.2);*
- *ensure that appropriate weight is attached to designated sites of international, national and local importance (PPW 5.3.2);*
- *protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans (PPW 5.2);*
- *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 (PPW paragraphs 5.5.1 and 5.5.2);*
- *ensure that the range and population of protected species is sustained (PPW 5.2.3, 5.5.11 and 5.5.12);*
- *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 (PPW 5.2.2, 5.2.7 and 5.5.2).*

Wrexham

- 1.5.6 Local planning authorities will consider biodiversity/ nature conservation issues in accordance with adopted policies and plans. The following are considered of particular relevance to the proposal.

Wrexham Unitary Development Plan

- 1.5.7 The Wrexham Unitary Development Plan (UDP) was adopted in February 2005. It will be replaced by the Local Development Plan. The UDP '*...provides a framework for local decision making and the reconciliation of development and conservation interests...*'.

Relevant strategic and general development policies include:

- *Policy PS2. Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.*
- *Policy PS11. Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.*
- *Policy GDP1f). Ensure the safety and amenity of the public and safeguard the environment from the adverse effects of pollution of water, land or air, hazards from industry and quarrying, and associated noise, odour or vibration arising from development.*
- *Policy GDP1h). Safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest.*

Section 5 of the UDP concerns 'Environment and Conservation'. The relevant policies listed are as follows:

- *Policy EC4. Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.*
- *Policy EC6. Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.*
- *Policy EC13. Development which would result in an unacceptable adverse impact on the water environment due to additional surface water run-off will not be permitted.*
- *Policy EC14. Development which would have an unacceptable adverse impact upon the capacity, flow, quality or availability of controlled waters and associated land will not be permitted.*

Local Planning Guidance

- 1.5.8 Wrexham County Borough Council (WCBC) has produced a series of supplementary planning guidance documents which set out detailed advice on the way in which Development Plan policies will be applied. Supplementary planning guidance is a material consideration in the determination of planning applications for development. The following Local Planning Guidance (LPG) notes are of particular relevance:
- LPG 17 Trees and Development. Adopted September 2000, Updated December 2012. Provides further advice in relation to UDP policy EC4.
 - LPG 29 Wrexham Industrial Estate – Employment Development and Nature Conservation. Adopted August 2009.
 - LPG 32 Biodiversity and Development. Adopted March 2011. Provides further advice in relation to UDP policies PS2, PS11, EC4 and EC6. Of particular importance it details the requirements for ecological survey and reporting.
- 1.5.9 The Wrexham Biodiversity Action Plan (WBAP) is also listed as supplementary planning guidance on the WCBC website. This reference is out-of-date, the WBAP has been archived and is no longer available.

1.6 Legislation

Introduction

- 1.6.1 This sub-section provides a brief summary of key legislation relevant to ecology/ nature conservation and the development. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation but summarises the salient points. Further information on how this legislation affects the protection of particular species is provided in *Appendix 1*.

***The Conservation of Habitats and Species Regulations 2017 (The Regulations)*²**

- 1.6.2 Transposed the *EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992* into UK law. The Regulations provide for the protection of sites in the UK that support habitats and species of European importance (e.g. Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)). The Regulations also provide full protection for certain species which are frequently referred to as European Protected Species (EPS). EPS of potential relevance to the site include bats and Great Crested Newt (*Triturus cristatus*).

The Wildlife and Countryside Act 1981, as amended (WCA)

- 1.6.3 The WCA strengthened protection for nature conservation sites of at least national importance and provides varying levels of protection for a number of species within the UK. This protection may include prohibition of some or all of: killing, injuring, disturbing, taking, sale/barter or possession of species and also protection of breeding/ sheltering places. The following species/ species groups that receive some level of protection under the WCA and are of potential relevance to the proposal include Badger (*Meles meles*), bats, Great Crested Newts, reptiles and birds. The WCA also prohibits the spread of certain non-native invasive species.

The Countryside and Rights of Way Act 2000 (The CROW Act)

- 1.6.4 The CROW Act includes legislation in relation to the Biodiversity Action Plan; more stringent management, protection and consenting measures for SSSIs; greater penalties for wildlife crime; and greater protection for species listed in the WCA. Some of this legislation was superseded by the NERC Act.

The Natural Environment and Rural Communities Act 2006 (The NERC Act)

- 1.6.5 Sections 40 to 42 of the NERC Act replace Section 74 of the CROW Act. Section 40 of the NERC Act extends to all public authorities (including local planning authorities) the existing Section 74 duty to have regard to biodiversity as far as is consistent with the proper exercise of their functions. In addition, Sections 41 (England) and 42 (Wales) provide a list of species and habitats of principal importance for conservation of biological diversity. Government has a statutory duty to promote steps "to further the conservation" of habitats and species listed in Sections 41 and 42.

² Amended in line with EU Exit by *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*.

Environment (Wales) Act 2016

- 1.6.6 The Environment Act enhances and replaces the current NERC Act (*Section 40*) duty to require all public authorities, when carrying out their functions in Wales, to seek 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'. *Section 7* of the Environment Act provides a list of the living organisms and habitats of principal importance for the purpose of maintaining and enhancing biodiversity in Wales. This list replaces that previously provided in *Section 42* of the NERC Act.

The Protection of Badgers Act 1992 (The Badgers Act)

- 1.6.7 The Badgers Act provides for the protection of Badgers and their setts. This legal protection is provided for welfare rather than the conservation value of the species.

2 METHODOLOGY

2.1 Desk Study

2.1.1 A desk study was undertaken to provide background information on the ecological status of the survey site and its surroundings (a 1 km search area centred on the site was defined). Information was requested from Cofnod. Information sought included designated (nature conservation) sites, Ancient Woodland/ other habitats, legally protected species and other species of nature conservation interest. In addition, contextual information available on the MAGIC environmental database (<http://magic.defra.gov.uk/>) was consulted.

2.1.2 Cofnod provide two sets of records – a ‘Confidential’ set which is not authorised for release into the public domain, and a ‘Public Version’ where the accuracy of some of the grid references has been reduced. The Confidential data set has been issued to the client as part of this study; ‘Public Version’ records are utilised in this document (the full report of which is provided as *Appendix 2*).

2.2 Field Survey

Extended Phase 1 Habitat Survey

2.2.1 The Extended Phase 1 Habitat Survey was carried out on 29th July 2021 by Max Ellson of Marches Ecology. The Extended Phase 1 Habitat plan is provided as *Figure 1*. The survey focussed on land within the site boundary (the ‘survey site’, refer to *Figure 1*), this is understood to correspond to the ‘redline planning boundary’. Immediately adjacent habitat was considered where deemed appropriate and viewed from the survey site boundary where possible. The weather during the survey was sunny, windy and warm; there had been heavy rain in recent days.

2.2.2 Phase 1 Habitat Survey involves identifying areas or features of particular interest either in terms of their botanical interest, and/or habitat potential for protected or other notable species that are likely to occur in the region and within the survey site. The Phase 1 Habitat Survey has been adapted in this instance as an ‘extended’ Phase 1 Habitat Survey, where more information has been obtained to inform site assessment. The methods used centre on the Phase 1 Habitat Survey approach (JNCC 2010) as extended for use in Environmental Impact Assessment (Institute of Environmental Assessment 1995). Extended Phase 1 Habitat Survey involves the following elements:

- Habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat map.
- Description of features of ecological or nature conservation interest in notes relating to numbered locations on the Phase 1 Habitat map, called target notes.

2.2.3 In addition to the habitat map and target notes, a plant species list was compiled³ (provided in *Table 6, Section 8*). Plant nomenclature in this report follows Stace (2010). July is within the accepted survey period for Extended Phase 1 Habitat Surveys. It is unrealistic to suppose that walk-through surveys can generate completely exhaustive species lists at any time of year. It is considered that the list in this report indicates the character of the vegetation and the ecological value of the area inspected.

³ This should not be deemed a comprehensive record of ornamental/ garden plants/ varieties.

2.2.4 Further information describing the assessment conducted during the Extended Phase 1 Habitat Survey for particular species is provided briefly below:

- Badger. Areas within the survey site that might be used by Badger for foraging and sett building were assessed. Incidental foraging signs, tree scratching, paths, latrines and setts were recorded if found (Harris *et al.*, 1989).
- Bats. The potential value of the habitat for foraging/ commuting and roosting was assessed in accordance with *Table 4.1* provided in Collins (2016).
- Great Crested Newts. The quality of terrestrial and aquatic habitat for Great Crested Newts was assessed. The assessment of aquatic habitat was based on the Habitat Suitability Index (Oldham, *et al.* 2000).
- Reptiles. A qualitative assessment of the habitat for reptiles was undertaken. The survey involved identifying potential basking areas, hibernation sites and foraging habitat. English Nature (2004) provides information on the distribution and ecology of the four widespread species. Habitat requirements differ between species but are summarised in Edgar *et al.* (2010).
- Birds. The habitat within the survey site was assessed for its potential value for breeding birds based on guidance provided in e.g. JNCC (2004).

Preliminary Roost Assessment

2.2.5 The PRA was carried out on 29th July 2021 by Lucy Boyett (accredited agent under Natural Resources Wales Bat licence number S087351/1). It was carried out following best practice guidelines (Collins, 2016). Photographic evidence was taken where necessary.

2.2.6 The domestic bungalow (*Target Note 1, Figure 1*) was assessed for any signs of bats (such as droppings, feeding remains, and scratches/ other indicative marks). Features of potential use to bats such as crevices, cracks and other holes, and any potential access points were also looked for. A high-powered torch was used to inspect any identified features, and an endoscope was used to investigate any gaps or crevices, where appropriate. Both the interior and exterior of the building was examined.

Dusk Emergence Survey

2.2.7 The dusk emergence survey was undertaken on 04th August 2021, which is within the peak bat survey months of May to August (inclusive).

2.2.8 During the emergence survey, the building was monitored by surveyors Lucy Boyett, Sophie Johnson and Mandy Cartwright, who focused on the potential roosting features identified during the PRA. The survey began approximately 30 minutes before sunset and continued for approximately 90 minutes after sunset.

2.2.9 Records would be taken if any bats were observed emerging from the building, and of any other bat activity taking place in the area during the survey. The surveyors used Batbox Duet and Anabat Scout detectors, which recorded any bat calls for further analysis.

2.2.10 The PRA/ dusk emergence survey data is deemed to be valid for a period of 18 months from August 2021, in accordance with best practice.

2.3 Survey Limitations

- 2.3.1 No specific survey limitations have been identified. The surveys were conducted in accordance with a Covid-19 Risk Assessment. This did not give rise to any limitations at this site.
- 2.3.2 It should be noted that Bats are a difficult group to survey. They are highly mobile animals. Therefore, it cannot be guaranteed that bats will not move into the building following the PRA/ emergence survey.

2.4 Evaluation

- 2.4.1 The ecological importance (value) of habitats and/or species is often assessed according to a number of widely used criteria of which perhaps the most frequently used are naturalness, extent, rarity, and diversity. For the purpose of this report the ecological importance of the habitat and species present on the site has been determined using the approach detailed in CIEEM (2018). Geographical context is used as a frame of reference for identifying the importance of ecological features. The frame of reference has the following categories: International/ European - National - Regional - Metropolitan/County/Vice-county/ other local-authority wide area - Local. Within this report Local is defined as relating to district or parish; less than local refers to features of value at a Site level.
- 2.4.2 Broadly speaking habitat importance should be determined by identifying designated sites, 'priority habitats' (as defined in CIEEM, 2017a) or by using published, ideally local, site selection criteria. The ecological importance of a species considers its distribution and legal or conservation status, the latter is mostly due to inherent rarity. 'Priority species' are also defined in CIEEM (2017a) and include legally protected species as well as those identified on various conservation lists.

3 BASELINE ECOLOGICAL CONDITIONS

3.1 Protected Sites

Statutory

- 3.1.1 There are no statutory protected sites within 1 km of the survey site.
- 3.1.2 The closest such site is Stryt Las a'r Hafod Site of Special Scientific Interest (SSSI) – part of the Johnstown Newt Sites Special Area of Conservation (SAC) which is located approximately 1.5 km to the southeast at its closest point. No *Annex I* habitats are given as a primary reason for selection of the site as an SAC or as a qualifying feature. Great Crested Newt (*Triturus cristatus*) is the *Annex II* species that is the primary reason for selection of the site as an SAC. No *Annex II* species are given as a qualifying feature.
- 3.1.3 Stryt Las a'r Hafod SSSI extends to 69.4 hectares and the boundary largely corresponds with the SAC. The citation states that '*the water bodies at Stryt Las and Hafod support one of the largest known breeding populations of the Great Crested Newt in Britain*'. It also notes the presence of '*significant populations*' of the four common amphibian species.

Non-statutory

- 3.1.4 There are three non-statutory protected sites within 1 km of the survey site: Legacy Substation (W218) Wildlife Site (WS), Bronwylfa Wood (W219) WS and Crematorium (W222) WS. The closest of these is W222 which is located approximately 485 m to the north-east.
- 3.1.5 7 no. Ancient Semi-natural Woodland (ASNW) sites and 3 no. Restored Ancient Woodland (RAW) sites are located within the 1 km search area. The closest of these is a RAWs located approximately 165 m to the north-west.

3.2 Habitats and Flora

Introduction

- 3.2.1 The Extended Phase 1 Habitat map is provided as *Figure 1*. The Target Notes (numbered 1 to 9 for the survey site) are provided in *Section 6* and shown on *Figure 1*.

Hedgerow and Trees

- 3.2.2 A roadside hedgerow is located on the northern/ western edge of the survey site at *Target Note 7*. This appears to be frequently maintained to between 1 and 2.5 m high, and 0.5 m wide. It is frequently gappy at the base and has been locally recently planted up with *Prunus laurocerasus* (Cherry Laurel). Otherwise the woody component is dominated by *Crataegus monogyna* (Hawthorn) with a wide variety of other shrubs present at lower levels of abundance such as *Carpinus betulus* (Hornbeam), *Fraxinus excelsior* (Ash), *Taxus baccata* (Yew), *Prunus spinosa* (Blackthorn), *Symphoricarpos albus* (Snowberry), *Acer pseudoplatanus* (Sycamore) and *Corylus avellana* (Hazel). The field-layer appears species-poor.



Garden hedge at Target Note 7. Photo taken from northern corner of survey site, looking due west.

- 3.2.3 A frequently maintained *X Cupressocyparis leylandii* (Leyland Cypress) hedge forms part of the eastern boundary of the survey site at Target Note 4.
- 3.2.4 Young/ semi-mature and mature trees are scattered along the northern/ western edge of the survey site. Species present include Ash, *Quercus pedunculatus* (Pedunculate Oak), *Populus nigra* var. *Italica* (Lombardy-poplar) and Yew. Where considered relevant these are further described below with regards bats (Target Notes 5 and 6).

Grassland

- 3.2.5 The survey site is dominated by a large area of closely mown, species-poor lawn at Target Note 8; there is also a small connected area of infrequently managed grassland at Target Note 5. A further area of amenity grassland characterises a road verge at Target Note 9.



Closely mown, species-poor, lawn at *Target Note 8*. Decking at *Target Note 2* is on the LHS of the photo.

Other Habitats

3.2.6 Other habitats are restricted to the following resources:

- the domestic dwelling at *Target Note 1* (refer to PRA below);
- hard-standing/ bare-earth, for example *Target Note 3* and also including raised wooden decking at *Target Notes 2/ 2a*;
- small stands of ornamental plantings/ introduced shrubs;
- very small areas of ephemeral/ short-perennial vegetation;
- a short section of dry ditch/ stream (*Target Note 5*); and
- fences/ walls.

Flora

3.2.7 No notable plants were recorded during the survey (for example Locally Rare/ Scarce in Williams (2014), listed as above 'Least Concern' in Dines (2008), or listed in *Schedule 9* of the *Wildlife and Countryside Act 1981*).

3.2.8 None of the plant records provided by Cofnod are from within the survey site or immediately adjacent habitat. Several species of plant listed in *Schedule 9* of the *Wildlife and Countryside Act 1981* have been recorded from the 1 km search area: Cofnod provided records of *Cotoneaster simonsii* (Himalayan Cotoneaster), *Fallopia japonica* (Japanese Knotweed), *Rhododendron ponticum* (Rhododendron) and *Crocsmia x crocosmiiflora* (Montbretia) (Japanese Knotweed recorded from the same 1 km grid square as the survey site).

3.3 Species/ Species Groups

Badgers

- 3.3.1 Cofnod provided three records of Badger from the 1 km search area, the closest of which is for a sett located over 600 m from the survey site.
- 3.3.2 No setts or evidence of Badger were recorded from the survey site. Opportunities for sett excavation are negligible, the survey site being dominated by a frequently maintained garden. Immediately adjacent habitats comprise roads to the north/west, an improved field to the south and another domestic dwelling/ garden to the east. Taking this into account and the nature of the proposals, no further survey and or specific mitigation/ enhancement measures with regards Badgers are considered necessary. This species will not be dealt with further in this report.

Bats

Contextual Information

- 3.3.3 Cofnod provided records of 8 species of bat for within the 1 km search area: Brown-Long-eared Bat (*Plecotus auritus*), Common Pipistrelle (*Pipistrellus pipistrellus*), Noctule (*Nyctalus noctula*), Pipistrelle bat species, Soprano Pipistrelle (*Pipistrellus pygmaeus*), 'Unknown Bat', Whiskered bat (*Myotis mystacinus*) and 'Whiskered/ Brandt's Bat agg.'. A summary is provided in *Table 1* below.

Table 1 – Summary of bat records within the 1 km search area

Species	Record Type	Year	Distance (m)
Brown Long-eared (BLE), Common Pipistrelle, Soprano Pipistrelle, Noctule, Whiskered/Brandt's agg., 'Unknown Bat'	Activity	2018	293 m north
Common Pipistrelle	Roost	2019	340 m west
Soprano Pipistrelle, BLE and Noctule	Activity	2019	340 m west
Common Pipistrelle	Roost	2019	817 m south
Noctule	Activity	2019	817 m south
Pipistrelle sp.	Roost	2004	868 m south
BLE	Roost	2016	892 m south
Common Pipistrelle	Roost	2016	973 m north-west

Site Description

- 3.3.4 The building at *Target Note 1* is located within a rural area, comprising mainly agricultural fields, lined with mature managed hedgerows and scattered broad-leaved trees along the field boundaries. There are a number of small to large broadleaved woodlands nearby, many of which are linked with woodland corridors or mature hedgerows.



Wider landscape, the location of the building at *Target Note 1* is shown in red.
Base Image © Google 2021.



Aerial view of the building at *Target Note 1* and immediate surroundings.
Base Image © Google 2021.

- 3.3.5 Immediately to the south of the building are agricultural fields; to the east are further properties with gardens comprising large mature trees and shrubs. To the immediate north and west, is the garden, comprising amenity grassland (*Target Note 8*), with a row of mature trees and a hedgerow along the boundary (e.g. *Target Notes 5, 6 and 7*) with the B5097.

Extended Phase 1 Habitat Survey

3.3.6 Six trees with bat roost potential are located in the survey site:

- 3 no. Ash and 1 no. Pedunculate Oak at *Target Note 5* which may provide low bat roost potential at most, and
- 2 no. mature Lombardy-poplar trees at *Target Note 6* which may provide low bat roost potential.

3.3.7 The limited variety and complexity of habitats afforded by the survey site is considered to be of low-moderate (potential) value for commuting/ foraging bats (in accordance with Collins (2016)). The hedge/ tree line at *Target Notes 5, 6 and 7*, adjacent to the road, provides the best potential feature for foraging and commuting and is linked to, and/ or is nearby to other linear features.

Preliminary Roost Assessment

3.3.8 *Table 2* provides a general description and photos of the building at *Target Note 1*.

Table 2 – Building at Target Note 1.

Description	Photos
• Single storey bungalow, with a slated pitched roof. • Felted flat roof garage, attached to the southern elevation of the house and a lean-to conservatory on the western elevation. • Predominantly wooden fascia's, soffits and bargeboards (plastic fascia's on garage).	

- Open plan roof structure, which was slightly asymmetrical.
- Lined with bitumen felt.
- Glass fibre type insulation present.
- Hot water tank and associated pipework present and an area of the loft was also used for storage.

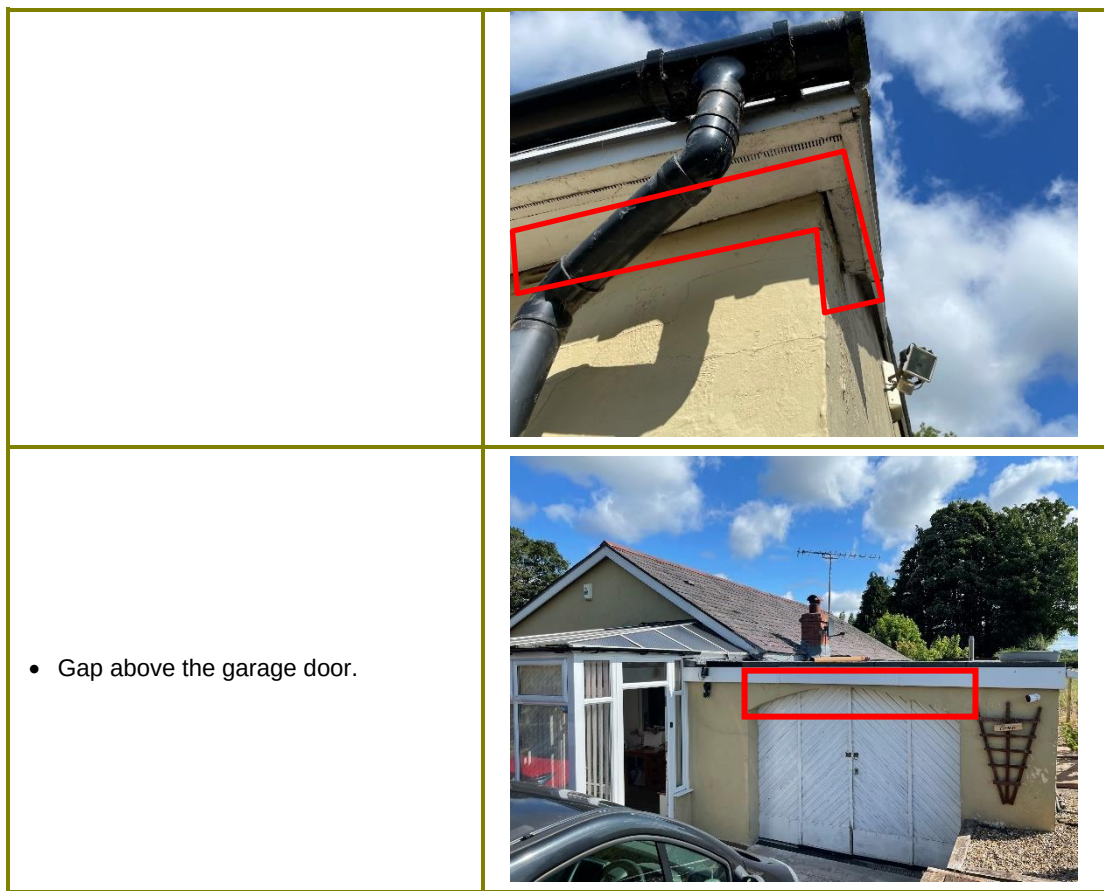


- 3.3.9 The property is generally in good condition with intact rendered walls, no slipped or missing slates or ridge tiles, and bargeboards with limited gaps behind.
- 3.3.10 A small number of potential roosting features were identified, including gaps behind soffits, a gap along the length of the eaves on the southern elevation and a gap above the garage door.
- 3.3.11 No droppings or signs of bats were found within the loft space and the space has a large number of cobwebs present.

3.3.12 Table 3 provides examples of the potential roosting features (PRFs) identified.

Table 3 – Description and photos of Potential Roosting Features; Target Note 1

Description	Photos
- Gap at the eaves along the southern elevation; light seen here from within the loft space. - Associated small gap behind the soffit.	
Small gaps and cracks behind the soffits, including where the chimney meets the soffit on the northern elevation and at the north western and south eastern corners of the property, behind the soffits.	



3.3.13 The PRA showed the building to have low potential for roosting bats (as per Collins (2016)) and no bats or evidence of bats was identified.

Dusk Emergence Survey

- 3.3.14 Table 4 provides the timing and weather conditions for the dusk survey visit and the results are shown in Table 5.

Table 4 – Timing & Weather Conditions

Date	Sunset time	Temperature at start	Temperature at end	General weather conditions
04/08/21	21.02 hrs	19°C (20.32 hrs)	16°C (22.32 hrs)	Dry, calm, 80% cloud cover.

Table 5 – Dusk Survey Results

Date	Results
04/08/21	Summary: No bat emergence from building for the duration of the survey. 20:51 hrs. The first bat to be recorded was a Common Pipistrelle, this was a brief pass, thought to be commuting down the tree line, along the northern/ western boundary of the garden. 20:51 to 21:15 hrs. Brief commuting passes by Common Pipistrelles, along the northern/ western tree line. 21:17 hrs. Soprano Pipistrelle commuted along the northern/ western boundary tree line. From 21:22 hrs, to the end of the survey. Frequent foraging activity within the garden to the north of the property and northern/ western tree line by Common and Soprano Pipistrelles (thought to be a low number of individuals). 22:01 hrs. Social calls from Common Pipistrelles heard. Brief passes from <i>Myotis</i> sp. were recorded at 21:32, 21:58 and 22:08, along the southern survey site boundary.

Great Crested Newts

- 3.3.15 Cofnod provided 10 Great Crested Newt records for the 1 km search area. The closest is from a location approximately 320 m to the west: this being dated 2017, for '2' individuals (from author knowledge presumed to be a terrestrial record). The next closest is from the 'acid tar lagoon' at Llwyneinion, which is located approximately 430 m to the south-west of the survey site at its closest point: this record is dated 2010 and was submitted by Marches Ecology; it is further discussed below. A cluster of 5 records are located to the north of the survey site, the closest being approximately 480 m away. Cofnod have also provided records for Common Frog (*Rana temporaria*), Common Toad (*Bufo bufo*), Palmate Newt (*Lissotriton helveticus*) and Smooth Newt (*Lissotriton vulgaris*).
- 3.3.16 There is no aquatic habitat within the survey site and or immediately adjacent land.
- 3.3.17 An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography⁴, along with author knowledge, indicates that there may be only one waterbody within approximately 250 m of the survey site (excluding ditches), as follows:

⁴ <https://www.google.co.uk/maps/place/Rhostyllen,+Wrexham+LL14+4ER/@53.0220353,-3.0561237,374m/data=!3m1!1e3!4m5!3m4!1s0x487ac7e6afab07f1:0xd755a46f820d1793!8m2!3d53.0234431!4d-3.0539434>

- Pond 1. A pond within a disused railway line at SJ 2932 4746. This is located approximately 240 m to the south of the survey site. It was identified by Marches Ecology in 2010 as part of an unrelated project: it was provided an 'Average' Habitat Suitability Index (HSI) at the time. It is unknown if this pond remains and or its current ecological status.
- 3.3.18 A detailed pond scoping exercise has not been undertaken to confirm the presence/ absence of this waterbody; other waterbodies could be present in the locality, including in private gardens.
- 3.3.19 The 'acid tar lagoon' at Llwyneinion is located approximately 430 m to the south-west as detailed above. In 2010 this was recorded as supporting a medium population (*i.e.* between 11-100 individuals) as defined by the Great Crested Newt mitigation guidelines (English Nature (2001)). However due to survey constraints it was determined at the time that the results could be quite justifiably extrapolated to a large population (*i.e.* over 100 individuals). A large population of Palmate Newts was also recorded.
- 3.3.20 Features of potential value to Great Crested Newts (for foraging, refugia and hibernacula) within the survey site are largely limited to old/ defunct built structures (including brick/ patio slab steps) located underneath the raised wooded decking at *Target Note 2*, disturbed edges of remaining decking at *Target Note 2a*, exposed old sections of breeze block/ stone walls (partly submerged) at *Target Note 3* (including occasional small brick/ rubble mounds) and the bases of boundary hedgerows. Locally these may be of high-quality potential value. Landscaping to the east of the dwelling includes hard-surfaces/ low breeze block and timber sleeper walls, and small/ disturbed beds of ornamental planting; locally these features may be of some value. The mown lawns are of negligible value, however animals would be able to disperse across these areas should they be present.



Defunct brick/ patio slab steps located underneath the raised wooded decking at *Targe Note 2*.



Old sections of breeze block/ stone walls (partly submerged), and associated small brick/ rubble mounds, at *Target Note 3*.

Reptiles

- 3.3.21 Cofnod provided two records of Grass Snake (*Natrix natrix*), the closest of which is located approximately 600 m to the north-west of the survey site.
- 3.3.22 Overall, the habitats present within the survey site are of low potential value for reptiles at most. The hedge lines could provide dispersal routes and possibly refugia opportunities at their bases. However the location of the nearest Grass Snake record outlined above is not directly connected to the survey site and review of web based aerial photography does not indicate any areas of likely optimal reptile habitat in the immediate locality.
- 3.3.23 Given the above, the likelihood of this species group being present is considered to be negligible. As such no further survey and or specific mitigation/ enhancement measures with regards reptiles are considered necessary. This species group will not be dealt with further in this report.

Birds

- 3.3.24 Cofnod provided a large number of bird records from within 1 km of the survey site (though none from within/ immediately adjacent to it) largely with four-figure grid references. The nearest record is from approximately 680 m to the north-west of the survey site, this being for Long-tailed Tit (*Aegithalos caudatus*). Other records of possible relevance to the survey site include Dunnock (*Prunella modularis*), Fieldfare (*Turdus pilaris*), House Martin (*Delichon urbicum*), Starling (*Sturnus vulgaris*), Bullfinch (*Pyrrhula pyrrhula*), Song Thrush (*Turdus philomelos*), Swallow (*Hirundo rustica*) and House Sparrow (*Passer domesticus*).
- 3.3.25 The survey site provides nesting opportunities for species of bird associated with trees/ hedgerows and buildings. No bird nests or signs of past nesting was seen during the inspection of the building at *Target Note 1* during the PRA; there is however suitable nesting habitat associated with the building, particularly around the eaves.

Other Species

- 3.3.26 Cofnod provided a small number of butterfly/ other invertebrate records within 1 km of the survey site (though none from within it). None are of any particular relevance.
- 3.3.27 A small number of other mammal records were supplied by Cofnod; including for American Mink (*Neovison vison*), Hare (*Lepus europaeus*), Hedgehog (*Erinaceus europaeus*), Otter (*Lutra lutra*), Polecat (*Mustela putorius*) and Stoat (*Mustela erminea*). With the exception of Otter, Mink, and Hare, the habitats present could support these species (and or animals could disperse through it) but will not be of any particular value.

4 EVALUATION, ASSESSMENT AND RECOMMENDATIONS

4.1 Introduction

4.1.1 Brief details regarding the proposal are provided in *Section 1.4*. An assessment of ecological issues based on the information provided is detailed below and considers:

- potential ecological constraints relevant to the proposal;
- further survey requirements; and
- potential mitigation/ compensation measures along with opportunities for ecological enhancement.

These are dealt with in turn for protected sites, habitats and flora, and specific species groups in the section below. Potential impacts have been considered with reference to the information/ plans provided only. This assessment considers the survey site and immediately surrounding area.

4.1.2 Technical Advice Note 5 (Nature Conservation and Planning) (Welsh Assembly Government, 2009) seeks developments to achieve net biodiversity gain. The requirement to secure net benefit for biodiversity was reinforced in a letter issued by the Chief Planner (Welsh Government) to all planning departments in October 2019.

4.2 Evaluation, Assessment and Recommendations

Protected Sites

4.2.1 No statutory or non-statutory protected sites would be directly impacted by the proposed development. Taking into account the location of statutory/ non-statutory protected sites as detailed in *Section 3.1*, along with consideration of the small-scale nature of the proposals, no indirect impacts on protected sites are deemed likely to occur [the survey site is outside the buffer associated with the Johnstown Newt Sites SAC, as illustrated in WCBC (2018)].

4.2.2 No ASNW or RAWs would be (in)directly impacted.

Habitat

4.2.3 Habitat resources within the survey site are restricted to the following features:

- a roadside hedgerow composing native shrubs;
- a Leyland Cypress hedge;
- amenity grassland (species-poor lawn);
- a small number of individual trees;
- small stands of ornamental plantings/ introduced shrubs;
- very small areas of ephemeral/ short-perennial vegetation;
- a short section of dry ditch/ stream;
- the existing domestic dwelling;
- hard-standing/ bare-ground; and
- fences/ walls.

Due to the size, quality and geographical location of the habitat resources listed above they may be considered individually and as a unit to be of no more than site value⁵. This includes

⁵ In accordance with CIEEM (2018).

the hedgerow which is in a domestic garden setting and as such would be excluded from the *Hedgerow Regulations 1997*.

- 4.2.4 No further survey of the habitat resource is considered necessary at this time.
- 4.2.5 The proposal would largely impact the footprint of the existing dwelling and adjacent areas of hard-standing/ bare ground only. Indirect/ disturbance impacts may result to the species-poor lawn. Taking into account the quality of the habitats to be impacted and the small areas concerned, this would not give rise to a significant impact. No particular mitigation measures are proposed (other than the avoidance/ best practice measures, and fauna species-specific led requirements, as detailed below).
- 4.2.6 To minimise impacts on adjacent ecological resources (such as the roadside hedgerow/ trees) temporary protective fencing (e.g. heras) will be installed around the works footprint in advance. Such fences will remain in-situ until the completion of the construction. No access/ storage of materials/ construction work, etc. will be allowed beyond them. Where in close proximity to trees this fencing will meet the necessary WCBC tree-protection specifications.
- 4.2.7 General best practice measures will be implemented during preparatory works and the construction phase to avoid any indirect impacts (e.g., dust, diffuse pollution, etc) on adjacent habitat. The general advice contained in the Guidance for Pollution Prevention (GPP) leaflets produced by SEPA, EA and the Environment and Heritage Service (Northern Ireland) will be adhered to, particularly the following:
- PPG1: Understanding Your Environmental Responsibilities - Good Environmental Practices.
 - PPG6: Working at Construction and Demolition Sites.
- 4.2.8 Assuming the appropriate installation and maintenance of the temporary protective fencing along with the adoption of best practice measures, no significant impact is anticipated on valued habitat resources located within or close to the proposed works.
- 4.2.9 As an enhancement the existing roadside hedgerow at *Target Note 7* will be widened with native hedgerow shrub species of ideally local, but minimum British provenance. This will comprise a double staggered row of planting using bare-rooted whips. Appropriate advice on planting (including ground preparation) will be sought from the supplier. The woody species-mix utilised will be chosen by an appropriately qualified ecologist and reflect species found in the existing hedgerow/ hedgerows in the wider countryside at this locality. In addition, the widened hedgerow will be underplanted with native/ locally appropriate hedgerow ground flora plants (again to be chosen by an appropriately qualified ecologist). Further to establishment the enhanced hedgerow will be managed appropriately in the long-term. This proposal is indicated on Drawing no. 21-01_A101_RevB, and has been broadly agreed with Emma Broad (WCBC Ecologist) by email dated 16th August 2021.

Flora

- 4.2.10 No species of plant listed in categories (above Least Concern) in the most recent Vascular Plant Red Data List for Wales (Dines 2008) or in Williams (2014) were recorded from the proposed development/ survey site. No plants listed in *Schedule 9* to the *Wildlife and Countryside Act 1981* (as amended) were recorded. As such no issues with regards flora have been determined and no further survey and or mitigation measures are deemed necessary.

Fauna

Bats

- 4.2.11 The PRA showed the domestic building at *Target Note 1* to have low potential for roosting bats (as per Collins (2016)) and no bats or evidence of bats was identified. During the emergence survey, no bats were seen to emerge from the building. Therefore, the building at *Target Note 1* is not considered to be in use by bats for roosting.
- 4.2.12 During the emergence survey there was moderate activity from a small number of individual bats, including Common and Soprano Pipistrelles and *Myotis* sp. Commuting and foraging activity was concentrated along the northern/ western boundary tree/ hedge line (*Target Notes 5, 6 and 7*) and within the garden (*Target Note 8*).
- 4.2.13 As the building at *Target Note 1* is not used by bats to roost, no further surveys, specific mitigation or reasonable avoidance measures are required; a licence will not be required for the works and the proposed works can be carried out at any time of year (subject to (potential) nesting bird restrictions – refer below). No trees which have been identified with bat roost potential will be directly or indirectly impacted by the proposals.
- 4.2.14 Taking into account the bat activity recorded however around the building there is the potential for lighting and noise levels to disturb bats using the locality (for foraging/ commuting). In addition as detailed in *Section 2.3*, as bats are highly mobile animals, it cannot be guaranteed that bats will not move into the building prior to works commencing. As such to protect bats in the unlikely event that any are present; and to avoid disturbance to bats during the works, general Reasonable Avoidance Measures (RAMs) should be followed at all times.
- 4.2.15 Where possible any works which impact PRFs should be completed by hand/ with caution. If, in the unlikely event, bats are encountered at any point during any works; all works must immediately stop and a licenced ecologist must be called. A licence will then be required from Natural Resources Wales (NRW) before works can continue.
- 4.2.16 The surrounding habitats of the site are of moderate suitability for bats, particularly along the northern/ western boundary tree/ hedge line. Therefore, any lighting associated with the development, during and after the works, has the potential to impact bats (and nocturnal birds). To reduce the potential impact of any light spillage on commuting/ foraging bats during the construction and post construction phases of the development, lighting for the site should seek to minimise the levels of light on the trees and hedge line along the boundaries of the site. Any external (temporary or permanent) lighting should follow guidance provided by The Bat Conservation Trust and Institution of Lighting Professionals (2018) and Stone (2013). The following measures will be followed:
- A dark 'buffer zone', whereby there will no (additional) illumination, will be created along the northern/ western boundary tree/ hedge line (refer to image below).
 - There must be no lights focused on the entrances of any installed bat boxes (refer below) and lighting spillage should also avoid trees and linear features such as the site boundaries.
 - Works should start at least one hour after dawn and finish at least one hour before dusk during the summer months (May – August) to prevent light and noise levels disturbing bats using the site.



Location of dark 'buffer zone' along the northern/ western site boundary.
Base Image © Google 2021.

4.2.17 The following luminaire specifications are provided by Bat Conservation Trust and Institute of Lighting Professionals (2018) and must be considered if new lighting is to be installed:

- Lighting that reduces vertical and horizontal light spillage should 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 <2700Kelvin) should be adopted to reduce the blue light component.
- All luminaires should lack UV elements when manufactured and have an upward light ratio of 0%. Metal halide, fluorescent sources should not be used.
- Column heights should be carefully considered to minimise light spill.
- All luminaires used will be fully directional (e.g., LED) and will point straight down to where the light is required. They will be mounted on the horizontal, i.e., no upward tilt.
- Lighting that reduces vertical and horizontal light spillage will be used.
- The number of poles/ bollards/ lamps installed will be kept to a minimum and will be as low (in height) as possible.
- Low wattage lamps (<70W) will be used.
- All external lighting will only be turned on when the area is in use wherever possible (and should be fitted with motion detectors, automatic timers and/ or dimmers). Ideally the lighting should be motion activated, and not stay on longer than one minute, in order to provide maximum darkness when not needed as well as providing safe lighting conditions when required.

- As a last resort, accessories such as cowls/ hoods/ baffles or similar will be used where the light spillage is likely to cause an unacceptable light level increase in adjacent retained habitat.
- 4.2.18 Assuming that a sympathetic lighting arrangement is installed, no significant impact on (potential) foraging/ commuting resources is anticipated.
- 4.2.19 2 no. bat boxes are to be installed on existing mature trees as follows:
- 1 no. General Purpose 2F bat box (for example <https://www.nhbs.com/2f-schwegler-bat-box-general-purpose>); and
 - 1 no. Eco Kent Bat Box (for example <https://www.nhbs.com/eco-kent-bat-box>).
- These boxes are suitable for crevice dwelling bats. They will be installed by or under the advice of an ecologist and will be placed ideally at least 5 m above the ground and sheltered from strong winds and exposed to the sun for part of the day (usually south, south-east or south-west). The boxes must only be checked by a licensed bat worker.
- 4.2.20 This proposal is indicated on Drawing no. 21-01_A101_RevB and has been broadly agreed with Emma Broad (WCBC Ecologist) by email dated 16th August 2021.
- Great Crested Newts*
- 4.2.21 Features of potential value to Great Crested Newts (for foraging, refugia and hibernacula) that will be impacted by the proposals are largely limited to old/ defunct built structures (including brick/ patio slab steps) located underneath the raised wooded decking at *Target Note 2*, disturbed edges of remaining decking at *Target Note 2a* and exposed old sections of breeze block/ stone walls (partly submerged) at *Target Note 3* (including occasional small brick/ rubble mounds). Locally these may be of high-quality potential value. Other features such as low breeze block and timber sleeper walls, and small/ disturbed beds of ornamental planting may be of some value.
- 4.2.22 The potential presence of Great Crested Newts in terrestrial habitat is governed more by the proximity of a suitable breeding waterbody than by the quality of the terrestrial habitat. There may be only one waterbody within approximately 250 m of the survey site, this being located approximately 240 m to the south; the current ecological status of this is unknown. However, a large breeding population of Great Crested Newts is known to be supported by an 'acid tar lagoon' at Llwyneinion, approximately 430 m to the south-west.
- 4.2.23 Taking the large breeding population size at the tar pit into account it is considered possible that associated animals could potentially access the survey site. Most Great Crested Newts travel no more than 250 m from their breeding ponds with the majority utilising habitats closer than this (especially if these are of high quality), however newts can disperse up to 1 km from their breeding sites. There are no significant reasons why individual animals should disperse across/ utilise terrestrial habitats within the survey site (for example it does not appear to form part of an obvious dispersal corridor to other ponds and does not support high quality foraging habitat), however this cannot be ruled out (especially considering the potential features present (for example at *Target Note 2*) and the absence of any significant barriers to dispersal).
- 4.2.24 As such, although the likelihood of animals being present is considered low/ negligible, as a precautionary approach a RAMs scheme will be designed and implemented. A basic RAMs Method Statement will be prepared by an ecologist to guide the works. Should a Great

Created Newt be found at any time during implementation of the RAMs all works will cease and NRW be consulted. It is likely that in this instance an NRW 'development' licence will be required before works can lawfully proceed.

- 4.2.25 This approach has been broadly agreed with Emma Broad (WCBC Ecologist) and Matt Ellis (NRW Senior Species Officer) by emails dated 16th August 2021.

Birds

- 4.2.26 The building at *Target Note 1* is the only potential nesting feature in the survey site which will be impacted by the proposals. Although no nesting birds were seen at this building during the PRA survey, there is potential nesting habitat within the eaves.

- 4.2.27 No further survey for birds is deemed necessary (other than a pre-work check should work be undertaken during the nesting season as detailed below).

- 4.2.28 The destruction of any bird nests that are in use is illegal. The simplest option to avoid issues arising from the presence of nesting birds is to schedule work that affects nesting habitat (e.g. work to buildings) outside the nesting period (March to August inclusive). If habitat/ features that could be used by nesting birds is affected during this period it will be the subject of a pre-work check by a suitably qualified ecologist (no more than 48 hours beforehand) to ensure that no active nests will be affected. If active nests are found then work must be delayed until all chicks have fledged.

- 4.2.29 2 no. bird boxes are to be installed on existing mature trees as follows:

- 1 no. General Purpose 1B nest box bat box (for example: <https://www.nhbs.com/1b-schwegler-nest-box>); and
- 1 no. Tawny Owl box (for example <https://www.nhbs.com/tawny-owl-nest-box>).

They will be installed by or under the advice of an ecologist. The boxes will require annual maintenance/ cleaning out.

- 4.2.30 This proposal is indicated on Drawing no. 21-01_A101_RevB and has been broadly agreed with Emma Broad (WCBC Ecologist) by email dated 16th August 2021.

Other Species

- 4.2.31 No significant impact on any other species of conservation interest is currently anticipated, and no particular mitigation measures are proposed. As a precautionary approach however a 'watching brief' for Hedgehogs will be maintained by site personnel during any external works. Any hedgehogs located should be removed to suitable dense habitat outside of the works footprint. Any such works should seek to avoid the hibernation period (October/ November to March/ April). However, if it is necessary to undertake the work at this time periods of cold weather should be avoided. Should a hibernating Hedgehog be found it should be covered back up and left where it is until the end of the hibernation period. Any open trenches should be inspected for Hedgehogs on a daily basis.

5 SUMMARY CONCLUSIONS

5.1.1 This report concludes the following with regards existing (on- and off-site) ecological resources:

- No statutory or non-statutory protected sites would be directly or indirectly impacted by the proposed development.
- No ASNW or RAWs would be (in)directly impacted.
- Direct impacts to habitats associated with the proposed development are negligible – limited to the footprint of the existing dwelling and associated areas of hard-standing/ bare earth. This would not give rise to a significant impact.
- Limited indirect impacts on species-poor lawn may also result.
- No issues with regards flora have been determined.
- Potential impacts on Badger and reptiles have been discounted.
- The building at *Target Note 1* is of low potential value to roosting bats and none were recorded emerging from the building during an emergence survey. Moderate commuting/ foraging activity was recorded in adjacent habitats.
- Great Crested Newts associated with a large breeding population located at an 'acid tar lagoon' approximately 430 m to the south-west could access the survey site and utilise potential foraging, refugia and hibernacula features present. However, the likelihood of animals being present is considered low/ negligible.
- No bird nests or signs of past nesting have been recorded from the building at *Target 1*, however suitable features are available, particularly around the eaves.

5.1.2 This report recommends the following avoidance/ mitigation/ enhancement measures:

- Protective fencing will be installed to protect adjacent habitats during preparatory/ construction works. Where necessary this will meet the necessary WCBC tree-protection specifications.
- General best practice measures will be implemented during preparatory/ construction works to avoid any indirect impacts on adjacent habitat.
- As an enhancement the existing roadside hedge at *Target Note 7* will be widened with native hedgerow shrubs and underplanted with native/ locally appropriate hedgerow ground flora plants. Advice/ guidance from an ecologist will be sought.
- General Reasonable Avoidance Measures (RAMs) with regards bats will be followed at all times.
- Any external (temporary or permanent) lighting should be designed to minimise impacts to bats and will follow published guidance.
- As a precautionary approach a Great Crested Newt RAMs scheme will be designed and implemented. A basic RAMs Method Statement will be prepared by an ecologist to guide the works.
- A precautionary Hedgehog watching brief will be undertaken.
- Any works associated with the building at *Target Note 1* which may potentially impact nesting birds should be undertaken outside the bird nesting season. Should this not be possible then suitable features would need to be checked by a qualified ecologist prior to the commencement of work.
- 2 no. bat and 2 no. bird-boxes will be installed on mature trees as specified. They will be installed by or under the advice of an ecologist and will be managed appropriately in the long-term.

6 TARGET NOTES

Target Note 1. A domestic dwelling. Not assessed in detail during Extended Phase 1 Habitat Survey; refer to PRA.

Target Note 2. Raised wooden decking adjacent to the domestic dwelling described at *Target Note 1*. There are two sets of timber steps which enable access to the adjacent garden area. The northern face of the decking comprises a timber 'wall'. The decking appears to enclose an earth bank/ old/ defunct built structures (including brick/ patio slab steps); visual inspection was limited to a gap at the south-western corner. Landscaping to the east of the dwelling includes hard-surfaces/ low breeze block and timber sleeper walls, and small/ disturbed beds of ornamental planting. At *Target Note 2* the decking appears to have been removed with the exception of a small strip adjacent to the dwelling. The ground is largely disturbed here with frequent gaps at the edges of the remaining decking.

Target Note 3. Earth works have exposed old sections of breeze block/ stone walls here which remain partly submerged. There is frequent bare earth and occasional small brick/ rubble mounds.

Target Note 4. A frequently maintained *X Cupressocyparis leylandii* (Leyland Cypress) hedge to approximately 2.5 m tall and 1-1.5 m wide.

Target Note 5. A small area in the north corner of the garden which supports a short dry section of ditch/ stream. The bed is approximately 1-2 m wide with gravel/ stones; there was a small area of shallow standing water. It is understood (Mr Geraint Davies, *pers. comm.*) that this feature takes running water after heavy rain only. It is isolated in the landscape being culverted in pipes at both ends.

Between the ditch and the hedge, amenity grassland appears to be infrequently managed; the sward is species poor.

There are 4 no. semi-/mature trees in this area: 3 no. *Fraxinus excelsior* (Ash) and 1 no. *Quercus pedunculatus* (Pedunculate Oak). These trees were not assessed in detail with regards bat roost potential, however no significant potential roosting features were seen. They appear to be in largely good condition with associated *Hedera helix* (Ivy) growth. Some of these trees may provide low bat roost potential at most.

Target Note 6. 2 no. mature *Populus nigra* var. *Italica* (Lombardy-poplar) trees. These trees were not assessed in detail with regards bat roost potential, however no significant potential roosting features were seen. They appear to be in largely good condition and may provide low bat roost potential.

Target Note 7. A roadside garden hedgerow/ with associated fence-line. It appears to be frequently maintained to between 1 and 2.5 m high, and 0.5 m wide. It is frequently gappy at the base and has been locally recently planted up with *Prunus laurocerasus* (Cherry Laurel). Otherwise the woody component is dominated by *Crataegus monogyna* (Hawthorn) with a wide variety of other shrubs present at lower levels of abundance such as *Carpinus betulus* (Hornbeam), Ash, *Taxus baccata* (Yew), *Prunus spinosa* (Blackthorn), *Symphoricarpos albus* (Snowberry), *Acer pseudoplatanus* (Sycamore) and *Corylus avellana* (Hazel). The field-layer largely appears to be bare, or with an occasional carpet of Ivy, or occasional coarse-leaved grasses; a few plants of *Geranium robertianum* (Herb-Robert) were recorded.

Target Note 8. Lawn. It appears to be frequently mown; the sward was largely to no more than 0.02 m in height. It is dominated by grasses including *Lolium perenne* (Perennial Rye-grass), and *Holcus lanatus* (Yorkshire-fog). It appears to be very species-poor; associated forbs were limited to *Bellis perennis* (Daisy), *Veronica chamaedrys* (Germander Speedwell), *Taraxacum* sect. *Ruderalia* (Common Dandelion), *Plantago major* (Greater Plantain) and *Prunella vulgaris* (Selfheal), all at low levels of abundance.

Target Note 9. Amenity grassland road-verge, approximately 1-2.5 m wide. It appears to be frequently mown; the sward was largely to no more than 0.05 m in height. This resource was not assessed in detail.

7 REFERENCES

- Bat Conservation Trust and Institution of Lighting Professionals (2018). *Guidance Note 08/18. Bats and Artificial Lighting in the UK*. Bats and the Built Environment Series.
- CIEEM (2017a). *Guidelines for Preliminary Ecological Appraisal, 2nd Edition*. CIEEM, Winchester.
- CIEEM (2017b). *Guidelines on Ecological Report Writing, 2nd Edition*. CIEEM, Winchester.
- CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London.
- Dines, T. (2008). *A Vascular Plant Red Data List for Wales*. Plantlife International, Salisbury.
- Edgar, P., Foster, J. and Baker, J. (2010). *Reptile Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.
- English Nature (2001). *Great Crested Newt Mitigation Guidelines – Version – August 2001*. English Nature, Peterborough.
- English Nature (2004). *Reptiles: guidelines for developers*. English Nature, Peterborough.
- Harris, S., Cresswell, P., & Jeffries, D. (1989). *Surveying Badgers*. Occasional Publication No. 9, The Mammal Society.
- HMSO (1981). *The Wildlife and Countryside Act 1981*. HMSO, London.
- HMSO (1992). *The Protection of Badgers Act 1992*. HMSO, London.
- HMSO (2000). *The Countryside and Rights of Way Act 2000*. HMSO, London.
- HMSO (2006). *The Natural Environment and Rural Communities Act 2006*. HMSO, London.
- HMSO (2016). *The Environment Act (Wales) 2016*. HMSO, London.
- HMSO (2017). *The Conservation of Habitats and Species Regulations 2017*. HMSO, London.
- HMSO (2019). *The Invasive Alien Species (Enforcement and Permitting) Order 2019*. HMSO, London.
- HMSO (2021). *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. HMSO, London.
- Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. E & FN Spon, London.
- JNCC (2004). *Common Standards Monitoring Guidance for Birds. Version August 2004*. Joint Nature Conservation Committee, Peterborough.
- JNCC (2010). *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. Joint Nature Conservation Committee, Peterborough.
- Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal*, Vol 10, pp143-155.
- Stace, C. (2010; 3rd Edition). *New Flora of the British Isles*. Cambridge University Press, Cambridge.
- Stone, E.L. (2013). *Bats and lighting: Overview of current evidence and mitigation guidance*.
- Welsh Government (2009). *Planning Policy Wales - Technical Advice Note 5: Nature Conservation and Planning*. September 2009.
- Welsh Government (2021). *Planning Policy Wales*. Edition 11, February 2021.
- Williams, D. (2014). *Denbighshire (VC50) Rare Plant Register*. BSBI & NRW.

Wrexham County Borough Council (2005). *Wrexham Unitary Development Plan 1996-2011*. Adopted 14th February 2005.

Wrexham County Borough Council (2009). *Local Planning Guidance Note 29 Wrexham Industrial Estate – Employment Development and Nature Conservation*. Adopted August 2009.

Wrexham County Borough Council (2011). *Local Planning Guidance Note 32 Biodiversity and Development*. Adopted March 2011.

Wrexham County Borough Council (2012). *Local Planning Guidance Note 17 Trees and Development*. Adopted September 2000, Updated December 2012.

Wrexham County Borough Council (2018). *Local Planning Guidance: Great Crested Newt Mitigation Requirements – Johnstown Newt Site SAC and the Wider Countryside*. Adopted summer 2018.

8 DATA

Table 6 – Vascular plant species recorded within the survey site

Plant Species	<i>Epilobium</i> sp. (a Willowherb)
<i>Acer pseudoplatanus</i> (Sycamore)	<i>Festuca rubra</i> (Red Fescue)
<i>Buxus sempervirens</i> (Common Box)	<i>Fuchsia</i> sp. (a Fuchsia)
<i>Carpinus betulus</i> (Hornbeam)	<i>Fumaria</i> sp. (a Fumitory)
<i>Corylus avellana</i> (Hazel)	<i>Galium aparine</i> (Cleavers)
<i>Crataegus monogyna</i> (Hawthorn)	<i>Geranium robertianum</i> (Herb-Robert)
<i>X Cupressocyparis leylandii</i> (Leyland Cypress)	<i>Hebe</i> sp. (a Hedge Veronica)
<i>Fraxinus excelsior</i> (Ash)	<i>Hedera helix</i> agg. (Ivy)
<i>Ilex aquifolium</i> (Holly)	<i>Holcus lanatus</i> (Yorkshire-fog)
<i>Populus nigra</i> var. <i>Italica</i> (Lombardy-poplar)	<i>Lapsana communis</i> (Nipplewort)
<i>Prunus laurocerasus</i> (Cherry Laurel)	<i>Lolium perenne</i> (Perennial Rye-grass)
<i>Prunus spinosa</i> (Blackthorn)	<i>Lonicera</i> sp. (a Honeysuckle)
<i>Quercus robur</i> (Pedunculate Oak)	<i>Medicago lupulina</i> (Black Medick)
<i>Rhododendron</i> sp. (an Azalea)	<i>Persicaria maculosa</i> (Redshank)
<i>Symphoricarpos albus</i> (Snowberry)	<i>Poa annua</i> (Annual Meadow-grass)
<i>Taxus baccata</i> (Yew)	<i>Poa trivialis</i> (Rough Meadow-grass)
	<i>Plantago lanceolata</i> (Ribwort Plantain)
<i>Achillea millefolium</i> (Yarrow)	<i>Plantago major</i> (Greater Plantain)
<i>Aegopodium podagraria</i> (Ground Elder)	<i>Polygonum aviculare</i> (Knotgrass)
<i>Agrostis stolonifera</i> (Creeping Bent)	<i>Prunella vulgaris</i> (Selfheal)
<i>Alliaria petiolata</i> (Garlic Mustard)	<i>Ranunculus repens</i> (Creeping Buttercup)
<i>Anthriscus sylvestris</i> (Cow Parsley)	<i>Rubus fruticosus</i> agg. (Bramble)
<i>Antirrhinum</i> sp. (a Snapdragon)	<i>Rumex obtusifolius</i> (Broad-leaved Dock)
<i>Artemisia</i> sp. (a Mugwort)	<i>Senecio jacobaea</i> (Common Ragwort)
<i>Atriplex</i> sp. (an Orache)	<i>Senecio vulgaris</i> (Groundsel)
<i>Bellis perennis</i> (Daisy)	<i>Sonchus oleraceus</i> (Smooth Sow-thistle)
<i>Calluna</i> sp. (a Heather)	<i>Stellaria media</i> (Common Chickweed)
<i>Cardamine hirsuta</i> (Hairy Bittercress)	<i>Taraxacum</i> sect. <i>Ruderalia</i> (Common Dandelion)
<i>Carex pendula</i> (Pendulous Sedge)	<i>Trifolium dubium</i> (Lesser Trefoil)
<i>Cerastium fontanum</i> (Common Mouse-ear)	<i>Trifolium repens</i> (White Clover)
<i>Chamerion angustifolium</i> (Rosebay Willowherb)	<i>Urtica dioica</i> (Common Nettle)
<i>Cirsium arvense</i> (Creeping Thistle)	<i>Veronica chamaedrys</i> (Germander Speedwell)
<i>Dactylis glomerata</i> (Cock's-foot)	<i>Vicia sativa</i> (Common Vetch)
<i>Epilobium hirsutum</i> (Great Willowherb)	<i>Vinca</i> sp. (a Periwinkle)
<i>Epilobium montanum</i> (Broad-leaved Willowherb)	

9 APPENDIX 1 - SPECIES-SPECIFIC LEGISLATION

9.1 Introduction

9.1.1 The species-specific legislation below is presented here due either to the actual or suspected/ possible presence of each species on the site or within the zone of influence and is therefore considered to be relevant for this study.

9.1.2 This sub-section provides a brief summary of key relevant species legislation. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation, but summarises the salient points.

9.2 Bats

9.2.1 All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. They are also listed as European Protected Species on *Schedule 2* of *The Conservation of Habitats and Species Regulations 2017* which gives them full protection under *Regulation 42(1)*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the *CRoW Act 2000*).

9.2.2 Under the above legislation it is an offence to intentionally or recklessly:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

9.2.3 Several species of bat are included on *Section 7* of the *Environment Act 2016*.

9.2.4 All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

9.3 Great Crested Newt

9.3.1 Great Crested Newts are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. The 1981 Act was amended by the *CRoW Act 2000* which further extends the protection. They are also listed as European Protected Species on *Schedule 2* of *The Conservation of Habitats and Species Regulations 2017* which gives it full protection under *Regulation 42(1)*. The legislation applies to all life stages of the Great Crested Newt, including eggs, larvae, juveniles and adults.

9.3.2 Under the above legislation it is an offence to intentionally or recklessly:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- disturb such a species whilst using any place of shelter or protection; or

- sell or attempt to sell any such species.

9.3.3 The Great Crested Newt is included on *Section 7* of the *Environment Act 2016*.

9.4 Birds

9.4.1 All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the *CRoW Act 2000*.

9.4.2 The legislation makes it an offence to intentionally or recklessly:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

9.4.3 Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

9.4.4 *Section 7* of the *Environment Act 2016* includes several birds.

Cofnod Environmental Information Search (PUBLIC VERSION)

Our Reference	E09115
Your Reference	C457
Requested By	Marches Ecology
Data Users	Max Ellson, Partner, Marches Ecology LLP Tom Knight, Partner, Marches Ecology LLP Rhian Hughes, Consultancy Manager, Enfys Ecology Ltd Lucy Boyett, Ecologist, Enfys Ecology Ltd Geraint Davies, private home owner Geraint Edwards, Frame Architects David Gwilt, PRG Roofing Contractors Ltd
Search Date	13/07/2021
Expiry Date	13/01/2022
Search Type	Chargeable

Important Issues

- Use of the data is governed by Cofnod's [Terms & Conditions](#).
- Data marked as confidential or sensitive must not be released into the public domain, with the exception of the Public Version of the PDF report, which has had sensitive information removed or restricted.
- You should not amend any part of the downloaded records.
- Unless otherwise agreed, use of the data is valid until the Expiry Date (13/01/2022).
- The data was generated on the Search Date (13/07/2021) and is not live.
- The Dataset ID associated with each record can be used to find information about the provenance of the data. Verification Levels are given for each record. Refer to individual LERCs for further metadata and policies relating to the data.
- Please [contact us](#) if you have any questions about using the data or wish to add further Data Users.

Notes

- Cofnod uses a search system which optionally reports species (usually high priority or protected species) within a specified search radius or buffer. Where required a search will also include high priority 'Mobile Species', such as bats, otters, amphibians and certain invertebrates, which lie outside the specified search radius. These species are highlighted on the report with **(Mobile)** next to the distance. They have been selected as 'Mobile Species' as their territory (possibly due to foraging activity or life cycle) could intersect with the search radius.
- Records with 4 figure grid references are displayed as 1km squares on any relevant maps. They are highlighted with **(1km)** next to the distance.
- Records shown in **bold** typeface are sensitive species records, and some details have been restricted in this public version of the report.

Data Description

Distance	Indicates the distance, in metres, between the GRID REFERENCE of the record (using the central point of the grid square) and the search location. For any Sensitive Species Records, this cannot be released into the Public Domain.
Species Name	Name of the taxon (usually identified to species level) using the binomial system.
Grid Reference	Full grid reference based on the Ordnance Survey grid system. For any Sensitive Species Records, this cannot be released into the Public Domain.
Date	Date on which the record was made. In some cases this might be a date range, or a vague date such as 'Summer 2010'.
Recorder(s)	One or more people who made the original observation and recorded it in some way. It may have subsequently been included in a data collation by another person or it may have been submitted to Cofnod directly.
Abundance	Number of individuals recorded. Where not specified it is assumed that at least one was present.
Record Type	The recording methods used (only where specified).
Site Name	The site name (if one has been supplied). For any Sensitive Species Records, this cannot be released into the Public Domain.
Comments	Any additional notes about the sighting, including any information on habitat or substrate if this is available. For any Sensitive Species Records, this cannot be released into the Public Domain.
Dataset ID	ID of this dataset. See 'Important Issues' for more details.
Lists	Any local, national or international conservation statuses or legal protection which apply to this species and whether it is included in any Local Biodiversity Action Plans. See 'Abbreviations' for more details.
V	Summarised record Verification Level. The following codes are used: 1 - Unassessed, 2 - Unconfirmed, 3 - Considered Correct by Cofnod, 4 - Considered Correct by Expert. See our Data Quality policy, available from the Cofnod website for more details.

Abbreviations

ANG - Anglesey County Council Local Biodiversity Action Plan, **AONB** - Area of Outstanding Natural Beauty, **AW** - Ancient Woodland, **BAP** - UK Biodiversity Action Plan, **BDir1** - EU Birds Directive Annexe 1, **BDir2.1** - EU Birds Directive Annexe 2.1, **BDir2.2** - EU Birds Directive Annexe 2.2, **Bern** - Bern Convention on the Conservation of European Wildlife and Natural Habitats, **Bonn** - Bonn Convention on the Conservation of Migratory Species of Wild Animals, **CITES** - Convention on International Trade in Endangered Species of Wild Fauna and Flora, **CON** - Conwy County Borough Council Local Biodiversity Action Plan, **DEN** - Denbighshire County Council Local Biodiversity Action Plan, **EPS** - European Protected Species, **FLI** - Flintshire County Council Local Biodiversity Action Plan, **GWY** - Gwynedd County Council Local Biodiversity Action Plan, **HDir** - EU Habitats Directive, **INNS** - Invasive Non-native Species, **LBAP** - Local Biodiversity Action Plan species for the listed area, **LI** - Locally Important within the listed area, **LNR** - Local Nature Reserve, **MNR** - Marine Nature Reserve, **NNR** - National Nature Reserve, **NRW** - Natural Resources Wales Priority Species, **PBA** - Protection of Badgers Act 1992, **RD1(UK)** - Red Data Book listing for the UK based on IUCN guidelines, **RD1(Wales)** - Red Data Book listing for Wales based on IUCN guidelines, **RD2(UK)** - Red Data Book listing for the UK not based on IUCN guidelines, **RIGS** - Regionally Important Geodiversity Site, **S7** - Environment (Wales) Act 2016 (Section 7), **SAC** - Special Area of Conservation, **SNP** - Snowdonia National Park Local Biodiversity Action Plan, **SPA** - Special Protection Area, **SSSI** - Site of Special Scientific Interest, **UKBA** - RSPB UK Birds Amber List (not based on IUCN criteria), **UKBR** - RSPB UK Birds Red List (not based on IUCN criteria), **WBA** - RSPB Welsh Birds Amber List (not based on IUCN criteria), **WBR** - RSPB Welsh Birds Red List (not based on IUCN criteria), **WCA1.1** - Wildlife & Countryside Act 1981 Schedule 1.1 (Birds which are protected at all times), **WCA1.2** - Wildlife & Countryside Act 1981 Schedule 1.2 (Birds which are protected at certain times), **WCA5** - Wildlife & Countryside Act 1981 Schedule 5 (Animals which are protected from killing and taking, possession, disturbance and sale), **WCA8** - Wildlife & Countryside Act 1981 Schedule 8 (Plants which are protected), **WCA9** - Wildlife & Countryside Act 1981 Schedule 9 (Non-native animals and plants which are established in the wild), **WRE** - Wrexham County Council Local Biodiversity Action Plan, **WS** - Wildlife Site, **WVP** - IUCN Threat Listing of Welsh Vascular Plants

Contact Us

Cofnod - Gwasanaeth Gwybodaeth Amgylcheddol Gogledd Cymru/North Wales Environmental Information Service

Intec, Ffordd y Parc, Parc Menai, Bangor, Gwynedd. LL57 4FG

Tel: (01248) 672603 Email: contactus@cofnod.org.uk Website: <https://www.cofnod.org.uk> Facebook: <https://facebook.com/Cofnod> Twitter: <https://twitter.com/Cofnod>

Search Location					Grid Reference					
5 Oaks, Legacy, Wrexham					SJ29264769					
Birds										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ298480	24/06/1997	Recorder Name Withheld			Crematorium		D0229/002/01	WBA	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ2947	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656- BGBW2009-16442455-106734558	D1852/002/01	WBA	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ2946	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656- BGBW2009-16442068-106734409	D1852/002/01	WBA	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ3048	2 records, between 2009 and 04/07/2009	Recorder Name Withheld	3	Reported to recorder		Activity: H. Survey: Observer data	D1779/001/02 , D0062/008/01	WBA	3
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ2848	21/03/2019	Recorder Name Withheld			World's End		D1297/026/01	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ3048	2 records, between 2009 and 04/07/2009	Recorder Name Withheld	1	Reported to recorder		Activity: S. Survey: Observer data	D1779/001/02 , D0062/008/01	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Anthus pratensis</i> (Meadow Pipit / Corhedydd y Waun)	SJ2948	17/12/2016	Recorder Name Withheld	100	Reported to recorder	Wrexham, Pentrebychan, NE	Large flock on maize stubble. Survey: Observer data	D0062/008/01	Bern, UKBA, WBA, LBAP[CON]	3
<i>Anthus pratensis</i> (Meadow Pipit / Corhedydd y Waun)	SJ2848	2 records, between 02/05/2018 and 21/03/2019	Recorder Name Withheld	2		Rhosllanerchrugog, Bronwylfa		D1297/025/01 , D1297/026/01	Bern, UKBA, WBA, LBAP[CON]	4
<i>Anthus pratensis</i> (Meadow Pipit / Corhedydd y Waun)	SJ3048	10/12/2008	Recorder Name Withheld	2	Reported to recorder	Rhostyllen, W	Survey: Observer data	D0062/008/01	Bern, UKBA, WBA, LBAP[CON]	3
<i>Apus apus</i> (Swift / Gwennol Ddu)	SJ2948	06/05/2014	Recorder Name Withheld	8	Reported to recorder	Wrexham, Pentrebychan, NE	1st of spring. Survey: Observer data	D0062/008/01	UKBA, WBA	3
<i>Apus apus</i> (Swift / Gwennol Ddu)	SJ2848	11/07/2009	Recorder Name Withheld	2	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: H. Survey: Observer data	D0062/008/01	UKBA, WBA	3
<i>Apus apus</i> (Swift / Gwennol Ddu)	SJ2946	2 records, between 04/07/2009 and 07/05/2013	Recorder Name Withheld	3; 30	Reported to recorder	Rhosllanerchrugog	BirdTrack; Activity: d. Survey: Observer data	D1297/025/01 , D0062/008/01	UKBA, WBA	4
<i>Apus apus</i> (Swift / Gwennol Ddu)	SJ3048	04/07/2009	Recorder Name Withheld	25	Reported to recorder	Rhostyllen, W	Activity: H. Survey: Observer data	D0062/008/01	UKBA, WBA	3
<i>Chroicocephalus ridibundus</i> (Black-headed Gull / Gwylan Benddu)	SJ3048	2 records, between 10/12/2008 and 11/03/2019	Recorder Name Withheld	20+; 10	Reported to recorder	Rhostyllen, W	Flying. Migration/Flying over/Summering (M/F/U); Survey: Observer data	D1297/026/01 , D0062/008/01	BDir2.2, S7, UKBA, WBR, LBAP[GWY]	4
<i>Cinclus cinclus</i> (Dipper / Bronwen y Dwr)	SJ3047	20/10/2004	Recorder Name Withheld	2	Reported to recorder	Wrexham, Pentrebychan	Singing. Survey: Observer data	D0062/008/01	Bern, UKBA, WBA, LBAP[CON]	3
<i>Cuculus canorus</i> (Cuckoo / Cog)	SJ28334802 (Selected from Interactive Map)	22/05/2018	Recorder Name Withheld	1 Adult		Bronwylfa	Heard calling only	D1117/001/01	S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	4

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Cuculus canorus</i> (Cuckoo / Cog)	SJ2848	03/05/2019	Recorder Name Withheld	1		Rhosllanerchrugog, Bronwylfa	Breeding activity: Singing male	D0062/010/01	S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ2848	11/07/2009	Recorder Name Withheld	6	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: H. Survey: Observer data	D0062/008/01	Bern, UKBA, WBA, LBAP[CON]	3
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ2946	04/07/2009	Recorder Name Withheld	15	Reported to recorder	Rhosllanerchrugog	Activity: H. Survey: Observer data	D0062/008/01	Bern, UKBA, WBA, LBAP[CON]	3
<i>Dendrocopos minor</i> (Lesser Spotted Woodpecker / Cnocell Fraith Leiaf)	SJ2948	13/01/2016	Recorder Name Withheld	1	Reported to recorder	Wrexham, Pentrebychan, NE	Survey: Observer data	D0062/008/01	Bern, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3
<i>Dendrocopos minor</i> (Lesser Spotted Woodpecker / Cnocell Fraith Leiaf)	SJ3048	2 records, both on 25/07/2010	Recorder Name Withheld	1; 3 Juvenile	Reported to recorder	Rhostyllen, W	Family, near suitable Alders. Survey: Observer data; Survey: Observer data	D0062/008/01	Bern, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3
<i>Emberiza citrinella</i> (Yellowhammer / Bras Melyn)	SJ3048	2 records, between 2009 and 04/06/2011	Recorder Name Withheld	1 Male	Reported to recorder		Survey: Observer data	D1779/001/02 , D0062/008/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Emberiza schoeniclus</i> (Reed Bunting / Bras y Cyrs)	SJ3048	10/12/2008	Recorder Name Withheld	1	Reported to recorder	Rhostyllen, W	Survey: Observer data	D0062/008/01	Bern, S7, UKBA, WBA, LBAP[CON, DEN, FLI, GWY]	3
<i>Falco peregrinus</i> (Peregrine / Hebog Tramor)	SJ24	04/07/2009	Recorder Name Withheld	1 Juvenile	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	BDir1, Bern, CITES, WCA1.1, LBAP[ANG, CON, GWY]	3
<i>Falco peregrinus</i> (Peregrine / Hebog Tramor)	SJ34	2 records, both on 12/07/2014	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1297/025/01	BDir1, Bern, CITES, WCA1.1, LBAP[ANG, CON, GWY]	4
<i>Falco subbuteo</i> (Hobby / Hebog yr Ehedydd)	SJ24	09/08/2010	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, LBAP[CON, GWY]	3
<i>Falco subbuteo</i> (Hobby / Hebog yr Ehedydd)	SJ24	3 records, between 12/05/2006 and 12/08/2010	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, LBAP[CON, GWY]	3
<i>Falco subbuteo</i> (Hobby / Hebog yr Ehedydd)	SJ34	21/07/2014	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, LBAP[CON, GWY]	3
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3048	14/02/2009	Recorder Name Withheld	1		Rhostyllen, W	Birdtrack	D1297/025/01	Bern, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Ficedula hypoleuca</i> (Pied Flycatcher / Gwybedog Brith)	SJ295484	06/08/1997	Recorder Name Withheld			Legacy Substation		D0229/002/01	S7, UKBR, WBR, LBAP[CON, GWY, SNP]	4
<i>Fringilla montifringilla</i> (Brambling / Pinc y Mynydd)	SJ2946	26/03/2019	Recorder Name Withheld			41 Osborne Street, Rhosllanerchrugog		D1297/026/01	WCA1.1, LBAP[CON]	4
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ28374802 (Selected from Interactive Map)	05/05/2020	Recorder Name Withheld	2 Adult		Bronwylfa	Returning to check out stables used last year	D1117/001/01	Bern, WBA, LBAP[ANG, CON, GWY]	4
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ28364801 (Selected from Interactive Map)	19/05/2019	Recorder Name Withheld	2 Adult		Bronwylfa	Nesting in stables	D1117/001/01	Bern, WBA, LBAP[ANG, CON, GWY]	4

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2836948028 (Selected from Interactive Map)	19/05/2018	Recorder Name Withheld	2 Adult	Live Sighting	Bronwylfa	Returned to nest inside stable after missing them last year	D1117/001/01	Bern, WBA, LBAP[ANG, CON, GWY]	4
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ28364804 (Selected from Interactive Map)	19/05/2018	Recorder Name Withheld	2 Adult	Live Sighting	Bronwylfa	Returned to outside shed where they have nested many years but not last year	D1117/001/01	Bern, WBA, LBAP[ANG, CON, GWY]	4
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2947	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog, N	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2847	04/07/2009	Recorder Name Withheld	5	Reported to recorder	Llwyneinion	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2948	2 records, between 01/04/2009 and 04/07/2009	Recorder Name Withheld	20; 1	Reported to recorder	Wrexham, Pentrebychan, NE	Activity: H. Survey: Observer data; Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2848	11/07/2009	Recorder Name Withheld	80	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2946	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3048	2 records, between 2009 and 04/07/2009	Recorder Name Withheld	3	Reported to recorder	Rhostyllen, W	Activity: H. Survey: Observer data	D0062/008/01 , D1779/001/02	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Lagopus lagopus</i> (Red Grouse / Grugiar Goch)	SJ2848	21/03/2019	Recorder Name Withheld	6		World's End		D1297/026/01	BDir2.1, S7, UKBA, WBR, LBAP[CON, DEN, FLI, GWY, SNP]	4
<i>Larus fuscus</i> (Lesser Black-backed Gull / Gwylan Gefnddu Leiaf)	SJ2946	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog	Survey: Observer data	D0062/008/01	BDir2.2, UKBA, WBA, LBAP[CON, GWY, SNP]	3
<i>Larus fuscus</i> (Lesser Black-backed Gull / Gwylan Gefnddu Leiaf)	SJ3048	04/07/2009	Recorder Name Withheld	2	Reported to recorder	Rhostyllen, W	Survey: Observer data	D0062/008/01	BDir2.2, UKBA, WBA, LBAP[CON, GWY, SNP]	3
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ295484	06/08/1997	Recorder Name Withheld			Legacy Substation		D0229/002/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ3048	2009	Recorder Name Withheld					D1779/001/02	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Loxia curvirostra</i> (Common Crossbill / Gylfingroes)	SJ3047	02/12/2005	Recorder Name Withheld	6	Reported to recorder	Wrexham, Pentrebychan	Survey: Observer data	D0062/008/01	Bern, WCA1.1, LBAP[CON]	3
<i>Milvus milvus</i> (Red Kite / Barcud)	SJ24 (Selected from Interactive Map)	05/06/2020	Recorder Name Withheld	1 Adult		Site Name Withheld	Comments Withheld	D1117/001/01	BDir1, CITES, WBA, WCA1.1, WCA9, LBAP[CON, GWY]	4
<i>Oenanthe oenanthe</i> (Wheatear / Tinwen y Garn)	SJ2848	02/05/2018	Recorder Name Withheld	1		Rhosllanerchrugog, Bronwylfa		D1297/025/01	Bern, WBA, LBAP[CON]	4
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2947	2 records, between 24/01/2009 and 04/07/2009	Recorder Name Withheld	4	Reported to recorder	Rhosllanerchrugog, N	Activity: H. Survey: Observer data; Occurrence ID: NBN-GA000656-BGBW2009-16442455-106609063	D0062/008/01 , D1852/002/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2847	2 records, between 26/01/2008 and 24/01/2009	Recorder Name Withheld			Wrexham Denbighshire	Occurrence ID: NBN-GA000567-BGBW2008-22135374-139272585; Occurrence ID: NBN-GA000656-BGBW2009-16441947-106608912	D1852/001/01 , D1852/002/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	4

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2948	04/07/2009	Recorder Name Withheld	4	Reported to recorder	Wrexham, Pentrebychan, NE	Activity: H. Survey: Observer data	D0062/008/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2848	04/07/2009	Recorder Name Withheld	2	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: H. Survey: Observer data	D0062/008/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2946	3 records, between 26/01/2008 and 04/07/2009	Recorder Name Withheld	4	Reported to recorder	Rhosllanerchrugog	Activity: H. Survey: Observer data; Occurrence ID: NBN-GA000656-BGBW2009-16442378-106608848; Occurrence ID: NBN-GA000567-BGBW2008-22135382-139481720	D0062/008/01 , D1852/002/01 , D1852/001/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2846	2 records, between 26/01/2008 and 04/07/2009	Recorder Name Withheld	3	Reported to recorder	Rhosllanerchrugog, W	Activity: H. Survey: Observer data; Occurrence ID: NBN-GA000567-BGBW2008-22135373-139489554	D0062/008/01 , D1852/001/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3048	2009	Recorder Name Withheld					D1779/001/02	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3
<i>Passer montanus</i> (Tree Sparrow / Golfan y Mynydd)	SJ3047	16/05/2007	Recorder Name Withheld	1	Reported to recorder	Wrexham, Pentrebychan	Survey: Observer data	D0062/008/01	S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ2948	04/07/2009	Recorder Name Withheld	2	Reported to recorder	Wrexham, Pentrebychan, NE	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[CON]	3
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ2848	04/07/2009	Recorder Name Withheld	2 Juvenile	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: FL. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[CON]	3
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ2846	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog, W	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[CON]	3
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ3048	2009	Recorder Name Withheld					D1779/001/02	UKBA, WBR, LBAP[CON]	3
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ295484	06/08/1997	Recorder Name Withheld			Legacy Substation		D0229/002/01	Bern, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	4
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ2948	04/01/2018	Recorder Name Withheld	1		Wrexham, Pentrebychan, NE		D1297/025/01	Bern, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	4
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2947	04/07/2009	Recorder Name Withheld	2	Reported to recorder	Rhosllanerchrugog, N	Activity: S. Survey: Observer data	D0062/008/01	Bern, S7, UKBA, LBAP[CON]	3
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2948	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Wrexham, Pentrebychan, NE	Activity: S. Survey: Observer data	D0062/008/01	Bern, S7, UKBA, LBAP[CON]	3
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2848	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: S. Survey: Observer data	D0062/008/01	Bern, S7, UKBA, LBAP[CON]	3
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2946	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16442068-106179346	D1852/002/01	Bern, S7, UKBA, LBAP[CON]	4
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2846	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog, W	Activity: S. Survey: Observer data	D0062/008/01	Bern, S7, UKBA, LBAP[CON]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3048	3 records, between 10/12/2008 and 11/03/2019	Recorder Name Withheld	2	Reported to recorder	Rhostyllen, W	1 Pair in suitable habitat (P); Survey: Observer data	D1297/026/01 , D1779/001/02 , D0062/008/01	Bern, S7, UKBA, LBAP[CON]	4
<i>Pyrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ2848	11/07/2009	Recorder Name Withheld	2	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: H. Survey: Observer data	D0062/008/01	S7, UKBA, WBR, LBAP[CON, DEN, FLI, GWY]	3
<i>Pyrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ3048	04/07/2009	Recorder Name Withheld	2	Reported to recorder	Rhostyllen, W	Activity: H. Survey: Observer data	D0062/008/01	S7, UKBA, WBR, LBAP[CON, DEN, FLI, GWY]	3
<i>Regulus regulus</i> (Goldcrest / Dryw Eurben)	SJ2948	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Wrexham, Pentrebychan, NE	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[CON]	3
<i>Regulus regulus</i> (Goldcrest / Dryw Eurben)	SJ2848	11/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: H. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[CON]	3
<i>Regulus regulus</i> (Goldcrest / Dryw Eurben)	SJ3048	11/03/2019	Recorder Name Withheld	2		Rhostyllen, W		D1297/026/01	Bern, WBA, LBAP[CON]	4
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ289467	20/11/2014	Recorder Name Withheld	25	Field record	Rhosllanerchrugog, Wrexham.		D0969/001/05	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	1
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ2946	2 records, between 26/01/2008 and 24/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656- BGBW2009-16442378- 106878408; Occurrence ID: NBN- GA000567-BGBW2008-22135733- 139481721	D1852/002/01 , D1852/001/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	4
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ2846	26/01/2008 - 27/01/2008	Recorder Name Withheld			Wrexham, Denbighshire	Occurrence ID: NBN-GA000567- BGBW2008-22135729-139489555	D1852/001/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	4
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ3048	11/03/2019	Recorder Name Withheld	40+		Rhostyllen, W		D1297/026/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	4
<i>Sylvia communis</i> (Whitethroat / Llwydfron)	SJ3048	04/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhostyllen, W	Activity: S. Survey: Observer data	D0062/008/01	WBA, LBAP[CON]	3
<i>Tetrao tetrix</i> (Black Grouse / Grugiar Ddu)	SJ24	2 records, between 02/05/2018 and 21/03/2019	Recorder Name Withheld	10; 23		Site Name Withheld	Comments Withheld	D1297/025/01 , D1297/026/01	BDir2.2, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY, SNP]	4
<i>Turdus iliacus</i> (Redwing / Coch Dan Adain)	SJ3048	2 records, between 10/12/2008 and 11/03/2019	Recorder Name Withheld	2+; 100	Reported to recorder	Rhostyllen, W	Survey: Observer data	D1297/026/01 , D0062/008/01	BDir2.2, UKBR, WBA, WCA1.1, LBAP[CON]	4
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ2848	11/07/2009	Recorder Name Withheld	1	Reported to recorder	Rhosllanerchrugog, Bronwylfa	Activity: S. Survey: Observer data	D0062/008/01	BDir2.2, Bern, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3048	4 records, between 10/12/2008 and 11/03/2019	Recorder Name Withheld	1	Reported to recorder	Rhostyllen, W	Activity: S. Survey: Observer data; Survey: Observer data	D1297/026/01 , D1779/001/02 , D0062/008/01	BDir2.2, Bern, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4
<i>Turdus pilaris</i> (Fieldfare / Socan Eira)	SJ3048	2 records, between 10/12/2008 and 11/03/2019	Recorder Name Withheld	20+; 3	Reported to recorder	Rhostyllen, W	Survey: Observer data	D1297/026/01 , D0062/008/01	BDir2.2, UKBR, WBA, WCA1.1, LBAP[CON]	4
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ24 (Selected from Interactive Map)	05/02/2019	Recorder Name Withheld	1 Full-Grown		Site Name Withheld	Comments Withheld	D1117/001/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ24	13/01/2010	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ24	13/08/2008	Recorder Name Withheld	4	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ24	4 records, between 16/03/2008 and 08/12/2010	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ24	16/10/2010	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ34	01/07/2008	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ24	3 records, between 27/09/2014 and 16/11/2014	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ34	12/12/2014	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ28614808 (Selected from Interactive Map)	23/05/2016	Recorder Name Withheld	4 Adult	Live Sighting	Bronwylfa	2 pairs with 3 chicks between them	D1117/001/01	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ290484 (Selected from Interactive Map)	14/04/2019	Recorder Name Withheld	2 Adult		Bryn Rhedyn Farm		D1814/001/01	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ2948	3 records, between 28/04/2005 and 03/01/2016	Recorder Name Withheld	1 Male; 450; 1 Female	Reported to recorder	Wrexham, Pentrebychan, NE	Weasel nearby. Survey: Observer data; On maze stubble. Survey: Observer data; Survey: Observer data	D0062/008/01	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ3047	2 records, between 29/12/2007 and 23/02/2010	Recorder Name Withheld	2000; 80	Reported to recorder	Wrexham, Pentrebychan	Survey: Observer data	D0062/008/01	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ3048	4 records, between 08/02/2007 and 11/07/2009	Recorder Name Withheld	1; 3	Reported to recorder	Rhostyllen, W	Activity: T. Survey: Observer data; Birdtrack	D0062/008/01 , D1297/025/01 , D1779/001/02	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3

Butterflies and Moths										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ295484 (Estimated (Centroid of Site))	2 records, between 20/06/1994 and 24/07/1994	Recorder Name Withheld	1		Legacy (National Grid)	Breeding: No. Mature: Yes. Record type: Field record / observation	D0127/001/02	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Hipparchia semele</i> (Grayling / Gweirlöyn Llwyd)	SJ295484 (Estimated (Centroid of Site))	2 records, both on 24/07/1994	Recorder Name Withheld	1		Legacy (National Grid)	Breeding: No. Mature: Yes. Record type: Field record / observation	D0127/001/02 , D1858/001/02	RD1(UK)VU, S7, LBAP[GWY]	3
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ295484 (Estimated (Centroid of Site))	20/08/1994	Recorder Name Withheld	1		Legacy (National Grid)	Breeding: No. Mature: Yes. Record type: Field record / observation	D0127/001/02	RD1(UK)NT, S7, LBAP[GWY]	3

- PUBLIC VERSION -

Mammals										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Chiroptera</i> (Unknown Bat / Ystlum Anhysbys)	SJ2947 (Supplied by Original Recorder (Checked))	4 records, between 12/07/2018 and 27/07/2018	Recorder Name Withheld	1	Bat Roost	Site Name Withheld	Comments Withheld	D1901/001/01	EPS, WCA5, LBAP[ANG, DEN, FLI, SNP]	4
<i>Chiroptera</i> (Unknown Bat / Ystlum Anhysbys)	SJ2847	14/10/1997	Recorder Name Withheld	15		Site Name Withheld	Comments Withheld	D1486/001/01	EPS, WCA5, LBAP[ANG, DEN, FLI, SNP]	3
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ289483	27/08/2013	Recorder Name Withheld			Bronwylfa, Wrexahm	Young, crossing the road. Mammal Society (Mammal Atlas)	D1844/001/03	Bern, S7, LBAP[ANG, CON, FLI, GWY]	3
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ295484	06/06/2012	Recorder Name Withheld	1 Adult	Dead on road	Bronwylfa	Time of sighting: 4pm; Habitat: Roadside	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ295468	3 records, between 2012 and 19/07/2015	Recorder Name Withheld	3; 2	Live Sighting	Brynydd		D1688/004/01 , D1574/001/03	Bern, S7, LBAP[ANG, CON, FLI, GWY]	3
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ28414802 (Selected from Interactive Map)	12/07/2018	Recorder Name Withheld	1 Adult	Dead	Bronwylfa	Found dead in orchard	D1117/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ28394804 (Selected from Interactive Map)	13/04/2021	Recorder Name Withheld	2 Adult	Live Sighting	Bronwylfa	On trail camera eating peanuts left out; Time of sighting: 00:15; Habitat: Garden	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	1
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ28394806 (Selected from Interactive Map)	09/08/2017	Recorder Name Withheld	1 Adult	Live Sighting	Tan y Llan	Woodland edge; Time of sighting: 9pm; Habitat: Woodland	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ2839548067 (Selected from Interactive Map)	16/04/2018	Recorder Name Withheld	1 Adult	Live Sighting	Bronwylfa	Time of sighting: 10pm; Habitat: Garden	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ283480	12/08/2013	Recorder Name Withheld			Bronwylfa	Young, curled up on drive, attacked by something. took to vets but too badly injured to save. Mammal Society (Mammal Atlas)	D1844/001/03	Bern, S7, LBAP[ANG, CON, FLI, GWY]	3
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ2847 (Selected from Interactive Map)	21/05/2014	Recorder Name Withheld	1 Adult	Live Sighting	Llwyneinion wood	Huge; Time of sighting: night; Habitat: Woodland	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ2948 (Selected from Interactive Map)	2 records, both on 07/05/2013	Recorder Name Withheld	1 Adult	Live Sighting	Legacy area	Road crossing; Time of sighting: 12pm; Habitat: Roadside; 12pm road crossing. Mammal Society (Mammal Atlas)	D1383/001/01 , D1844/001/03	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ2848	18/10/2012	Recorder Name Withheld	1 Adult	Live Sighting	Tan y Llan	Time of sighting: night; Habitat: Woodland	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ3048 (Selected from Interactive Map)	26/05/2012	Recorder Name Withheld	2	Dead on road	A483 Rhostyllen Junction	2 hedgehogs dead on road a 100m or so apart S bound.	D1383/001/01	Bern, S7, LBAP[ANG, CON, FLI, GWY]	4
<i>Lepus europaeus</i> (Hare / Ysgyfarnog)	SJ2848 (Selected from Interactive Map)	05/06/2014	Recorder Name Withheld	1 Full-Grown		Bronwylfa	On lane, late evening	D1117/001/01	S7, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ2948	08/09/2014 - 26/09/2014	Recorder Name Withheld	1	Dung/Droppings/ Frass/Pellet, etc.	Site Name Withheld	Comments Withheld	D1927/001/01	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ3047	08/09/2014 - 26/09/2014	Recorder Name Withheld	1	Dung/Droppings/ Frass/Pellet, etc.	Site Name Withheld	Comments Withheld	D1927/001/01	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ2848	08/09/2014 - 26/09/2014	Recorder Name Withheld	3	Dung/Droppings/ Frass/Pellet, etc.	Site Name Withheld	Comments Withheld	D1927/001/01	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2948	25/02/2003	Recorder Name Withheld		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/03	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2948	24/06/1997	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D0229/002/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	4
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2948 (Selected from Interactive Map)	2 records, between 08/12/2016 and 14/12/2016	Recorder Name Withheld	Burrow	Badger Sett	Site Name Withheld	Comments Withheld	D1117/001/01 , D0059/001/03	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	4
<i>Mustela erminea</i> (Stoat / Carlwm)	SJ29974830 (Selected from Interactive Map)	16/04/2018	Recorder Name Withheld	1 Adult		Legacy	Crossing road	D1117/001/01	Bern, NRW, LBAP[ANG, CON, FLI]	4
<i>Mustela erminea</i> (Stoat / Carlwm)	SJ28554831 (Selected from Interactive Map)	26/03/2018	Recorder Name Withheld	1 Adult	Live Sighting	Bronwylfa	Crossing road	D1117/001/01	Bern, NRW, LBAP[ANG, CON, FLI]	4
<i>Mustela putorius</i> (Polecat / Ffwlbart)	SJ298468	15/09/2014	Recorder Name Withheld		Dead on road	Ponciau	Classification: True polecat	D1544/002/01	Bern, HDir, RD2(UK), S7, LBAP[CON, FLI, GWY, SNP]	1
<i>Mustela putorius</i> (Polecat / Ffwlbart)	SJ2848 (Selected from Interactive Map)	04/02/2012	Recorder Name Withheld	1 Adult		Bronwylfa, Wrexham	Night. trail camera.	D1117/001/01	Bern, HDir, RD2(UK), S7, LBAP[CON, FLI, GWY, SNP]	4
<i>Mustela putorius</i> (Polecat / Ffwlbart)	SJ3048	June 1975	Recorder Name Withheld			Rhostyllen		D1072/001/02	Bern, HDir, RD2(UK), S7, LBAP[CON, FLI, GWY, SNP]	3
<i>Myotis mystacinus</i> (Whiskered Bat / Ystlum Barfog)	SJ2847	25/08/2000	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1486/001/01	Bern, EPS, HDir, RD2(UK), WCA5, LBAP[ANG, DEN, FLI, GWY, SNP]	3
<i>Myotis mystacinus/brandtii</i> agg. (Whiskered/Brandt's Bat agg.)	SJ2947 (Supplied by Original Recorder (Checked))	6 records, between 12/07/2018 and 22/08/2018	Recorder Name Withheld	1; 4	Bat Detector; Bat Roost	Site Name Withheld	Comments Withheld	D1901/001/01	Bern, EPS, HDir, WCA5, LBAP[ANG, CON, DEN, FLI, SNP]	4
<i>Neovison vison</i> (American Mink / Minc)	SJ2947 (Supplied by Original Recorder)	May 2008	Recorder Name Withheld	2		Garden near Pentre Bychan		D0967/003/01	INNS, WCA9	4
<i>Neovison vison</i> (American Mink / Minc)	SJ3047	08/07/2015	Recorder Name Withheld	1		Pentre Bychan, Johnstown	In stream	D0967/009/01	INNS, WCA9	1
<i>Nyctalus noctula</i> (Noctule Bat / Ystlum Mawr)	SJ2947 (Supplied by Original Recorder (Checked))	5 records, between 12/07/2018 and 22/08/2018	Recorder Name Withheld	1	Bat Detector	Site Name Withheld	Comments Withheld	D1901/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Nyctalus noctula</i> (Noctule Bat / Ystlum Mawr)	SJ2847	2 records, between 08/08/2019 and 22/08/2019	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1798/006/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Nyctalus noctula</i> (Noctule Bat / Ystlum Mawr)	SJ2946	28/08/2019	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1798/006/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus</i> (Pipistrellus Bat Species)	SJ2947 (Supplied by Original Recorder (Checked))	22/08/2018	Recorder Name Withheld	1	Bat Roost	Site Name Withheld	Comments Withheld	D1901/001/01	EPS, WCA5, LBAP[ANG, DEN, FLI, SNP]	4
<i>Pipistrellus</i> (Pipistrellus Bat Species)	SJ2946 (Estimated (Centroid of Site))	28/07/2004	Recorder Name Withheld		Bat Roost	Site Name Withheld	Comments Withheld	D0026/274/01	EPS, WCA5, LBAP[ANG, DEN, FLI, SNP]	3
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ2947 (Supplied by Original Recorder (Checked))	12 records, between 12/07/2018 and 22/08/2018	Recorder Name Withheld	2; 1	Bat Roost; Bat Detector	Site Name Withheld	Comments Withheld	D1901/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ2847	2 records, between 08/08/2019 and 22/08/2019	Recorder Name Withheld	2; 3	Bat Roost	Site Name Withheld	Comments Withheld	D1798/006/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ2947	12/07/1982	Recorder Name Withheld	21		Site Name Withheld	Comments Withheld	D1486/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ2946	4 records, between 16/05/2017 and 16/09/2019	Recorder Name Withheld	1; 2	Bat Roost	Site Name Withheld	Comments Withheld	D1798/006/01 , D1798/002/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ2946	05/09/1996	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D1486/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ2848 (Selected from Interactive Map)	16/07/2016	Recorder Name Withheld	35 Adult	Bat Roost	Site Name Withheld	Comments Withheld	D1117/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus pygmaeus</i> (Soprano Pipistrelle / Ystlum Lleiaf Uchelsain)	SJ2947 (Supplied by Original Recorder (Checked))	11 records, between 12/07/2018 and 22/08/2018	Recorder Name Withheld	2; 11; 5	Bat Detector; Bat Roost	Site Name Withheld	Comments Withheld	D1901/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus pygmaeus</i> (Soprano Pipistrelle / Ystlum Lleiaf Uchelsain)	SJ2847	2 records, between 08/08/2019 and 22/08/2019	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1798/006/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, DEN, FLI, GWY, SNP]	4
<i>Plecotus auritus</i> (Brown Long-eared Bat / Ystlum Hirglust)	SJ2947 (Supplied by Original Recorder (Checked))	4 records, between July 2018 and 22/08/2018	Recorder Name Withheld	1; At least 2	Bat Detector; Dung/Droppings/ Frass/Pellet, etc.	Site Name Withheld	Comments Withheld	D1901/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Plecotus auritus</i> (Brown Long-eared Bat / Ystlum Hirglust)	SJ2847	08/08/2019	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1798/006/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Plecotus auritus</i> (Brown Long-eared Bat / Ystlum Hirglust)	SJ2946 (Supplied by Original Recorder)	2 records, between 14/03/2016 and 04/07/2016	Recorder Name Withheld	1 Adult; 20 Droppings	Bat Roost	Site Name Withheld	Comments Withheld	D1117/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4

Other Invertebrates										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Harmonia axyridis</i> (Harlequin Ladybird)	SJ287485	21/04/2015	Recorder Name Withheld	approx 4 Adult		House	Have had about 30 in the house. iRecord (iRecord Ladybirds)	D1844/001/03	INNS	3
<i>Harmonia axyridis</i> (Harlequin Ladybird)	SJ300483	05/02/2015	Recorder Name Withheld	unsure, several Adult		In house	In the house, a lot were hibernating round a window Your site doesn't work well on my mac!! very hard to distinguish,. iRecord (iRecord Ladybirds)	D1844/001/03	INNS	3

- PUBLIC VERSION -

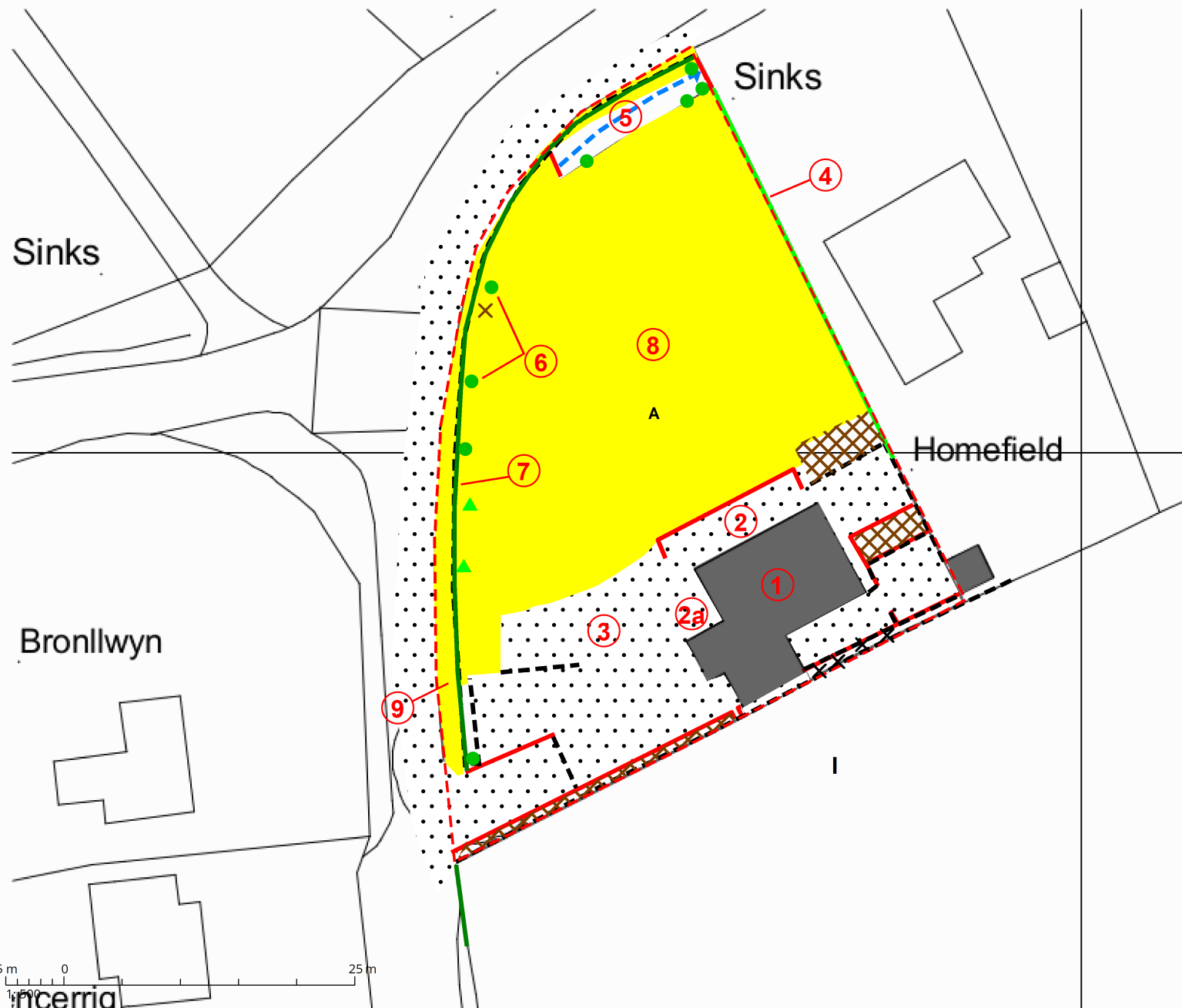
Plants										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Ceterach officinarum</i> (Rustyback / Duegredynen Gefngoch)	SJ296482	06/09/1992	Recorder Name Withheld			Cadwgan	SJ296 482 Talwrn, brick wall	D1169/004/02	LI[VC50, VC51]	3
<i>Cotoneaster simonsii</i> (Himalayan Cotoneaster / Cotoneaster Simons)	SJ2847	10/11/2014	Recorder Name Withheld			Llwyneinion	Bird-sown	D1169/004/02	INNS, WCA9	3
<i>Crassula helmsii</i> (New Zealand Pigmyweed / Corchwyn Seland Newydd)	SJ295482 (Estimated (Centroid of Site))	April 2003 - June 2003	Recorder Name Withheld			Wrexham; Environment Centre, Legacy	Mound pond	D0026/279/01	INNS, WCA9	3
<i>Crocasmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i> (Montbretia / Crib-y-Ceiliog)	SJ2847	10/11/2014	Recorder Name Withheld			Llwyneinion		D1169/004/02	INNS, WCA9	3
<i>Crocasmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i> (Montbretia / Crib-y-Ceiliog)	SJ2946	14/09/2014	Recorder Name Withheld			Rhosllanerchrugog		D1169/004/02	INNS, WCA9	3
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ2947	14/10/2015	Recorder Name Withheld			Talwrn		D1169/004/02	INNS, WCA9	3
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ2946	14/10/2015	Recorder Name Withheld			Rhosllanerchrugog		D1169/004/02	INNS, WCA9	3
<i>Meconopsis cambrica</i> (Welsh Poppy / Pabi Cymreig)	SJ2946	14/10/2015	Recorder Name Withheld			Rhosllanerchrugog		D1169/004/02	RD2(UK)S, LBAP[CON, DEN], LI[VC48, VC49]	3
<i>Prunus laurocerasus</i> (Cherry Laurel / Coeden Lawrgeirios)	SJ2946	14/10/2015	Recorder Name Withheld			Rhosllanerchrugog		D1169/004/02	INNS	3
<i>Ranunculus lingua</i> (Greater Spearwort / Llafnlys Mawr)	SJ295482 (Estimated (Centroid of Site))	April 2003 - June 2003	Recorder Name Withheld			Wrexham; Environment Centre, Legacy	Mound pond	D0026/279/01	LI[VC48, VC50, VC51]	4
<i>Rhododendron ponticum</i>	SJ2946	10/11/2014	Recorder Name Withheld			Rhosllanerchrugog		D1169/004/02	INNS, WCA9	3
<i>Sinapis arvensis</i> (Charlock / Mwstard Gwyllt)	SJ29284738	10/11/2014	Recorder Name Withheld			Talwrn	Several plants on field margin	D1169/004/02	RD1(Wales)VU	3

Reptiles and Amphibians										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ28854737 (Supplied by Original Recorder)	2 records, between 06/05/2010 and 18/05/2010	Recorder Name Withheld	2 Adult (Sex Unknown); 1 Adult (Sex Unknown)	Torch Count	Llwyneinion: P01 (Acid Tar Lagoon)		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Lissotriton helveticus</i> (Palmate Newt / Madfall Ddwr Balfog)	SJ28854737 (Supplied by Original Recorder)	2 records, between 06/05/2010 and 18/05/2010	Recorder Name Withheld	203 Adult Male; 298 Adult Female; 11 Adult (Sex Unknown); 162 Adult Male; 164 Adult Female; 10 Adult (Sex Unknown)	Torch Count	Llwyneinion: P01 (Acid Tar Lagoon)	Both GCN and Palmate appear to be egg-laying on algae	D1320/014/01	Bern, WCA5, LBAP[ANG, CON, DEN, FLI]	3
<i>Lissotriton helveticus</i> (Palmate Newt / Madfall Ddwr Balfog)	SJ295482 (Estimated (Centroid of Site))	5 records, between 08/04/2003 and 11/06/2003	Recorder Name Withheld	1 Female; 1 Male; 1 Female; 2 Male; 2 Male		Wrexham; Environment Centre, Legacy	Mound pond. Bottle trapping	D0026/279/01	Bern, WCA5, LBAP[ANG, CON, DEN, FLI]	4
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ295482 (Estimated (Centroid of Site))	13 records, between 07/04/2003 and 11/06/2003	Recorder Name Withheld	>10 Male; >10 Female; 8 Male; 12 Female; 9 Male; 3 Female; 1 Female; 5; 4 Male; 9 Female; 10 Female; 3 Male; 8 Female; 1 Male; 4 Female; >5 Male; >5 Female		Wrexham; Environment Centre, Legacy	Mound pond. Torch; Mound pond. Bottle trapping; Celtic Ditch Pond & Entrance Ditch Pond; Alder pond; Mound pond. Bottle trap; Mound pond. Bottle	D0026/279/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ28564793 (Selected from Interactive Map)	21/05/2016	Recorder Name Withheld	3 Adult		Bronwylfa	Torch survey	D1117/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ28364805 (Selected from Interactive Map)	21/05/2016	Recorder Name Withheld	2 Juvenile		Bronwylfa	Terrestrial search, down a pit	D1117/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4
<i>Natrix helvetica</i> (Grass Snake / Neidr y Gwair)	SJ298479	2 records, both in 1990	Recorder Name Withheld			Crematorium, Talwrn		D0035/002/01 , D1076/001/02	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Natrix helvetica</i> (Grass Snake / Neidr y Gwair)	SJ28364803 (Selected from Interactive Map)	09/07/2016	Recorder Name Withheld	1 Adult		Tan y Llan	Also noticing a lot of baby toads in the garden	D1117/001/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Natrix helvetica</i> (Grass Snake / Neidr y Gwair)	SJ3048	2 records, both in 1942	Recorder Name Withheld			Bersham, nr Wrexham		D1076/001/02 , D0035/002/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ28854737 (Supplied by Original Recorder)	06/05/2010	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Llwyneinion: P01 (Acid Tar Lagoon)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ2892247638	28/07/2017	Recorder Name Withheld	2		Llwyneinion, LL14 4ET		D1856/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ29434818 (Approximate)	27/06/2018	Recorder Name Withheld	1 Adult Male		West of Rhostyllen		D1117/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ28854737 (Supplied by Original Recorder)	2 records, between 06/05/2010 and 18/05/2010	Recorder Name Withheld	47 Adult Male; 37 Adult Female; 35 Adult Male; 16 Adult Female; 1 Adult (Sex Unknown)	Torch Count	Llwyneinion: P01 (Acid Tar Lagoon)	Both GCN and Palmate appear to be egg-laying on algae	D1320/014/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ292482	01/05/2003	Recorder Name Withheld	P Adult (Exact)				D1923/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ2922048283	05/03/2004	Recorder Name Withheld			Bryn Rhedyn Farm		D1118/011/03	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ295482 (Estimated (Centroid of Site))	7 records, between April 2003 and 11/06/2003	Recorder Name Withheld	3 Male; 1 Female; 2 Male; 1 Female; 3 Male; 1 Female; Egg		Wrexham; Environment Centre, Legacy	Mound pond. Torch; Mound pond. Bottle trap; Mound pond; Mound pond. Torch/net	D0026/279/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ28634741 (Supplied by Original Recorder)	2 records, between 1992 and 21/05/1992	Recorder Name Withheld	Present				D1122/001/01 , D0137/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ29524833	Before 23/03/2007	Recorder Name Withheld			Legacy	Groundwork Wrexham. Report from P Davidson GWF	D1118/011/03	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ29944817 (Approximate)	27/06/2018	Recorder Name Withheld	1 Adult Female		West of Rhostyllen		D1117/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ2848 (Selected from Interactive Map)	23/02/2020	Recorder Name Withheld	1 Adult Female		Bronwylfa		D1117/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4

Statutory Sites returned by search	AONB: Bryniau Clwyd a Dyffryn Dyfrdwy (926m)
Wildlife Sites intersecting 1000m buffer	W222: Crematorium (513m), W218: Legacy Substation (527m), W219: Bronwylfa Wood (773m)
Ancient Monuments intersecting 1000m buffer	DE137: Offa's Dyke: Pentre-Bychan Hall Section, extending 540m S from Bron-Wylfa (704m), DE174: Offa's Dyke: Section S of Bryn yr Owen Farm (713m), DE179: Offa's Dyke: Sections N & S of Bryn yr Owen Colliery (750m), DE194: Offa's Dyke: Section extending 120m from Railway to Bronwylfa Road, Legacy (840m), DE132: Offa's Dyke: Cadwgan Hall Section, extending from River Clywedog to the Railway (917m)
Ancient Woodland sites (if searched)	36794: Restored Ancient Woodland Site (197m), 36793: Restored Ancient Woodland Site (315m), 31882: Ancient Semi Natural Woodland (336m), 28399: Ancient Semi Natural Woodland (337m), 31884: Ancient Semi Natural Woodland (426m), 36792: Restored Ancient Woodland Site (608m), 31883: Ancient Semi Natural Woodland (630m), 31888: Ancient Semi Natural Woodland (776m), 31881: Ancient Semi Natural Woodland (957m), 31886: Ancient Semi Natural Woodland (973m)
Phase I Habitats intersecting 1000m buffer (Habitat at central point shown in red , if found)	A.1.1.1: Semi-natural Broad-leaved Woodland (7.07% / 222,187 sq.m), A.1.1.2: Planted Broad-leaved Woodland (2.64% / 82,773 sq.m), A.1.2.2: Planted Coniferous Woodland (0.34% / 10,595 sq.m), A.1.3.2: Planted Mixed Woodland (0.58% / 18,095 sq.m), A.2.1: Dense Scrub (1.85% / 57,987 sq.m), B.2.2: Semi-improved Neutral Grassland (2.56% / 80,404 sq.m), B.4: Improved Grassland (54.54% / 1,713,180 sq.m), C.1.1: Bracken (0.13% / 3,938 sq.m), C.3.1: Tall Ruderal Herb (0.15% / 4,615 sq.m), G.1: Standing Water (0.06% / 2,016 sq.m), J.1.1: Arable (4.31% / 135,485 sq.m), J.1.2: Amenity Grassland (4.3% / 135,145 sq.m), J.1.3: Ephemeral/Short Perennial (0.22% / 6,986 sq.m), J.1.4: Introduced Scrub (0% / 57 sq.m), J.1.5: Gardens (0.18% / 5,586 sq.m), J.3.6: Buildings (14.54% / 456,633 sq.m) , J.3.7: Track (0.02% / 718 sq.m), NA: Not Accessed Land (0.93% / 29,155 sq.m)

↑
North



- Individual broad-leaved tree
- ▲ Individual coniferous tree
- A** Amenity grassland
- I Improved grassland
- Building
- Hard-standing/ bare ground
- Introduced shrub
- × Scattered introduced shrub
- Hedgerow
- Conifer hedgerow
- Dry ditch
- × Ephemeral/ short perennial
- Fence
- Wall
- - - Survey site boundary
- Target Note

C457 Proposed Residential Extension & Associated Works, Five Oaks, Legacy, Wrexham, LL14 4ER - Ecological Appraisal

Figure 1 - Extended Phase 1 Habitat Survey

Date: 03/08/2021

marches ecology

www.marchesecology.co.uk

5 m 0 25 m

incerra