

Report Title	Proposed Development at James Jones & Sons Ltd, Off Oak Road, Wrexham Industrial Estate, Wrexham – Ecological Appraisal
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Quality Assurance

Survey/ Assessment Work Schedule		
Survey/Assessment Type	Surveyors/ Author	Date
Extended Phase 1 Habitat Survey	Max Ellson	01/02/21 & 19/05/21
Ecological background data search	Max Ellson	January 2021
Great Crested Newt pond scoping exercise	Max Ellson	18 & 22/03/21
Great Crested Newt detailed survey	Max Ellson and Tom Knight	20/04 & 12/05/21
Reptile presence/ absence survey	Max Ellson	March to June 2021
Botanical update survey	Max Ellson	19/05/21

Review Schedule				
Issue	Date	Author	Reviewed by	Approved by
1.0	23/06/21	Max Ellson	Tom Knight	Tom Knight

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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.

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1 INTRODUCTION

1.1 Project Background

1.1.1 Marches Ecology was initially commissioned by James Jones & Sons (Pallets and Packaging) Ltd to undertake a Preliminary Ecological Appraisal of land at James Jones & Sons Ltd, Off Oak Road, Wrexham Industrial Estate, Wrexham (approximate OS Grid Ref. SJ 3938 4931). The Preliminary Ecological Appraisal (PEA) comprised an ecological background data search and an Extended Phase 1 Habitat Survey and was reported as follows:

- Marches Ecology (2021). *Proposed Development at James Jones & Sons Ltd, Off Oak Road, Wrexham Industrial Estate, Wrexham – Preliminary Ecological Appraisal*. Unpublished report on behalf of James Jones & Sons (Pallets and Packaging) Ltd.

1.1.2 The PEA report was provided as supporting information to a planning application (ref: P/2021/0217) to Wrexham County Borough Council (WCBC) for a small development comprising a biomass boiler house/ kilns/ dry pallet store and associated infrastructure.

1.1.3 The PEA identified a number of further survey requirements which have been subsequently commissioned and completed by Marches Ecology between March and June 2021; these are as follows:

- An Extended Phase 1 Habitat Survey of a 'wider survey site';
- A botanical update survey further to the original Extended Phase 1 Habitat Survey undertaken in February 2021;
- A Great Crested Newt (*Triturus cristatus*) pond-scoping survey;
- A Great Crested Newt survey (comprising 2 no. survey visits to a small number of ponds); and
- A reptile presence/ absence survey.

1.1.4 This report, which will be provided as additional supporting information to the planning application as detailed above, has three key aims:

- to provide an 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 Report (PEAR) 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 nineteen 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.

1.3 Site Description and Context

- 1.3.1 The survey site extends to approximately 0.6 hectares (ha); it is understood this reflects the 'redline planning boundary'. This is slightly larger than the proposed development site, which extends to approximately 0.43 ha. The wider survey site incorporates the remainder of the field unit.
- 1.3.2 The site is located within/ immediately adjacent to the north-eastern end of the existing James Jones & Sons Ltd facility (which comprises a wooden pallet and packaging manufacturing site). This is itself located to the north of Oak Road, on the eastern edge of Wrexham Industrial Estate.
- 1.3.3 Part of the proposed development/ survey site is located within the existing facility and comprises amenity grassland, hard-standing and a small number of built structures. There is no defined southern/ eastern boundary to this area; the western boundary (and the boundary of the James Jones & Sons Ltd facility at this location) comprises a fence line, on the opposite side of which is located another light industrial complex dominated by a large warehouse-type building.
- 1.3.4 The remainder of the proposed development/ survey site is located outside of the existing James Jones & Sons Ltd facility, albeit within the same landholding, from which it is separated by a fence line. This area comprises part of a larger field unit which is characterised by unmanaged grassland/ scrub. The western boundary of this area is fenced as above. There are no other defined boundaries, although parts of the northern/ eastern edges of the proposed development site were demarcated with red posts at the time of the Extended Phase 1 Habitat Survey. The wider survey site/ field unit is fenced on all sides. A similar field unit is located to the immediate north. Open agricultural fields dominate the landscape to the east.

1.4 The Development

- 1.4.1 The proposed development is outlined within a 'Design and Access Statement' (Kingsway Design 2020) which describes the proposal as follows:
- 'the construction of a biomass boiler house and kilns and a dry pallet store together with associated fuel store and external works'.*
- 1.4.2 The statement further outlines that the development will comprise of four key aspects, as follows:
1. The construction of a new biomass boiler house with an attached fuel store.
 2. The construction of 2 no. new kilns (with a further 3 no. kilns to possibly be added at a later date) heated by steam produced in the new boiler house.
 3. The construction of a new dry pallet store.
 4. Associated drainage and external works.

- 1.4.3 The proposals are illustrated on a series of Kingsway Design plans, including Drawing no. 0729/01 (dated November 2019), entitled '*Site Plan as Existing*', and Drawing no. 0729/02_RevB (dated October 2020), entitled '*Site Plan as Proposed*'.
- 1.4.4 The statement further describes that the boiler house and kilns will be constructed off-site and once installed will be clad with profiled metal sheeting. The dry pallet store will comprise a profiled metal sheeted roof, supported by steel columns. 4 no. existing built structures will be demolished to accommodate the proposals. Although no adjustment to existing site access roads from Oak Road will be necessary, it is understood that a short new access road from existing areas of hard-standing to the new pallet store/ boiler house will be required. No details on this have been provided at the current time.
- 1.4.5 Drawing no. 0729/02_RevB indicates that surface and building runoff water will be directed to a new subterranean holding tank which will hold water before it is released into the existing site sewer system at a gradual pace. No further details on the drainage scheme have been provided to inform this report.
- 1.4.6 It is understood (Kingsway Development, *pers. comm.*) that new boundaries will be secured with metal palisade fencing on completion of the construction works.
- 1.4.7 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 Consultation

- 1.5.1 Further to completion of the PEA (Marches Ecology 2021), consultation was sought with both Emma Broad (WCBC Ecologist) and Matt Ellis (Senior Species Officer, Natural Resources Wales (NRW)). The scope of the further surveys as included in this report was agreed by 'phone and or email. Additional consultation was sought with Emma Broad further to completion of the additional surveys to discuss/ agree what additional documentation would be required to support the planning application.

1.6 Planning Policy

Introduction

- 1.6.1 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

- 1.6.2 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'.

- 1.6.3 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

- 1.6.4 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.
- 1.6.5 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);

- 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

- 1.6.6 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

- 1.6.7 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.*

¹ References to the relevant part of PPW.

- *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

1.6.8 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.

1.6.9 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.

1.7 Legislation

Introduction

- 1.7.1 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

- 1.7.2 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)

- 1.7.3 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)

- 1.7.4 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)

- 1.7.5 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

- 1.7.6 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)

- 1.7.7 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 proposed development/ 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 plan is provided as *Figure 1*. An initial Extended Phase 1 Habitat Survey was carried out on 01st February 2021 by Max Ellson of Marches Ecology; this survey focussed on land within the site boundary (the ‘survey site’, refer to *Figure 1*) and encompassed the ‘proposed development site’ (again, refer to *Figure 1*), as well as a small area of adjacent land which is understood to correspond to the ‘planning redline boundary’. A further survey was undertaken on 19th May 2021 (also by Max Ellson) which incorporated a ‘wider survey site’ (refer to *Figure 1*); the wider survey site is equivalent to the remainder of the field noted at *Target Note 4* on *Figure 1* of Marches Ecology (2021).
- 2.2.2 During both surveys, immediately adjacent habitat was considered where deemed appropriate and viewed from the survey site boundary where possible. The weather during the February survey was sunny, calm and cold; during the May survey it was dry with mixed high cloud.
- 2.2.3 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.
- 2.2.4 In addition to the habitat map and target notes, a plant species list was compiled (provided in *Table 1, Section 8*). Plant nomenclature in this report follows Stace (2010). February is outside the accepted survey period for Extended Phase 1 Habitat Surveys. As such a

botanical update visit was completed on 19th May 2021 and ad hoc plant recording was also undertaken during the reptile survey visits between March and early June. 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.

2.2.5 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).

Pond-scoping Exercise

- 2.2.6 The pond scoping exercise involved a two-stage process; 1) a detailed desk study to locate ponds on internet-based aerial photography³ and mapping⁴ within 250 m of the proposed development/ survey site, and 2) a subsequent walkover survey to field-truth and scope any ponds for their potential to support Great Crested Newts. Some land/ potential ponds in the west of the 250 m buffer area (refer to *Figure 2*) were discounted due to the perceived presence of barriers to dispersal (buildings/ industrial land).
- 2.2.7 Where permission was provided ponds were directly accessed, otherwise use was made of public-rights-of-way (PROWs). The walkover survey also aimed to locate any ponds/ other features (such as ditches) suitable for breeding Great Crested Newts that were not identified during the desk study; it was completed by Max Ellson of Marches Ecology on 18th and 22nd March 2021, the weather during both visits was suitable for this type of survey.
- 2.2.8 Each pond encountered was subject to a Habitat Suitability Index (HSI) assessment (as detailed within ARG UK⁵ 2010) in relation to its potential value for Great Crested Newts. It should be noted that some of the HSI criteria (including presence/ absence of fish) and water quality (based on invertebrate populations) were assessed in a subjective manner (as detailed fish and invertebrate surveys were not undertaken). A detailed egg-search was not completed during the pond scoping exercise, however if newt eggs were located (during a brief egg-search) they would have been recorded.

³ <http://maps.google.co.uk/>

⁴ <http://magic.defra.gov.uk/>

⁵ Amphibian and Reptile Groups of the UK

Great Crested Newt Survey

- 2.2.9 Four ponds were subject to detailed Great Crested Newt survey, numbers 1, 2, 7 and 8 (*Figure 2*). This survey was undertaken by led by Max Ellson (Natural Resources Wales Licence no. S088575-1) and Tom Knight (Licence no. S088571-1) of Marches Ecology.
- 2.2.10 The survey methodology followed that outlined in the current Natural England (previously English Nature) Great Crested Newt mitigation guidelines (English Nature 2001). These guidelines recommend four survey 'visits' to be carried out to each waterbody in suitable weather conditions for a presence/ absence survey. These surveys can be carried out between mid-March and mid-June with at least two of the four visits between mid-April and mid-May. If presence of Great Crested Newts is not determined on any of the four survey visits the presence/ absence survey may be discontinued to that waterbody. Where Great Crested Newts are detected a further two visits to each waterbody are usually required (six total) and at least three visits are completed during mid-April to mid-May as per the Natural England mitigation guidelines (for a population size class assessment). In this instance, however, it was agreed with Matt Ellis (Senior Species Officer, NRW) that two survey visits would be sufficient (refer to *Section 1.5*).
- 2.2.11 During each of the visits a combination of three survey techniques are required. In this case it involved egg searches, torching, bottle-trapping and netting.
- Egg searches – were conducted on each of the survey visits until a Great Crested Newt egg was found. Egg searches involve the careful inspection of marginal plants for newt eggs that are laid on suitable leaves, with the leaf subsequently folded over the egg.
 - Torch surveys – were conducted on each of the survey visits using a 1.5 million candlelight power clu-lite torch. This involves shining the torch into the pond at night when newts are most active and therefore more visible.
 - Bottle-trapping – involves the setting of funnel-traps (2-litre plastic bottles with the tops inverted) into the pond margins. The traps are usually set during the evening of one survey visit and have to be collected early the following morning. Under the NRW survey licence, restrictions are placed on how long these traps are left in place principally for welfare considerations. This technique is particularly useful in weed-filled ponds or where visibility is otherwise poor.
 - Netting – this was undertaken where it was not possible to complete bottle-trapping, for example in shallow water or where bottles may be disturbed (for example by livestock or members of the public).

Reptile Survey

- 2.2.12 A reptile presence/ absence survey was completed between March and early June 2021 by Max Ellson of Marches Ecology. While reptiles are largely active between March and October, the best survey months tend to be April to May/ June and September. The most effective method for a reptile presence/ absence survey is through the deployment of artificial refugia (0.5 m² tiles of roofing felt and or corrugated metal sheets); these were deployed around the survey and wider survey sites, concentrating on potentially suitable habitat or other features for reptiles that were previously identified during the Extended Phase 1 Habitat Survey visit(s).

- 2.2.13 Froglife (1999) indicates that for general survey purposes five to ten refuges per hectare is adequate, however generally it is recommended that a much greater number than this is used to give a better chance of recording reptiles if present. 37 artificial refugia were deployed in areas of suitable habitat throughout the survey/ wider survey sites. *Figure 3* shows the location of the reptile refugia deployed during the presence/ absence survey.
- 2.2.14 The refugia were deployed on the 22nd March 2021. A period of over three weeks elapsed between deploying the refugia and the first check; one to two weeks are usually allowed for them to 'bed-down', however in this instance cold weather in early April prevented the start of the survey. The deployed refugia were then re-visited during the survey period, when the weather was suitable, all reptiles found would have been recorded. When walking between refuges the surveyor would also note down any reptiles seen as some species do not use refuges as readily as others. Froglife (1999) suggests that at least seven visits in suitable weather conditions are required for a presence/ absence survey.

2.3 Survey Limitations

- 2.3.1 The following may be considered limitations associated with the Extended Phase 1 Habitat Survey:
- The initial survey of the proposed development/ survey site was undertaken outside the accepted optimal period for such surveys. Many plants may not be visible at this time of year. A botanical update survey was however completed in mid-May.
 - Some parts of the site are characterised by scrub or other dense vegetation (*e.g. Target Note 5*) which may have obscured evidence of use of the survey site by protected/ notable species.
- 2.3.2 The following may be considered limitations associated with the Great Crested Newt survey:
- Pond 1 has a wide shallow vegetated margin and the open water supported abundant algal growth throughout the survey. Torch survey was therefore problematic, however netting was not considered a viable alternative due to the risk of damaging egg-laying material. It was however possible to install bottle-traps around 95 % of the margin on the first visit, and 80% on the second visit (due to scrub and or bird nesting activity).
 - The water in Pond 2 was generally quite turbid beyond the immediate shore line (turbidity score of 1-4) based on the current convention recommended by Natural England⁶). The water within approximately 0.5 to 1 m from the margin was clear, thereafter the turbidity significantly reduced visibility during the torch surveys. However, the margins were fully accessible for bottle trap deployment.
 - Pond 7 was not subject to bottle-trapping due to its publicly accessible location at a roadside. It was found to be virtually dry during the first visit with largely less than 0.05 m of water. The depth had increased by the time of the second visit. Torching/ netting was only achievable from the road-side edge of the pond due to dense scrub.
- 2.3.3 No limitations have been identified with the pond scoping, reptile presence/ absence or botanical update surveys.
- 2.3.4 None of the survey limitations listed above significantly affected the findings of the survey and therefore the conclusions and prescribed mitigation measures. While the constraints noted above for the Great Crested Newt survey may have reduced the number of animals

⁶ <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>

recorded on each occasion to some small extent, it is considered that they did not significantly affect the results and conclusions drawn.

- 2.3.5 All surveys were conducted in accordance with a Covid-19 Risk Assessment. This did not give rise to any limitations at this site.

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

2.1 Protected Sites

Statutory

- 2.1.1 There are no statutory designated sites within 1 km of the proposed development/ survey site. The closest such sites are the River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid Site of Special Scientific Interest (SSSI)/ River Dee and Bala Lake Special Area of Conservation (SAC) which are located approximately 1.7 km/ 2.2 km (respectively) to the east at their closest points.

Non-statutory

- 2.1.2 There is one non-statutory designated site within 1 km of the proposed development/ survey site: Wrexham Industrial Estate (W337) Wildlife Site (WS). It has two parts within the 1 km search area, the nearest of which is located approximately 315 m to the southwest of the proposed development/ survey site at its closest point. This is known as Cefn Park and consists of a complex mosaic of scrub, species-rich grassland and tall herbs; it also incorporates short lengths of Redwither Brook and the River Clywedog.
- 2.1.3 No areas of Ancient Semi-natural Woodland (ASNW) are located within the 1 km search area.

2.2 Habitats and Flora

Introduction

- 2.2.1 The Extended Phase 1 Habitat map is provided as *Figure 1*. The Target Notes (numbered 1 to 1a-d, 2, 3, 4, 5 & 7 for the proposed development/ survey site, 9-18 for the wider survey site, and 1e, 6, & 8 for immediately adjacent land) are provided in *Section 6* and shown on *Figure 1*.

Proposed Development/ Survey Site

Scrub and Trees

- 2.2.2 Dense scrub at *Target Note 5* dominates the margins of the proposed development/ survey site at this location. This resource is located adjacent to boundary fences and is impenetrable, being largely characterised by *Rubus fruticosus* agg. (Bramble) to 2 m high and frequently more than 10 m wide. This resource does not appear to be very species-rich.



An example of the dense scrub at *Target Note 5*; photo taken looking towards Willow tree at *Target Note 2*. Photo taken 01/02/21.



An example of the dense scrub at *Target Note 5*; photo taken looking towards the off-site trees at *Target Note 6*. Photo taken 01/02/21.

- 2.2.3 Elsewhere scrub is limited: occasional young bushes (largely *Crataegus monogyna* (Hawthorn)) are scattered within the grassland resource at *Target Note 4*, where there is also occasional young, incipient Bramble within the sward. There is also a small corner of young Bramble scrub located under the canopy of a mature *Salix caprea* (Goat Willow) at *Target Note 2* (the only 'tree' present).



The mature Goat Willow/ associated Bramble scrub at *Target Note 2*. Photo taken 01/02/21.

Grassland

- 2.2.4 Two distinct types of grassland are located within the proposed development/ survey site; amenity grassland and unmanaged, unimproved, neutral grassland.
- 2.2.5 Amenity grassland at *Target Note 3* occupies a small area adjacent to a storage pad within the curtilage of the existing facility. On 01/02/21 the sward height was to approximately 0.05m, but frequently less with evidence of frequent management (mowing). Throughout the majority of the survey period for reptiles and during the botanical update on 19/05/21 it was not mown, with a sward height of 0.2 m being obtained. It does however appear to be grazed by Rabbit (*Oryctolagus cuniculus*) and was mown by the 5th reptile check.
- 2.2.6 The sward is dominated by a range of grasses including *Lolium perenne* (Perennial Ryegrass), *Holcus lanatus* (Yorkshire-fog) and *Festuca rubra* (Red Fescue); *Juncus inflexus* (Hard Rush) is occasional. Overall this resource is fairly species-rich; *Bellis perennis* (Daisy), *Leucanthemum vulgare* (Oxeye Daisy) and *Ranunculus repens* (Creeping Buttercup) are frequent/ locally abundant with a wide range of other forbs being scattered throughout, often at low levels of abundance. These include *Cerastium fontanum* (Common Mouse-ear), *Prunella vulgaris* (Self-heal), *Plantago lanceolata* (Ribwort Plantain), *Hypochaeris radicata* (Cat's-ear), *Primula veris* (Cowslip), *Lathyrus pratensis* (Meadow Vetchling), *Erodium cicutarium* (Common Stork's-Bill), *Veronica serpyllifolia* (Thyme-leaved Speedwell), *Trifolium dubium* (Lesser Trefoil) and *Centaurea nigra* (Common Knapweed).



Amenity grassland at Target Note 3. Photo taken 19/05/21.

- 2.2.7 The unmanaged, unimproved, neutral grassland at *Target Note 4* extends outside of the proposed development/ survey site to occupy the majority of the field unit (in the wider survey site). The grassland was wet underfoot on 01/02/21 and there are occasional old machine tracks which held shallow standing water. The sward is dense and tussocky and appears unmanaged; it is frequently to approximately 1 m in height and could be described as rank.
- 2.2.8 The sward is (visually) dominated by Hard Rush, with associated coarse-leaved/ tussocky grasses including abundant *Deschampsia cespitosa* (Tufted Hair-grass), frequent *Dactylis glomerata* (Cock's-foot), Yorkshire-fog and *Agrostis stolonifera* (Creeping Bent), and lesser amounts of *Arrhenatherum elatius* (False Oat-grass). The sedges *Carex nigra* (Common Sedge) and *Carex otrubae* (False-fox Sedge) are also present. (Bulky) tall-herbs are a characteristic feature including frequent/ locally abundant *Epilobium hirsutum* (Great Willowherb), and lesser amounts of Common Knapweed, *Cirsium arvense* (Creeping Thistle), *Stachys sylvatica* (Hedge Woundwort), *Heracleum sphondylium* (Hogweed), *Pulicaria dysenterica* (Common Fleabane), Oxeye Daisy and *Urtica dioica* (Common Nettle). Low-growing forbs are scattered throughout largely at low levels of abundance including Creeping Buttercup, *Vicia sativa* (Common Vetch), Meadow Vetchling, Ribwort Plantain, Self-heal, Cowslip, and *Potentilla reptans* (Creeping Cinquefoil). Overall this resource appears to be moderately species-rich at most (although large areas could be described as species-poor). Young shrub saplings are occasionally present (refer above).



The neutral grassland at *Target Note 4*. The red posts mark the boundary of the proposed development site. Photo taken looking towards the off-site trees at *Target Note 6*. Photo taken 01/02/21.



The neutral grassland at *Target Note 4*. One of the red posts (refer above) is circled. Photo taken looking to the southwest towards the main James Jones & Sons Ltd facility. Photo taken 01/02/21.

Other Habitats

2.2.9 Other habitats are restricted to the following resources:

- 4 no. built structures at *Target Notes 1a-1d* (these are further described below with regards bats);
- a small debris pile at *Target Note 3a*;
- hard-standing; and
- fences.

Wider Survey Site

Scrub and Trees

2.2.10 Fringing zones of scrub characterise the wider survey site, for example at *Target Notes 11, 12 and 19*; this resource is largely impenetrable. At *Target Note 11* it comprises a mosaic of Bramble (largely at the field edge), Hawthorn and *Prunus spinosa* (Blackthorn). Elsewhere Hawthorn shrubs to 3 m high are scattered throughout the grassland at *Target Notes 17 and 18* which also supports incipient Bramble.

2.2.11 A single semi-mature Pedunculate Oak tree is located at *Target Note 9*.

Grassland

2.2.12 The neutral grassland within the proposed development/ survey site extends into the wider field site and is characterised by a similar species-composition to that at *Target Note 18*. At *Target Note 17* the grassland resource is slightly different in composition, being not visually characterised by Hard Rush and also with less Tufted Hair-grass. It is likely to be drier, but remains rank.



An example of the neutral grassland within the wider survey site at *Target Note 17*. Photo taken 19/05/21.

2.2.13 The tussocky sward includes coarse-leaved grasses such as Cock's-foot, Yorkshire-fog, Creeping Bent, False Oat-grass, *Poa pratensis* (Smooth Meadow-grass), *Schedonorus*

arundinaceus (Tall Fescue), *Alopecurus pratensis* (Meadow Foxtail) and *Festuca pratensis* (Meadow Fescue), along with False-fox Sedge. The (bulky) tall-herb/ forb resource present is similar to that described at *Target Note 4*.

Other Habitats

2.2.14 Other habitats are restricted to the following resources:

- bare ground (*Target Note 10*);
- 2 no. brash piles at *Target Note 14*; and
- fences.

Immediately Adjacent Land

2.2.15 The existing facility extends to the south/ south-east and is largely characterised by buildings and hard-standing with occasional stands of amenity grassland and shrub plantings.

2.2.16 Immediately to the west there is another light industrial site associated with a different company; this is dominated by a large industrial shed. Much of the immediate boundary adjacent to the proposed development/ survey site was not visible (for example due to the dense boundary scrub at *Target Note 5*), however small areas of ephemeral vegetation were noted, along with a small built structure at *Target Note 1e*, and 2 no. trees at *Target Note 6* (these are further considered below with regards bats).

2.2.17 There is also an adjacent field unit to the north (*Target Note 8*) which appears to support similar vegetation to that described at *Target Notes 4* and *5*.



The adjacent field unit at *Target Note 8*. Photo taken 01/02/21.

Flora

- 2.2.18 One notable plant was recorded during the surveys; a few scattered plants of *Erodium cicutarium* (Common Stork's-Bill) were recorded from the edge of amenity grassland at *Target Note 3*. This is noted as 'Locally Scarce'⁷⁸ in Williams (2014).
- 2.2.19 No species of plant listed in *Schedule 9* of the *Wildlife and Countryside Act 1981* were recorded.
- 2.2.20 None of the plant records provided by Cofnod are from within the proposed development/ survey site or immediately adjacent habitat. Notable records from the 1 km search, which are of potential relevance to the proposed development/ survey site area, include *Ononis spinosa* (Spiny Restharrow), *Sinapis arvensis* (Charlock), *Polemonium caeruleum* (Jacob's-ladder), *Cichorium intybus* (Chicory), *Genista tinctoria* (Dyer's Greenweed), *Populus nigra* ssp. *betulifolia* (Black-poplar), *Lathyrus nissolia* (Grass Vetchling), *Crepis biennis* (Rough Hawk's-beard), and *Silaum silaus* (Pepper-saxifrage).
- 2.2.21 Several species of plant listed in *Schedule 9* of the *Wildlife and Countryside Act 1981* have been recorded from Wrexham Industrial Estate: Cofnod provided records of *Fallopia japonica* (Japanese Knotweed) and *Crococsmia x crocosmiiflora* (Montbretia) (both recorded from an adjacent 1 km grid square to the proposed development/ survey site), and *Impatiens glandulifera* (Indian Balsam) (the nearest record for which is from the River Clywedog, approximately 600 m away).

2.3 Species/ Species Groups

Badgers

- 2.3.1 Cofnod provided five records of Badger from the 1 km search area, all are for setts with records between 1983 and 2008. The closest of these records is from approximately 600 m from the proposed development/ survey site.
- 2.3.2 No setts were recorded within the proposed development/ survey site or wider survey site. However evidence may have been obscured by dense vegetation, especially scrub (for example *Target Notes 5* and *11*) which provide opportunities for sett excavation. The site is however largely very flat, and it is also unclear how wet the ground might be at various points throughout the year which may reduce the potential value.
- 2.3.3 No evidence of Badger activity has been recorded from the proposed development/ survey site. A possible animal breach into dense scrub was recorded at *Target Note 7* on 22/03/21 with a faint, short path in the adjacent grassland. No evidence of Badger using this feature has been recorded and by 19/05/21 it was largely obscured by fresh vegetation growth.
- 2.3.4 Evidence of Badger activity within the wider survey site has been recorded as follows:
- *Target Note 10*. A small number of Badger footprints located on 22/03/21.
 - *Target Note 10a*. A few Badger guard hairs were recorded here on 18/03/21 caught on the base of the fence/ on the ground beneath. A clump of hairs was also caught on adjacent barb-wire fence (on the field side of the scrub) and a partial Badger footprint in

⁷ Found in 4-15 Wells sites in Denbighshire.

⁸ It is understood by the author that this status is to be revised in the near future, where upon it will no longer be considered locally scarce (or rare).

wet mud on the adjacent ditch edge. No discernible paths were recorded with this evidence, although the scrub at this location is impenetrable.

- *Target Note 13.* A Badger breach into scrub, and an associated path was recorded here on 22/03/21. A recently used dung-pit was also located just inside the scrub boundary. The path crosses the wider survey site and passes under a chain-link fence to the immediate west of scrub at *Target Note 12*. On 22/03/21 the path appeared to be reasonably well used, with occasional evidence of foraging recorded. At the northern breach point the ground was bare under the fence with partial footprints recorded in mud.
- *Target Note 15.* An animal breach under a chain-link fence, presumed to be used by Badger (although no direct evidence) was recorded on 22/03/21. An associated path crossed grassland to a stand of dense scrub and appeared to be reasonably well used.

.2 no. animal breaches were also recorded at *Target Note 16* on 22/03/21.

- 2.3.5 No further evidence of Badger has been recorded on any subsequent visits to the site. By 04/06/21 (the final reptile visit) the paths were not obvious in the growing sward and the breaches were largely obscured by fresh vegetation growth. Fox (*Vulpes vulpes*) is known to use the site (Site Manager *pers. comm.*) and Rabbit evidence was also located. The unmanaged grassland at *Target Notes 4/ 17/ 18* provides habitat of moderate potential value for Badger foraging.

Bats

- 2.3.6 Cofnod provided records of 7 species of bat for within the 1 km search area: Brown Long-eared Bat (*Plecotus auritus*), Common Pipistrelle (*Pipistrellus pipistrellus*), Lesser Horseshoe Bat (*Rhinolophus hipposideros*), Noctule Bat (*Nyctalus noctule*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Whiskered Bat (*Myotis mystacinus*) and 'Unknown Bat'. The closest of these records to the survey site is for an 'Unknown Bat' from approximately 400 m away, dated 2005 (no other details are provided). The next closest is for a Common Pipistrelle from approximately 550 m away, dated 1993 (no other details provided).
- 2.3.7 There is only a single tree within the proposed development/ survey site, this being a mature Goat Willow at *Target Note 2* (refer to photo above). This is not of a sufficient age/ size to contain features of potential value for roosting bats and it provides negligible bat roost potential only. There are 2 no. trees located immediately adjacent to the proposed development/ survey site at *Target Note 6*; it was not possible to access near to these features due to dense scrub within the site. However one appears to be a *Betula pendula* (Silver Birch), and the other a Willow. They do not appear likely to provide more than negligible bat roost potential. A semi-mature Pedunculate Oak at *Target Note 9* in the wider survey site has negligible bat roost potential.
- 2.3.8 There are 4 no. built structures within the proposed development/ survey site (*Target Notes 1a-d*) and 1 no. immediately adjacent to it (*Target Note 1e*). These can be described as follows:
- *Target Note 1a.* The largest of the 4 structures, this comprises a single storey shed-type building which is constructed of corrugated metal walls and roof. It has a small number of windows and a large access door on the south-west facing wall. It appears to be in

good condition. No internal access was sought. There appear to be minor gaps where some of the corrugated roof plates meet the walls.

- *Target Note 1b & 1d.* 2 no. metal units.
- *Target Note 1c.* A small wooden shed with single-skin walls. There are gaps between the roof and the front wall.
- *Target Note 1e.* A brick built small electricity substation building



Building at *Target Note 1a*; eastern side. Photo taken 01/02/21.



Structure at *Target Note 1d*. Photo taken 01/02/21.

- 2.3.9 None of these structures are considered to provide any more than negligible bat roost potential; although the metal shed at *Target Note 1a* has minor gaps at the roof/ wall interface, the metal material is not deemed likely to provide suitable environmental attributes for bats. The small wooden shed at *Target Note 1c* is too small a structure to be of any particular potential value.
- 2.3.10 The part of the proposed development/ survey site associated with the amenity grassland and built structures (*Target Notes 1a-d* and 3) is unlikely to be of any particular value to foraging bats. However, the adjacent unmanaged grassland and scrub at *Target Notes 4, 5, 11, 12, 17, 18* and *19* (i.e. extending into the wider survey site) is likely to be of moderate to high potential value for foraging bats. The sheltered edges of scrub are likely to be of particular potential value. The resource present in the proposed development/ survey site only represents a small part of a much larger area of similar habitat (associated with the wider survey site and also extending into similar habitat further north, e.g. *Target Note 8*)).
- 2.3.11 As such, as a stand-alone resource the scrub within the proposed development/ survey site is not considered likely to provide any particular value for commuting bats as it represents only a small corner of a wider resource and is not directly connected to any similar habitats to the south (which is characterised by the existing facility) or west. The scrub resource in the wider survey site, particularly that at *Target Notes 11* and *12*, is deemed more likely to be of value to commuting bats; review of aerial photography indicates that this is part of a linear corridor (associated with a ditch) that passes adjacent to unmanaged habitats both to the north and south.

Great Crested Newts

Habitat Assessment

- 2.3.12 There is no aquatic habitat within the proposed development/ survey or wider survey sites and or immediately adjacent land.
- 2.3.13 The unmanaged grassland and scrub habitats at *Target Notes 4, 5, 11, 12, 17, 18* and *19* (i.e. extending into the wider survey site) provide high quality potential terrestrial habitat for Great Crested Newts. This terrestrial habitat is linked to further high quality terrestrial habitat outside the to the immediate north (*Target Note 8*). The amenity grassland resource at *Target Note 3* is of negligible value, however there are features within this area which could be utilised by amphibians, for example the unmanaged scrub corner at *Target Note 2*, a small debris pile at *Target Note 3a*, and the bases of buildings/ associated hard-standing (for example there are patio slabs to the immediate west of the building at *Target Note 1a*).

Desk Study

- 2.3.14 An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography⁹ indicates that there may be five waterbodies within approximately 250 m of the proposed development/ survey site (excluding ditches). *Table 1* below summarises the results of the desk based exercise, also see *Figure 2*.

⁹ <https://www.google.com/maps/search/wrexham+industrial+estate/@53.037561,-2.9087044,17z>

Table 1 – Summary of Desk-based Pond Scoping Results

Ref.	Approx. OS Grid Reference	Approx. distance to proposed development site/ survey site	Notes
1	SJ 3956 4932	130/ 115 m	A pond within an agricultural field.
4	SJ 3915 4931	165 m	A possible water feature on a light industrial site. Shown on the 1:25000 scale map but is not visible on aerial photography; it appears to be a square man-made structure. Separated from the proposed development/ survey site by industrial land including a large building.
5	SJ 3915 4938	180 m	A man made industrial feature on a light industrial site. Separated from the proposed development/ survey site by industrial land including a large building. Refer to Cofnod records below.
3	SJ 3961 4915	255/ 240 m	A marsh/ possible pond to the immediate north of Pond 2. Refer to Cofnod records below.
2	SJ 3960 4912	265/ 250 m	A pond within an agricultural field. Refer to Cofnod records below.
6	SJ 3958 4957	307 m	This appears to be shown on 1:50000 scale mapping only and is not visible on aerial photography. Refer to Cofnod records below. Located just outside 250 m buffer.

A ditch system is also visible on OS mapping to the east of the proposed development/ survey site.

2.3.15 Cofnod provided a large number of records for Great Crested Newt from the 1 km search area. Within the 250 m buffer these records are as follows:

- A 1992 record of 'presence' from Pond 2, and another 1992 record with no details given.
- 2 no. 1992 records for 'presence' from Pond 3.
- A 1999 record from SJ 391 493 for '2 male and 2 female'. It is thought likely this is from the feature described as Pond 4.
- 2 no. 1992 records from SJ 3909 4934 for 'presence'. It is unclear what feature this record is from but may be from the feature described at Pond 5 to the north of the location shown.

Pond 6 (just outside the 250 m buffer) also holds a Cofnod record, this being for 3 no.1992 records for 'presence'.

No records are provided for the closest pond (Pond 1) or any of the ditches within the 250 m buffer.

2.3.16 Outside the 250 m buffer, most agricultural ponds to the east and north have positive records. There is also a particular cluster of records to the west of Ponds 4 and 5, and there is a large number of records either side of Bryn Lane in the north of the search area.

- 2.3.17 Cofnod also provided over twenty records of Smooth Newt (*Lissotriton vulgaris*) and eighteen records of either/ or Common Toad (*Bufo bufo*) and Common Frog (*Rana temporaria*) from the 1 km search area.

Walkover Survey

- 2.3.18 Further to the desk study, a walkover survey was completed. No direct access was sought to numbers 4 and 5 which have been discounted from further survey due to the perceived presence of barriers to dispersal (buildings/ industrial land). Otherwise, access was provided to numbers 1-3 and 6 (*Figure 2*) and associated land. Numbers 1 and 2 were confirmed as being present, with numbers 3 and 6 confirmed as being absent. Two additional waterbodies, numbers 7 and 8 (*Figure 2*), were located; these are located approximately 190 m to the north/ or south (respectively) of the proposed development/ survey site.
- 2.3.19 No ditches or other features of potential value to breeding Great Crested Newts were located during the walkover survey.
- 2.3.20 A description (and photos where possible) of the four waterbodies (1, 2, 7 and 8) located during the walkover survey is provided in *Box 1* below.

Box 1 – Photos and Description

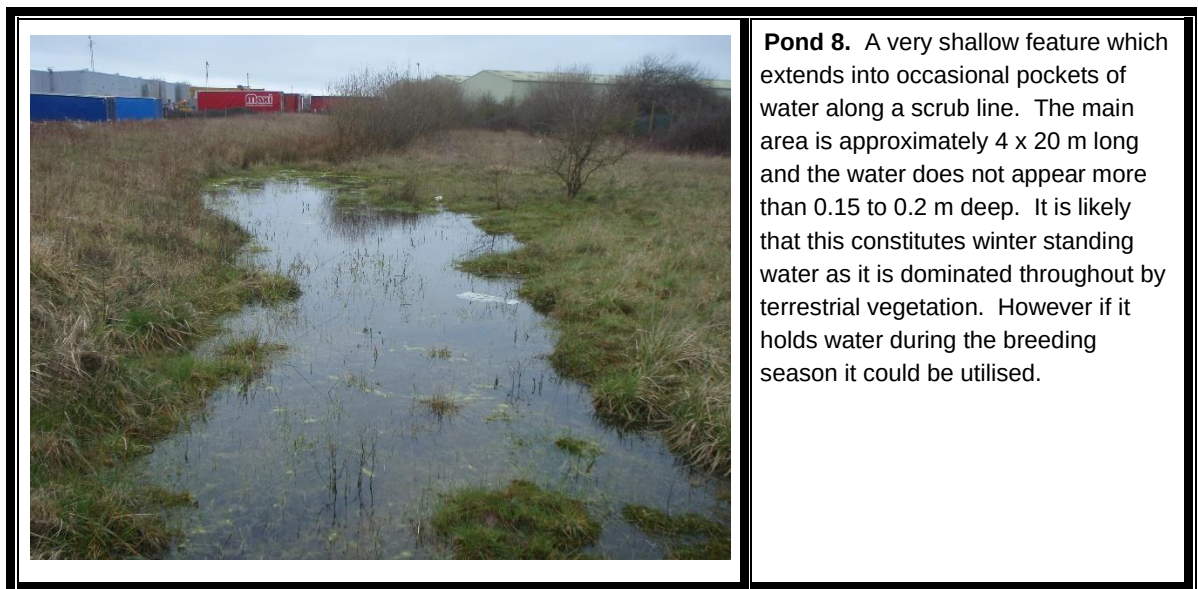
	Pond 1. A large, approximately circular, pond in an improved grassland field. No stock were present at the time of the walkover although there is no fencing to prevent access. The depth is unknown although it appears likely to be deep in the centre. There is a 3-4 m vegetated margin which appears to be species rich, supporting for example <i>Juncus effusus</i> (Soft-rush), <i>Carex</i> sp. (a Sedge), abundant <i>Myosotis scorpioides</i> (Water Forget-me-not), <i>Glyceria fluitans</i> (Floating Sweet-grass), <i>Alisma plantago-aquatica</i> (Water-plantain), <i>Nasturtium officinale</i> (Water-cress), <i>Lythrum salicaria</i> (Purple Loosestrife), and <i>Ranunculus</i> sp. (a Water Crowfoot), <i>Callitriche</i> sp. (a Water-starwort) and <i>Apium nodiflorum</i> (Fool's-water-cress). No submerged/ floating-leaved vegetation was seen in the remainder of the pond; during the detailed Great Crested Newt survey this was found to be dominated by filamentous algae.
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Pond 2. A moderately sized pond in an improved grassland field. No stock were present at the time of the walkover although there is no fencing to prevent access and there is puddling evident. The depth is unknown although it appears likely to be deep in the centre. There are occasionally Soft-rush tussocks at the edges and two small linear stands of *Typha latifolia* (Bulrush); otherwise there appears to be only occasional, scattered, marginal vegetation including Water-plantain, Water-cress, Creeping Bent, Floating Sweet-grass, Fool's-water-cress, Water Forget-me-not and a Water-starwort. No submerged/ floating-leaved vegetation was seen in the remainder of the pond, including during the detailed surveys.



Pond 7. A small, heavily shaded, roadside pond. It is connected to two minor ditches which pass alongside the road. It comprises shallow water under Willow scrub may dry out during the summer months. The water has abundant leaf litter, small woody debris and litter (from the road) associated with it. It could only be accessed along the roadside margin. Here there is a narrow fringe of Soft-rush with occasional marginal plants such as Great Willowherb, Fool's-water-cress, Floating Sweet-grass and Creeping Bent. A Great Crested Newt egg was located during a brief egg-search.



2.3.21 Detailed HSI results tables are provided as *Table 7 to 10* in *Section 8*, with a summary provided in *Table 2* below.

Table 2 – Habitat Suitability Index Score

Pond	HSI Category										10th Root	Pond Suitability
	SI ₁ Location	SI ₂ Pond area	SI ₃ Pond drying	SI ₄ Water Quality	SI ₅ Shade	SI ₆ Fowl	SI ₇ Fish	SI ₈ Ponds	SI ₉ Terrestrial Habitat	SI ₁₀ Macrophytes		
1	1	0.9	0.9	0.67	1	0.01	1	1	0.67	0.8	0.5577	Below Average
2	1	0.75	0.9	0.67	1	0.01	1	1	0.67	0.6	0.5321	Below Average
7	1	0.4	0.5	0.33	0.2	1	1	1	0.67	0.4	0.5687	Below Average
8	1	0.1	0.1	0.67	1	1	1	1	0.67	0.85	0.573	Below Average

2.3.22 HSI scores relate to a categorical scale and as such ponds can be classed as 'poor', 'below average', 'average', 'good' or 'excellent'. All four ponds subject to pond scoping have been classed as 'below average' in terms of their suitability to support Great Crested Newts and therefore likelihood that this species may be present.

2.3.23 A heavy weighting within the HSI assessment scoring is given to the presence or absence of fish and the size/ density of populations if present, along with fowl grazing. No fish were recorded during the detailed surveys. Ponds 1 and 2 appear to have 'major' grazing pressure from Canada Geese (*Branta canadensis*) which has weighted their scorings; if this was re-assessed as 'minor', both ponds would be classed as 'excellent'.

2.3.24 During (brief) egg-searches at each pond, a small number of Great Crested Newt eggs were located at Pond 7. A small amount of Frogspawn was located in Pond 1.

Detailed Survey

- 2.3.25 Weather conditions during the survey are provided in *Table 3* below. The full results of the presence/ absence survey are provided in *Table 11* in *Section 8*. Pond 8 was found to be completely dry on the first visit; it was visited again before the 2nd visit and remained dry. A summary of these results is presented here in *Table 4* below.

Table 3 – Weather Conditions During Presence/ Absence Survey

Visit	Date	Temperature at dusk	Wind (Beaufort Scale)	General Weather Conditions
1	20/04/21	9°C	1	Dry, 100% white cloud.
2	12/05/21	9°C	1-2	Dry, 30% grey cloud, heavy rain earlier in day.

Table 4 – Great Crested Newt Survey – Summary of Results

Waterbody	Maximum Count			GCN egg recorded	GCN Population Class ¹⁰
	Great Crested Newt	Smooth Newt	Palmate Newt (& Smooth/ Palmate Female ¹¹)		
1	4	6	0	Yes	Small
2	14	2	0	Yes	Medium
7	1	1	0	Yes	Small

- 2.3.26 Three of the four ponds subject to survey were found to support breeding populations of Great Crested Newts, with maximum counts of 4 (Pond 1), 14 (Pond 2) and 1 (Pond 7). Pond 8 was dry throughout the survey.
- 2.3.27 English Nature (2001) details that population estimate surveys ‘*may reveal from around 2% to 30% of the population*’. Although only 2 survey visits were completed to each pond, it is still considered a useful tool. As such populations supported by each pond may currently be in the region of between; 13 and 200 animals (Pond 1), 46 and 700 (Pond 2), and 3 and 50 (Pond 7).
- 2.3.28 The eggs recorded at Pond 7 during the scoping survey were above the water line/ had desiccated by the time of the survey visits. A small number of Smooth Newt eggs were however located. It is unknown if breeding is successful at this pond if the water level fluctuates greatly. Based on this, and in consideration of its poor quality (HSI of below average), it is deemed likely that the pond is used opportunistically by an individual or very small number of adults only.
- 2.3.29 Small number of Smooth Newt were recorded in each waterbody. Common Frog was recorded at Pond 1 only. No Common Toads were recorded.

¹⁰ In accordance with English Nature (2001).

¹¹ Total may include some female Smooth Newts.

- 2.3.30 During the reptile survey (refer below) a juvenile Great Crested Newt was recorded under a tin (located just outside of the proposed development site – no. 11, *Figure 3*) on 04/06/21. A small number of Common Toads were also recorded under artificial refugia throughout the site on a number of occasions (maximum count: 10).

Reptiles

Desk Study

- 2.3.31 Cofnod provided 2 records of both Adder (*Vipera berus*) and Slow-worm (*Anguis fragilis*) from the 1 km search area. They are both dated 1999 and are from an adjacent 1 km grid square (SJ 3849) to that in which the proposed development/ survey site is located. Marches Ecology has also undertaken a number of reptile presence/ absence surveys across Wrexham Industrial Estate over the last 14 years (for unrelated projects) and have not recorded any reptiles in this time. However despite this, in recent years it is known that both Grass Snake (*Natrix natrix*) and Common Lizard (*Zootoca vivipara*) have been recorded in low numbers from the industrial estate.

Habitat Assessment

- 2.3.32 The unmanaged grassland and scrub habitats at *Target Notes 4, 5, 11, 12, 17, 18 and 19* (i.e. extending into the wider survey site) provide habitat of high potential value for reptiles. This is particularly the case given that the area of this habitat within the proposed development/ survey site is a small corner or a larger field unit which provides a similar habitat resource. In addition to this, the field unit is known to connect to similar habitat to the immediate north (*Target Note 8*) and, from a review of aerial photography, appears to be part of a complex of semi-natural habitats that extend north and south on the fringes of the industrial estate.

Reptile Survey

- 2.3.33 The presence/ absence survey was completed between 14th April and 04th June 2021. *Table 5* below provides details of the weather conditions recorded during the reptile survey visits.

Table 5 – Weather Conditions During Presence/ Absence Survey

Visit	Date	Time of Visit	Air temperature	Wind (Beaufort Scale)	General Weather Conditions
1	14/04/21	PM	11-12°C	B0-2	90% high white/ grey cloud, very occasional direct sunshine, dry.
2	20/04/21	AM	13°C	B0-1	Occasional hazy cloud, otherwise blue sky, dry.
3	28/04/21	PM	13°C	B0-1	As 12/04/21.
4	07/05/21	PM	9-10°C	B1	Immediately after heavy rain shower. 75% cloud, very occasional direct sunshine.
5	19/05/21	AM	13°C	B1-2	50-75% scattered high cloud, occasional direct sunshine, dry.

Visit	Date	Time of Visit	Air temperature	Wind (Beaufort Scale)	General Weather Conditions
6	27/05/21	AM	15-16°C	B0-1	10% scattered high cloud, frequent direct sunshine, dry (after prolonged period of cool, wet weather)
7	04/06/21	AM	13-15°C	B0-1	35% scattered high cloud, frequent direct sunshine, dry

2.3.34 No reptiles were found during the survey.

Birds

- 2.3.35 Cofnod provided a large number of bird records from within 1 km of the proposed development/ survey site (though none from within/ immediately adjacent to it) largely with four-figure grid references. Records of possible relevance to the proposed development/ survey site include Dunnock (*Prunella modularis*), Starling (*Sturnus vulgaris*), Fieldfare (*Turdus pilaris*), Bullfinch (*Pyrrhula pyrrhula*), Snipe, Song Thrush (*Turdus philomelos*), Barn Owl (*Tyto alba*), Swallow (*Hirundo rustica*), Willow Warbler (*Phylloscopus trochilus*), Green Woodpecker (*Picus viridis*), Woodcock (*Scolopax rusticola*), Tree Sparrow (*Passer montanus*) and Whitethroat (*Sylvia communis*). Species such as Bullfinch, Song Thrush, Willow Warbler, Tree Sparrow and Whitethroat could potentially nest within the (wider) survey site. The grassland provides suitable hunting habitat for the Barn Owl, although only a small proportion of a larger resource is present within the proposed development/ survey site.
- 2.3.36 The proposed development/ survey site provides nesting opportunities for species of bird associated with trees/ dense scrub and possibly built structures (for example the features at *Target Notes 1a* and *1c* provide some, albeit minimal, opportunities). Similar opportunities (excluding built structures) are provided by the wider survey site.
- 2.3.37 A small number of Snipe (*Gallinago gallinago*) were flushed away on several occasions from the grassland at *Target Note 4* on 01/02/21; these would be using the grassland for wintering/ feeding purposes only.

Other Species

- 2.3.38 Cofnod provided a large number of butterfly and moth records within 1 km of the proposed development/ survey site (though none from within it). Records of possible relevance to the survey site include Dingy Skipper (*Erynnis tages*), Grizzled Skipper (*Pyrgus malvae*), Small Heath (*Coenonympha pamphilus*), Wall (*Lassiomata megera*) and Cinnabar (*Tyria jacobaeae*). The closest records for both Dingy Skipper and Grizzled Skipper are for over 500 m away to the west.
- 2.3.39 Due to frequently mown status of the grassland at *Target Note 3*, and the rank structure of the neutral grassland, the (wider) survey site is unlikely to be of potential value for either species of Skipper or Wall or Small Heath. The habitats present could possibly support the Cinnabar though this would be restricted by the limited amount of Ragwort.
- 2.3.40 Cofnod provided several records of other invertebrates none of which are from the proposed development/ survey site or immediately adjacent habitats.

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- 2.3.41 A small number of other mammal records were supplied by Cofnod; including for American Mink (*Neovison vison*), Hare (*Lepus europaeus*), Otter (*Lutra lutra*) and Stoat (*Mustela erminea*). With the exception of Otter, the habitats present could support these species but are unlikely to be of any particular value.
- 2.3.42 A small number of Atlantic Salmon (*Salmo salar*), Brown/ Sea Trout (*Salmo trutta*) and Eel (*Anguilla anguilla*) records were also provided from the Afon Clywedog, which passes to the south of the proposed development/ survey site (approximately 500 m at its closest point).

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 designated 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 proposed development site and associated survey/ wider survey sites as deemed appropriate.

4.2 Evaluation, Assessment and Recommendations

Designated Sites

4.2.1 No statutory or non-statutory designated sites would be directly impacted by the proposed development. No ASNW would be (in)directly impacted.

4.2.2 Potential indirect impacts that require consideration are likely to be limited to aerial emissions during the operation phase. The proposed development site is located within the 2nd outer Impact Risk Zone (IRZ) for the River Dee and Bala Lake designated site. *'Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals to SSSIs, SACs, SPAs and Ramsar sites. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts¹²'.*

4.2.3 While IRZs were developed for use in England it does provide a useful initial assessment. Applicable categories of development which are identified as posing a risk in this instance are:

'Any industrial/ agricultural development that could cause air pollution including industrial processes with a floorspace greater than 500 m²'

'General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.'

4.2.4 The footprint of the proposed development (new additional floor areas) is 1275 m² without the 3 additional kilns which might be installed in the future (refer to *Section 1.4*). It is understood (Kingsway Design, *pers. comm.*) that *'the only emissions from the new biomass boiler is steam and the boiler is rated at 2.1 Mw'*. Taking these factors into account, along with the overall scale of the proposed development and the distance to the River Dee it is considered unlikely that the proposal would give rise to any significant indirect impacts on this protected site. However reference should be made to an NRW consultation response

¹² <https://data.gov.uk/dataset/5ae2af0c-1363-4d40-9d1a-e5a1381449f8/sssi-impact-risk-zones>

letter (ref: CAS-142544-X5K4, dated 08/04/2021)¹³ available on the WCBC planning portal which states that ‘...clarification of the net thermal input of the biomass boiler [is required along with] an air quality assessment....’. Further consideration of potential impacts from aerial emissions on the SAC is therefore required; this is outside the scope of this report.

- 4.2.5 The closest non-statutory site (‘Wrexham Industrial Estate’) is located 315 m away from the proposed development site. No indirect impacts are anticipated.

Habitat

- 4.2.6 The proposed development/ (wider) survey sites include the following habitat resources:

- Unimproved neutral grassland;
- Amenity grassland;
- Dense and scattered scrub;
- Individual trees;
- Built structures; and
- Hard-standing and bare-ground.

Due to the size, quality and geographical location of the habitat resources listed above they may be considered individually to be of no more than site value¹⁴. However, the neutral grassland and scrub is part of a larger complex and, when considered as a whole, this resource it is likely to be of local value.

- 4.2.7 No further survey of this habitat resource is considered necessary at this time.
- 4.2.8 The proposal would result in the permanent loss of all the habitat within the proposed development site. However, taking into account the small areas concerned, loss of these habitat resources would not give rise to a significant impact. The wider field unit (for example at *Target Notes 11, 12, 17, 18* and *19*) would not be directly impacted by the proposal (with the exception of incorporating some of this land within an ecological mitigation area (EMA) with associated habitat enhancements (refer below)); as such loss of the small area (approximately 0.26 ha) of neutral grassland and scrub within the footprint of the proposed development is not considered likely to affect the overall integrity/ ecological value of the retained habitats. No particular mitigation measures are proposed (other than the avoidance/ best practice measures, and fauna species-specific led requirements, as detailed below).
- 4.2.9 As further detailed below, an EMA is to be provided; this will largely offset perceived impacts on Great Crested Newts, but also to some extent other valued ecological resources (such as scrub nesting birds). It is proposed that the EMA is situated within the wider field unit associated with *Target Notes 11, 12, 17, 18* and *19* which would allow retention of scrub and unmanaged grassland within the EMA. It is likely to be beneficial for it to be at least in part directly adjacent to the proposed development site (for example to enable ease of access for machinery etc.) Further detailed design of the EMA is required; it is likely that this will include for a new pond(s)/ hibernaculum(a) to be created in the EMA (with regards Great Crested Newts) and also that species-rich scrub planting will be undertaken (with regards off-setting perceived impacts on scrub nesting birds). In addition, a new native species-rich hedge will be established around the edge of the development (where it abuts the remainder

¹³ This consultation response also includes a requirement to further consider potential foul drainage/ sewerage impacts on the SAC which is outside the scope of this report.

¹⁴ In accordance with CIEEM (2018).

of the grassland/ scrub resource), it is proposed that at least parts of this hedge will be incorporated into the EMA. Emma Broad (WCBC Ecologist) has also requested that consideration is given to creating habitat suitable for Skipper butterflies; this is further discussed below.

- 4.2.10 The EMA will be outlined within an Ecological Mitigation Method Statement (EMMS); the requirement for and scope of this document has been discussed and agreed with Emma Broad. The EMMS will need to include broad details of proposed management of retained/ created habitats.
- 4.2.11 Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government 2009) seeks development to achieve net biodiversity gain. Creation and management of the EMA will provide an enhancement in the long-term and be in line with TAN 5.
- 4.2.12 Any scrub or hedge planting should include shrubs that are of ideally locally native provenance but as a minimum certified British native origin.
- 4.2.13 Prior to the start of construction or preparatory operations temporary protective fencing will be installed around the outside of the proposed development site to ensure adjacent/ retained habitats (including the EMA) are not subject to inadvertent disturbance. Additional fencing may be required within the EMA itself to protect retained habitats from e.g. pond creation works. These details will be further outlined in the EMMS.
- 4.2.14 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.

This should be included in any EMMS that is prepared.

- 4.2.15 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 development site.

Flora

- 4.2.16 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/ (wider) survey sites. No plants listed in *Schedule 9 to the Wildlife and Countryside Act 1981* (as amended) were recorded. It is proposed that the vegetation where Common Stork's-Bill is growing at *Target Note 3* will be scrapped off and re-lain on a suitable area of ground at the edge of the proposed development, within the EMA, or elsewhere within the James Jones & Sons Ltd facility.
- 4.2.17 A very small number of Ash saplings were recorded within the proposed development/ survey site. Although no symptoms of 'Ash dieback' (caused by the fungus *Hymenoscyphus fraxineus*) were recorded, as a precautionary approach basic biosecurity measures will be required particularly when undertaking initial vegetation clearance. Best practice guidance is

available on the Natural Resources Wales website¹⁵. Preparation (and implementation) of a Biosecurity Risk Assessment/ Method Statement will be required to both support the Great Crested Newt licence application (refer below) and also will likely be subject to a planning condition.

Fauna

Badgers

- 4.2.18 No setts were recorded within the proposed development/ (wider) survey sites. However evidence may have been obscured by dense vegetation, especially at *Target Notes 5, 11, 12 and 19*; opportunities for sett excavation are provided by these habitats. No evidence of Badger activity has been recorded from the proposed development site. Evidence, including footprints, caught guard hairs, two paths, a dung-pit, and occasional foraging (*Target Notes 10/a, 13 and 15*) was recorded in the wider survey site in March 2021, however no further evidence of Badger was recorded on any subsequent visits to the site. By early June the paths were not obvious in the growing sward and the breaches were largely obscured by fresh vegetation growth. The unmanaged grassland at *Target Notes 4, 17 and 18* provides habitat of moderate potential value for Badger foraging.
- 4.2.19 The proposed development would result in the loss of a small amount of unmanaged grassland that could be used for foraging. The proposed development site only comprises a small corner of a larger field unit which supports similar habitats and which would continue to be available to Badgers for foraging and sett construction. The loss of the habitats within the proposed development site is not considered likely to impact (potential) Badger movements as it will not result in any measurable fragmentation (there being existing industrial facilities to the immediate south and west).
- 4.2.20 No significant impacts on Badgers are anticipated at the current time. As a precautionary approach, best practice will be implemented during the preparatory and construction phases to avoid any potential impacts on Badgers. Further details will be provided in the EMMS.
- 4.2.21 Due the Badger activity recorded on the site, there remains the potential for a sett(s) to be obscured by the dense scrub vegetation within the proposed development site at *Target Note 5*, which is up to approx. 10 m deep. A pre-construction survey is not deemed likely to provide any additional information in the short-term, although if site clearance/ construction work is not implemented within 12 months of the final survey visits which are detailed within this report (June 2022) then the site will be re-surveyed by a suitably qualified ecologist to check for any setts. However regardless of this, scrub clearance works will be supervised by an ecologist. This will encompass scrub being cleared with hand-tools only in a methodical manner from one edge of the scrub at a time. It should be cleared in narrow strips only with hand-/ visual searches being completed for setts as it progresses. Should a sett/ possible sett be located by the ecologist during this process, all clearance works will cease immediately. Further decisions will be made at that time with regards potential licencing requirements.

¹⁵ <https://naturalresources.wales/guidance-and-advice/business-sectors/forestry/tree-health-and-biosecurity/?lang=en>

Bats

- 4.2.22 There are no trees that could provide potential roosting features located within the proposed development/ (wider) survey sites or immediately adjacent habitats. Likewise none of the built structures present provide any more than negligible bat roost potential. As such the proposal would not have any impact on (roosting) bats.
- 4.2.23 Although the unmanaged grassland and scrub at *Target Notes 4* and *5* within the proposed development site which is to be lost due to the proposal is likely to be of moderate to high potential value for foraging bats, it represents only a small part of a much larger area of similar habitat (associated with the remainder of the field unit and also extending into similar habitat further north, *e.g. Target Note 8*). As such and as a stand-alone resource the scrub is not considered likely to provide any particular value for commuting bats. The scrub resource to the east of the proposed development/ survey site (for example at *Target Note 11*) is deemed more likely to be of value to commuting bats.
- 4.2.24 The wider field unit will be retained, part of which will be incorporated into an EMA as outlined above. The EMA will seek to retain areas of unmanaged grassland and scrub, with any proposed scrub planting seeking to enhance existing sheltered lines/ corridors/ bolster connectivity. It will also be enhanced by the creation of a new pond(s) which is likely to be of value for foraging bats. Overall, based on the small-scale of the proposal, and the proposed EMA, no significant impact is anticipated on foraging/ commuting bats. No further survey is proposed.
- 4.2.25 No information is currently available on external lighting with regards the proposal. The potential impact of lighting (both during construction and operation) on bats that may use the proposed development/ (wider) survey sites and adjacent habitat should be considered. Any external lighting at the proposed development site should follow guidance provided by The Bat Conservation Trust and Institution of Lighting Professionals (2018). Further details will be provided in the EMMS but should take account of the following:
- Lighting that reduces vertical and horizontal light spillage should be used.
 - Adjacent retained and or created habitats should be kept as dark as possible with ideally lighting adjacent to these areas avoided.
 - 'Warm white' LED lamps should be used.
 - All luminaires should lack UV elements when manufactured and have an upward light ratio of 0%.
 - 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).

- Cowls/ hoods/ baffles or similar will be used where the light spillage is likely to cause an unacceptable light level increase in adjacent retained and or created habitat.

- 4.2.26 A lighting plan will be reviewed by a bat ecologist and amended accordingly. Assuming that a sympathetic lighting arrangement is installed, no significant impact on potential foraging/ commuting resources close to the proposed development site is anticipated.
- 4.2.27 The proposed development presents an opportunity to increase potential roost features within the site. 2 no. pole-mounted bat-boxes will be installed within the EMA. This would provide an enhancement in line with TAN 5. The specification of these boxes will be included for within the EMMS.

Great Crested Newts

- 4.2.28 The unmanaged grassland and scrub habitats that will be impacted by the proposed development provide high quality potential terrestrial habitat for Great Crested Newts. This terrestrial habitat is linked to further high quality terrestrial habitat outside the proposed development site. Other features which could also be utilised by amphibians are located within the proposed development site, for example the unmanaged scrub corner at *Target Note 2*, a small debris pile at *Target Note 3a*, and the bases of buildings/ associated hard-standing (particularly patio slabs).
- 4.2.29 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. 4 no. ponds within 250 m of the proposed development/ survey site (excluding those associated with barriers to movement) were located during the pond-scoping survey, three of which (Ponds 1, 2 and 7) have been subject to detailed survey (comprising 2 no. visits); Pond 8 was found to be dry throughout the survey period. Ponds 1, 2 and 7 were found to support small/ medium/ small breeding populations (respectively) of Great Crested Newts. Populations supported by each pond may currently be in the region of between; 13 and 200 animals (Pond 1), 46 and 700 (Pond 2), and 3 and 50 (Pond 7). Pond 7 however is deemed likely to be used opportunistically by an individual or very small number of adults only.
- 4.2.30 Small number of Smooth Newt, Common Frog and Common Toads were also recorded during the pond surveys (the latter including under reptile refugia on the proposed development site); a juvenile Great Crested Newt was also recorded under a reptile tin just outside of the proposed development site.
- 4.2.31 Due to the small area of (albeit high quality) terrestrial habitat that will be impacted, distance from ponds, and there being likely no impacts on dispersal opportunities or fragmentation of habitats/ creation of barriers, the proposed development is unlikely to result in a significant impact on the local Great Crested Newt population (in the absence of mitigation measures). However, as there is a risk of disturbing/ killing individual Great Crested Newts during the proposed development, a 'development' licence will be required from NRW in order for any scheme to legally proceed. The associated licence application will need to consider in detail maintenance of the Favourable Conservation Status (FCS) of the species in this area both during and after construction. Further details on the proposed mitigation/ compensation will be provided in the EMMS. Mitigation will include the completion of a licenced translocation programme.
- 4.2.32 With the implementation of appropriate mitigation measures to be outlined in the EMMS it is likely that the proposal would have a positive impact in the medium-term, particularly due to

the provision of a new pond(s), hibernaculum(a) and scrub/ hedge planting, as well as securing appropriate long-term site management of the EMA. The EMMS will also include indicative details of long-term monitoring (of the created ponds) and the requirement for 'amphibian friendly' drainage. Preparation of this document will likely require further consultation with Emma and Matt Ellis at NRW (the later to discuss the NRW consultation response letter (refer above) and what information is required to be confirmed at this stage). It will also make reference to the requirement for an Ecological Compliance Audit (ECA) and Biosecurity Risk Assessment/ Method Statement (which will both form part of any NRW licence application).

Reptiles

- 4.2.33 No reptiles were found during the presence/ absence survey. At present therefore no impacts on reptiles are anticipated. However there remains a negligible risk of individual/ low numbers of reptiles utilising the site. As such a purely precautionary approach will be adopted. The licensed ecologist will maintain a watching brief during the implementation of mitigation measures for Great Crested Newts. Should any reptiles be found at this time it may be necessary to temporarily halt work whilst appropriate reptile mitigation/ avoidance measures are designed and implemented. Such details will be included within the EMMS.

Birds

- 4.2.34 The proposal would result in the loss of a small area (approximately 0.15 ha) of dense Bramble dominated scrub, along with scattered shrubs and a single tree that could be used by nesting birds, and two built structures which provide minimal opportunities. The proposed EMA will include retention of existing scrub habitats and will also incorporate new (native/ diverse) scrub planting. This would partly offset the loss of these habitat features in the medium-term (it is however recognised that given the likely size of the EMA, and requirement to consider other ecological resources that it is unlikely to be possible for this to represent like-for-like mitigation for the loss of nesting opportunities). Whilst it is unlikely that the scrub resource that is to be lost could be fully mitigated for and there is likely to be some loss of scrub habitat, assuming careful design of the EMA and subsequent targeted long-term management (which will be further detailed in the EMMS) it is considered unlikely that the proposal would give rise to a significant impact on local bird populations.
- 4.2.35 Snipe are considered likely to be able to use the remainder of the grassland resource (in the wider survey site) that is not impacted in the long-term.
- 4.2.36 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).
- 4.2.37 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. clearance of scrub, trees, demolition of 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.
- 4.2.38 The proposal as detailed in Marches Ecology (2021) to installing a pole-mounted Barn Owl box within the EMA was discussed with Emma Broad who advised that existing features are available in the general locality and as such no further boxes are deemed necessary.

Other Species

- 4.2.39 No significant impact on any other species of conservation interest is currently anticipated, and no particular mitigation measures are proposed. Further to dialogue with Emma Broad it is proposed for the EMA to be enhanced (where possible) for Skipper butterflies by the creation/ on-going management of suitable habitats (for example scraped areas of turf to create bare areas, and/ or a butterfly bank). This will be further detailed in the EMMS as deemed appropriate.

5 SUMMARY CONCLUSIONS

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

- No designated sites will be directly impacted by the proposed development.
- No designated sites are currently anticipated to be indirectly impacted by the proposed development (although refer to *paragraph 5.1.2* below).
- No ASNW would be directly or indirectly impacted by the proposed development.
- A small area (approx. 0.26 ha) of neutral grassland/ scrub which is part of a larger resource deemed to be of local value would be lost due to the proposed development.
- Other habitat resources which will be lost are limited to features of site value only such as scattered shrubs, a single mature Goat Willow 'tree', amenity grassland and built structures.
- A single locally scarce plant – Common Stork's-bill – was recorded within the proposed development site. It is however understood that this is in the process of being re-registered with no local scarcity status.
- No non-native plants listed in *Schedule 9* were recorded from the development/ wider survey sites.
- Opportunities for sett excavation within the proposed development site are provided by dense Bramble scrub which is impenetrable and up to approx. 10 m deep. Limited Badger evidence has been recorded in the wider survey site. The proposed development site provides a small area of potential foraging habitat. No significant impacts on Badgers are anticipated at the current time.
- The proposal would not have any impact on (roosting) bats.
- Although the unmanaged grassland and scrub resource within the proposed development site is likely to be of moderate to high potential value for foraging bats, it represents only a small part of a much larger area of similar habitat. The scrub is not considered likely to provide any particular value for commuting bats at this location. No significant impacts on foraging/ commuting bats are anticipated.
- The unmanaged grassland and scrub habitats that will be impacted by the proposed development provide high quality potential terrestrial habitat for Great Crested Newts. Further to detailed survey 3 ponds within 250 m have been recorded as supporting breeding Great Crested Newts. A juvenile Great Crested Newt has been recorded using terrestrial habitat just outside the proposed development site boundary.
- In the absence of mitigation measures the proposed development is unlikely to result in a significant impact on the local Great Crested Newt population. However, there is a risk of disturbing/ killing individual Great Crested Newts during any proposed development.
- No reptiles were recorded during the presence/ absence survey. At present therefore no impacts on reptiles are anticipated
- Opportunities for nesting birds are provided by a small area of dense Bramble scrub, along with scattered shrubs and a single tree, and two built structures which provide minimal opportunities. The proposal is not deemed likely to give rise to a significant impact on local bird populations.

5.5.2 This report recommends the following avoidance/ mitigation measures:

- Further consideration of potential impacts from aerial emissions and foul drainage/ sewerage on the River Dee and Bala Lake SAC is required; this is outside the scope of this report.
- Provision of an ecological mitigation area (EMA) to be outlined with an Ecological Mitigation Method Statement (EMMS). This is to be provided largely to offset perceived impacts on Great Crested Newts and to some extent other valued ecological resources (such as scrub nesting birds). To include a new pond(s)/ hibernaculum(a) and hedgerow (including round the edge of the development)/ scrub planting. Consideration to be given to habitat creation for Skipper butterflies.
- Any scrub or hedge planting should include shrubs that are of ideally locally native provenance but as a minimum certified British native origin.
- Protective fencing will be installed to protect the adjacent habitats during preparatory/ construction works.
- General best practice measures will be implemented during preparatory/ construction works to avoid any indirect impacts on adjacent habitat.
- If possible, the vegetation where Common Stork's-Bill is growing should be scrapped off and re-lain elsewhere.
- Appropriate biosecurity measures will be established and implemented during preparatory and construction works.
- A pre-construction Badger survey should be undertaken if the development is not commenced prior to June 2022. Regardless of this, scrub clearance works will be supervised by an ecologist. Best practice measures will also be implemented during the preparatory and construction phases to avoid any potential impacts on Badgers.
- The design of the EMA should seek to enhance existing sheltered lines/ corridors/ bolster connectivity for foraging/ commuting bats.
- Any external lighting provided as part of the proposed development should accord with best practice guidance to minimise impacts on foraging/ commuting bats and keep adjacent retained/ created habitats as dark as possible. A lighting plan will be reviewed by a bat ecologist and amended accordingly.
- A Great Crested Newt 'development' licence will be required from Natural Resources Wales (NRW) in order for the scheme to legally proceed at this site. The associated licence application will need to consider in detail maintenance of the Favourable Conservation Status (FCS) of the species. Further details on the proposed mitigation/ compensation will be provided in the EMMS, this is likely to require further consultation with WCBC/ NRW.
- A precautionary watching brief for reptiles will be maintained during the implementation of mitigation measures for Great Crested Newts.
- Site clearance works/ removal of vegetation/ demolition of built structures should be undertaken outside the bird nesting season. Should this not be possible then suitable habitat/ features will be checked by a qualified ecologist prior to the commencement of work.

5.1.3 This report recommends the following enhancement measure:

- 2 no. pole-mounted bat-boxes will be installed within the EMA. The specification of these boxes will be included for within the EMMS.

6 TARGET NOTES

Proposed Development/ Survey Site

Target Notes 1a-d. 4 no built structures, as follows:

Target Note 1a. The largest of the 4 structures, this comprises a single storey shed-type building which is constructed of corrugated metal walls and roof. It has a small number of windows and a large access door on the south-west facing wall. It appears to be in good condition. No internal access was sought. There appear to be minor gaps where some of the corrugated roof plates meet the walls.

Target Note 1b & 1d. 2 no. metal units.

Target Note 1c. A small wooden shed with single-skin walls. There are gaps between the roof and the front wall, allowing potential access for birds.

None of these structures are considered to provide any more than negligible bat roost potential. The structures at *Target Notes 1a* and *1c* could however provide minor bird nesting opportunities.

Target Note 2. A mature *Salix caprea* (Goat Willow) and associated scattered/ low growing scrub (mostly *Rubus fruticosus* agg (Bramble)) in an apparently unmanaged corner of the survey site. The Willow does not provide any more than negligible bat roost potential.

Target Note 3. Amenity grassland. On 01/02/21 the sward height was to approximately 0.05m, but frequently less with evidence of frequent management (mowing). Throughout the majority of the survey period for reptiles and during the botanical update on 19/05/21 it was not mown, with a sward height of 0.2 m being obtained. It does however appear to be grazed by Rabbit (*Oryctolagus cuniculus*) and was mown by the 5th reptile check.

The sward is dominated by a range of grasses including *Lolium perenne* (Perennial Rye-grass), *Holcus lanatus* (Yorkshire-fog) and *Festuca rubra* (Red Fescue); *Juncus inflexus* (Hard Rush) is occasional. Overall this resource is fairly species-rich; *Bellis perennis* (Daisy), *Leucanthemum vulgare* (Oxeye Daisy) and *Ranunculus repens* (Creeping Buttercup) are frequent/ locally abundant with a wide range of other forbs being scattered throughout, often at low levels of abundance. These include *Cerastium fontanum* (Common Mouse-ear), *Prunella vulgaris* (Self-heal), *Plantago lanceolata* (Ribwort Plantain), *Hypochaeris radicata* (Cat's-ear), *Primula veris* (Cowslip), *Lathyrus pratensis* (Meadow Vetchling), *Erodium cicutarium* (Common Stork's-Bill), *Veronica serpyllifolia* (Thyme-leaved Speedwell), *Trifolium dubium* (Lesser Trefoil) and *Centaurea nigra* (Common Knapweed).

Target Note 3a. A small debris pile (comprising bricks/ rubble/ timbers etc.) adjacent to the building at *Target Note 1a*.

Target Note 4. Unmanaged neutral grassland which extends outside of the survey site to occupy the majority of a field unit (which is fringed by dense scrub, for example *Target Notes 5* and *11*). The grassland was wet underfoot on 01/02/21 and there are occasional old machine tracks which held shallow standing water. The sward is dense and tussocky and appears unmanaged; it is frequently to approximately 1 m in height and could be described as rank.

The sward is (visually) dominated by Hard Rush, with associated coarse-leaved/ tussocky grasses including abundant *Deschampsia cespitosa* (Tufted Hair-grass), frequent *Dactylis glomerata* (Cock's-foot), Yorkshire-fog and *Agrostis stolonifera* (Creeping Bent), and lesser amounts of *Arrhenatherum elatius* (False Oat-grass). The sedges *Carex nigra* (Common Sedge) and *Carex otrubae* (False-fox Sedge) are also present.

(Bulky) tall-herbs are a characteristic feature including frequent/ locally abundant *Epilobium hirsutum* (Great Willowherb), and lesser amounts of Common Knapweed, *Cirsium arvense* (Creeping Thistle), *Stachys sylvatica* (Hedge Woundwort), *Heracleum sphondylium* (Hogweed), *Pulicaria dysenterica* (Common Fleabane), Oxeye Daisy and *Urtica dioica* (Common Nettle).

Low-growing forbs are scattered throughout largely at low levels of abundance including Creeping Buttercup, *Vicia sativa* (Common Vetch), *Lathyrus pratensis* (Meadow Vetchling), Ribwort Plantain, Self-heal, Cowslip, and *Potentilla reptans* (Creeping Cinquefoil).

Overall this resource appears to be moderately species-rich at most (although large areas could be described as species-poor).

Young shrub saplings are occasionally present, largely *Crataegus monogyna* (Hawthorn) with occasional *Quercus robur* (Pedunculate Oak) and *Fraxinus excelsior* (Ash). A small number of Snipe (*Gallinago gallinago*) were flushed away on several occasions on 01/02/21.

Target Note 5. Dense scrub is located adjacent to boundary fences and is impenetrable, being largely characterised by Bramble to 2 m high and frequently more than 10 m wide.

Target Note 7. A possible animal breach into dense scrub (initially located during installation of reptile refugia on 22/03/21) with a faint, short path in the adjacent grassland. No evidence of Badger (*Meles meles*) observed. Throughout the survey period for reptiles no evidence of Badger was located, and on 19/05/21 the possible breach was found to be largely obscured by fresh vegetation growth.

Wider Survey Site

Target Note 9. A semi-mature Pedunculate Oak located on the immediate wider survey site of a fence-line. It has an approximate diameter at breast height (dbh) of 0.3 m. No potential roost features were observed. This tree has negligible bat roost potential.

Target Note 10. A cleared area of land, characterised by bare earth. The mapping of the extent of this feature should be considered approximate only. A small number of Badger footprints were located here on 22/03/21, although during subsequent survey visits. At **Target Note 10a**, a few Badger guard hairs were recorded (on 18/03/21 during the pond scoping exercise) caught on the base of the fence/ on the ground beneath. A clump of hairs was also caught on adjacent barb-wire fence (on the field side of the scrub) and a partial Badger footprint in wet mud on the adjacent ditch edge. No discernible paths were recorded with this evidence, although the scrub at this location is impenetrable. No additional Badger evidence was recorded at this **Target Note** during subsequent site visits.

Target Note 11. A wide band of scrub is located adjacent to the boundary fence here. It is impenetrable, being characterised by a mosaic of Bramble (largely at the field edge), Hawthorn and *Prunus spinosa* (Blackthorn). This scrub extends outside the wider survey site into a narrow boundary associated with a ditch corridor, here the scrub appears to be dominated by mature Hawthorn.

Target Note 12. Here the boundary scrub resource is dominated by Bramble, largely to 2 m height, but often taller.

Target Note 13. A Badger breach into scrub, and an associated path, recorded on 22/03/21. A recently used dung-pit was located just inside the scrub boundary on this date. The path crosses the wider survey site and passes under a chain-link fence to the immediate west of scrub (**Target Note 12**). On 22/03/21 the path appeared to be reasonably well used, with occasional evidence of foraging recorded. At the northern breach point the ground was bare under the fence with partial footprints recorded in mud. No additional Badger evidence was recorded during subsequent site visits with the path/ breaches not appearing to have been used. On 19/05/21 the path was not obvious within the growing grassland sward. Possible paths (also associated with **Target Note 15**) also extend on the opposite side of the fence [not accessible]. Fox (*Vulpes vulpes*) is known to use the site (Site Manager *pers. comm.*) and Rabbit evidence was also located.

Target Note 14. Two brash piles.

Target Note 15. An animal breach under a chain-link fence, presumed to be used by Badger (although no direct evidence), recorded on 22/03/21. An associated path crossing grassland to a stand of dense scrub appears to be reasonably well used. However, no direct evidence of Badger was located during subsequent site visits, and on 19/05/21 the possible breach in the scrub was found to be largely obscured by fresh vegetation growth.

Target Note 16. 2 no. animal breaches recorded on 22/03/21. No evidence of Badger recorded then or on subsequent survey visits.

Target Note 17. Here the grassland resource is slightly different in composition to that within the survey site, it being not visually characterised by Hard Rush to the same extent as recorded at *Target Note 4*, and also with less Tufted Hair-grass. It is likely to be drier, but remains rank. The tussocky sward includes coarse-leaved grasses such as Cock's-foot, Yorkshire-fog, Creeping Bent, False Oat-grass, *Poa pratensis* (Smooth Meadow-grass), *Schedonorus arundinaceus* (Tall Fescue), *Alopecurus pratensis* (Meadow Foxtail) and *Festuca pratensis* (Meadow Fescue), along with False-fox Sedge.

The (bulky) tall-herb/ forb resource present is similar to that described at *Target Note 4*.

Overall this resource appears to be moderately species-rich at most (although large areas could be described as species-poor).

Hawthorn shrubs to 3 m high are scattered throughout.

This resource extends throughout much of the wider survey site (towards for example *Target Note 15*); note also *Target Note 18*.

Target Note 18. Here the grassland resource is similar to that described at *Target Note 4*, with Hard rush being characteristically (visually) dominant.

Target Note 19. A scrub boundary (to palisade fence) of various widths and species composition. Largely comprises mature Willow bushes to the immediate fence line fronted by Bramble. Locally there are small stands of tall-herbs which are too small to map.

Immediately Adjacent Land

Target Note 1e. A brick built small electricity substation building. It could not be viewed in detail but did not appear likely to provide more than negligible bat roost potential.

Target Note 6. 2 no. mature trees located immediately adjacent to a fenced boundary. It was not possible to access near to these features due to dense scrub within the survey site. However, one appears to be a *Betula pendula* (Silver Birch), and the other a Willow. They do not appear likely to provide more than negligible bat roost potential.

Target Note 8. This field unit appears to support similar vegetation to that within the survey/ wider site (neutral grassland and scrub).

7

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8 DATA

Table 6 – Vascular plant species recorded within the survey and wider survey site

Plant Species	Survey Site	Wider Survey Site
<i>Betula pendula</i> (Silver Birch)	✓	
<i>Crataegus monogyna</i> (Hawthorn)	✓	✓
<i>Fraxinus excelsior</i> (Ash)	✓	✓
<i>Prunus spinosa</i> (Blackthorn)	✓	✓
<i>Quercus robur</i> (Pedunculate Oak)	✓	✓
<i>Rosa canina</i> agg. (Dog-rose)	✓	✓
<i>Salix caprea</i> (Goat Willow)	✓	✓
<i>Salix cinerea</i> (Grey Willow)	✓	✓
<i>Sambucus nigra</i> (Elder)		✓
<i>Achillea millefolium</i> (Yarrow)	✓	✓
<i>Agrostis stolonifera</i> (Creeping Bent)	✓	✓
<i>Anagallis arvensis</i> (Scarlet Pimpernel)	✓	✓
<i>Alliaria petiolata</i> (Hedge Mustard)	✓	
<i>Alopecurus pratensis</i> (Meadow Foxtail)	✓	✓
<i>Anthriscus sylvestris</i> (Cow Parsley)		✓
<i>Arrhenatherum elatius</i> (False Oat-grass)	✓	✓
<i>Bellis perennis</i> (Daisy)	✓	✓
<i>Bromus hordeaceus</i> (Soft-brome)	✓	
<i>Cardamine</i> cf. <i>hirsuta</i> (Hairy Bittercress)	✓	✓
<i>Carex nigra</i> (Common Sedge)	✓	✓
<i>Carex otrubae</i> (False-fox Sedge)	✓	✓
<i>Centaurea nigra</i> (Common Knapweed)	✓	✓
<i>Cerastium fontanum</i> (Common Mouse-ear)	✓	
<i>Chamerion angustifolium</i> (Rosebay Willowherb)	✓	✓
<i>Cirsium arvense</i> (Creeping Thistle)	✓	✓
<i>Cirsium vulgare</i> (Spear Thistle)	✓	
<i>Dactylis glomerata</i> (Cock's-foot)	✓	✓
<i>Deschampsia cespitosa</i> (Tufted Hair-grass)	✓	✓
<i>Elytrigia repens</i> (Common Couch)	✓	✓

Plant Species	Survey Site	Wider Survey Site
<i>Epilobium hirsutum</i> (Great Willowherb)	✓	✓
<i>Epilobium</i> sp. (a Willowherb)	✓	
<i>Epilobium montanum</i> (Broad-leaved Willowherb)	✓	✓
<i>Erodium cicutarium</i> (Common Stork's-bill)	✓	
<i>Festuca pratensis</i> (Meadow Fescue)	✓	✓
<i>Festuca rubra</i> (Red Fescue)	✓	✓
<i>Galium aparine</i> (Cleavers)	✓	✓
<i>Geranium dissectum</i> (Cut-leaved Crane's-bill)	✓	
<i>Helminthotheca echinoides</i> (Bristly Oxtongue)	✓	
<i>Hedera helix</i> (Ivy)	✓	
<i>Heracleum sphondylium</i> (Hogweed)	✓	✓
<i>Holcus lanatus</i> (Yorkshire-fog)	✓	✓
<i>Hypericum perforatum</i> (Perforate St. John's-wort)	✓	✓
<i>Hypochaeris radicata</i> (Cat's-ear)	✓	
<i>Juncus inflexus</i> (Hard Rush)	✓	✓
<i>Juncus effusus</i> (Soft-rush)		✓
<i>Lathyrus pratensis</i> (Meadow Vetchling)	✓	✓
<i>Leucanthemum vulgare</i> (Oxeye Daisy)	✓	✓
<i>Lolium perenne</i> (Perennial Rye-grass)	✓	
<i>Lonicera periclymenum</i> (Honeysuckle)		✓
<i>Lotus corniculatus</i> (Common Bird's-foot-trefoil)	✓	
<i>Luzula campestris</i> (Field Woodrush)	✓	
<i>Poa annua</i> (Annual Meadow-grass)	✓	✓
<i>Poa pratensis</i> (Smooth Meadow-grass)	✓	✓
<i>Plantago lanceolata</i> (Ribwort Plantain)	✓	✓
<i>Plantago major</i> (Greater Plantain)	✓	
<i>Polygonum aviculare</i> (Knotgrass)		✓
<i>Potentilla reptans</i> (Creeping Cinquefoil)	✓	✓
<i>Primula veris</i> (Cowslip)	✓	✓
<i>Prunella vulgaris</i> (Selfheal)	✓	
<i>Pulicaria dysenterica</i> (Common Fleabane)	✓	
<i>Ranunculus acris</i> (Meadow Buttercup)	✓	✓

Plant Species	Survey Site	Wider Survey Site
<i>Ranunculus repens</i> (Creeping Buttercup)	✓	✓
<i>Reseda luteola</i> (Weld)		✓
<i>Rumex obtusifolius</i> (Broad-leaved Dock)	✓	✓
<i>Rubus fruticosus</i> agg. (Bramble)	✓	✓
<i>Rumex</i> sp. (a Dock)	✓	✓
<i>Schedonorus arundinaceus</i> (Tall Fescue)		✓
<i>Scrophularia nodosa</i> (Common Figwort)	✓	
<i>Senecio jacobaea</i> (Common Ragwort)	✓	
<i>Senecio vulgaris</i> (Groundsel)	✓	
<i>Sonchus oleraceus</i> (Smooth Sow-thistle)	✓	
<i>Stachys sylvatica</i> (Hedge Woundwort)	✓	✓
<i>Tamus communis</i> (Black Bryony)		✓
<i>Taraxacum</i> sect. <i>Ruderalia</i> (Common Dandelion)	✓	✓
<i>Trifolium dubium</i> (Lesser Trefoil)	✓	
<i>Trifolium repens</i> (White Clover)	✓	
<i>Tussilago farfara</i> (Colt's-foot)	✓	✓
<i>Urtica dioica</i> (Common Nettle)	✓	✓
<i>Valerianella locusta</i> (Common Cornsalad)	✓	
<i>Veronica persica</i> (Common Field-Speedwell)	✓	
<i>Veronica serpyllifolia</i> (Thyme-leaved Speedwell)	✓	
<i>Vicia cracca</i> (Tufted Vetch)	✓	✓
<i>Vicia sativa</i> (Common Vetch)	✓	✓
<i>Vicia</i> cf. <i>tetrasperma</i> (Smooth Tare)		✓

Table 7 – Habitat Suitability Index Scoring Table, Pond 1

HSI Category	Description	Score
Sl₁ Location	A optimal	1
Sl₂ Pond area	450 m ² to nearest 50 m	0.9
Sl₃ Pond drying	Never dries?	0.9
Sl₄ Water Quality	Moderate [possibly low/ runoff etc. from agricultural field?]	0.67
Sl₅ Shade	5%	1
Sl₆ Fowl	Major – Canada Geese fouling and grazing evident	0.01
Sl₇ Fish	Absent (assumption)	1
Sl₈ Ponds	More than 12 within 1 km (OS map assessment)	1
Sl₉ Terrestrial Habitat	Moderate – largely improved grassland fields/ hedgerows within 250 m, unmanaged/ rough grassland appears to be limited to edge of industrial estate including proposed development site.	0.67
Sl₁₀ Macrophytes	Approximately 50%	0.8
Total HSI score		0.00291
10th Root		0.5577
Pond suitability		Below average

Table 8 – Habitat Suitability Index Scoring Table, Pond 2

HSI Category	Description	Score
Sl₁ Location	A optimal	1
Sl₂ Pond area	375 m ² to nearest 50 m	0.75
Sl₃ Pond drying	Never dries?	0.9
Sl₄ Water Quality	Moderate [possibly low/ runoff etc. from agricultural field?]	0.67
Sl₅ Shade	40-50%	1
Sl₆ Fowl	Major – Canada Geese fouling and grazing evident	0.01
Sl₇ Fish	Absent (assumption)	1
Sl₈ Ponds	More than 12 within 1 km (OS map assessment)	1
Sl₉ Terrestrial Habitat	Moderate – largely improved grassland fields/ hedgerows within 250 m, unmanaged/ rough grassland appears to be limited to edge of industrial estate including (edge of) land connected to proposed development site.	0.67
Sl₁₀ Macrophytes	Approximately 30%	0.6
Total HSI score		0.00182
10th Root		0.5321
Pond suitability		Below average

Table 9 – Habitat Suitability Index Scoring Table, Pond 7

HSI Category	Description	Score
SI₁ Location	A optimal	1
SI₂ Pond area	200 m ² to nearest 50 m	0.4
SI₃ Pond drying	Sometimes?	0.5
SI₄ Water Quality	Poor [road runoff?]	0.33
SI₅ Shade	100%	0.2
SI₆ Fowl	Absent (assumption)	1
SI₇ Fish	Absent (assumption)	1
SI₈ Ponds	More than 12 within 1 km (OS map assessment)	1
SI₉ Terrestrial Habitat	Moderate – variable resource within 250 m including unmanaged grassland (including on edge of) land connected to proposed development site), improved grassland/ hedges and industrial land.	0.67
SI₁₀ Macrophytes	Approximately 10%	0.4
Total HSI score		0.00354
10th Root		0.5687
Pond suitability		Below average

Table 10 – Habitat Suitability Index Scoring Table, Pond 8

HSI Category	Description	Score
SI₁ Location	A optimal	1
SI₂ Pond area	50 to 100 m ²	0.1
SI₃ Pond drying	Dries annually?	0.1
SI₄ Water Quality	Moderate	0.67
SI₅ Shade	0%	1
SI₆ Fowl	Absent (assumption)	1
SI₇ Fish	Absent (assumption)	1
SI₈ Ponds	More than 12 within 1 km (OS map assessment)	1
SI₉ Terrestrial Habitat	Moderate – variable resource within 250 m including unmanaged grassland (including on edge of) land connected to proposed development site), scrub, improved grassland/ hedges and industrial land.	0.67
SI₁₀ Macrophytes	Approximately 75% (but terrestrial vegetation)	1
Total HSI score		0.00449
10th Root		0.5824
Pond suitability		Below average

Table 11 – Great Crested Newt Survey Results

Waterbody	Visit	Date	Survey Type	Amphibians											Other/ Notes
				GCN				SN		PN		SN/PN			
				♂	♀	j	egg	♂	♀	♂	♀	♀	j	egg	
1	1	20/04/21	Torch	2	-	-	Y	1	1	-	-	-	-	-	1 CF adult (terrestrial).
			Bottle-traps (25 ¹⁶)	3 ¹⁷	1	-	-	5	1	-	-	-	-	-	
	2	12/05/21	Torch	-	-	-	-	-	-	-	-	-	-	-	No amphibians recorded.
			Bottle-traps (25)	3 ¹⁸	-	-	-	5	-	-	-	-	-	-	
2	1	20/04/21	Torch	11	3	-	Y	1	1	-	-	-	-	-	
			Bottle-traps (22)	-	1	-	-	-	-	-	-	-	-	-	
	2	12/05/21	Torch	2	1	-	-	-	1	-	-	-	-	-	
			Bottle-traps (22)	6 ¹⁹	6	-	-	-	1	-	-	-	-	-	
7	1	20/04/21	Torch	-	-	-	N	-	1	-	-	-	-	-	Eggs previously detected during pond scoping on 18/03/21 – subsequently appear to have dried up.
			Netting	-	1	-	-	-	-	-	-	-	-	-	No bottle traps deployed.
	2	12/05/21	Torch	-	-	-	N	-	-	-	-	-	-	-	No amphibians recorded.
			Netting	-	-	-	-	-	-	-	-	-	-	Y	No bottle traps deployed.

Key to Table 11.

♂	Male	j	Juvenile	Y	Yes
♀	Female	CF	Common Frog	N	No

¹⁶ Indicates number of bottle-traps deployed.¹⁷ Includes one sub-adult.¹⁸ Includes one sub-adult.¹⁹ Includes one sub-adult.

9 APPENDIX 1 - SPECIES-SPECIFIC LEGISLATION

9.5 Introduction

9.5.2 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.

9.5.3 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.

9.6 Badger

9.6.2 The Badger is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6 of the Wildlife and Countryside Act 1981* (as amended). The legislation affords protection to Badger and Badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

9.7 Bats

9.7.2 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*).

9.7.3 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.

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

9.7.5 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.

9.8 Great Crested Newt

9.8.2 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.

9.8.3 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.

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

9.9 Reptiles

9.9.2 Viviparous Lizard, Grass Snake, Slow-worm and Adder are all listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *CRoW Act 2000*.

9.9.3 Under the above legislation it is an offence to:

- intentionally or recklessly kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

9.9.4 All four of the above listed reptiles are included on *Section 7* of the *Environment Act 2016*.

9.10 Birds

9.10.2 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*.

9.10.3 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.

9.10.4 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.

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

Cofnod Environmental Information Search (PUBLIC VERSION)

Our Reference	E08675
Your Reference	C442
Requested By	Marches Ecology
Data Users	Max Ellson, Partner, Marches Ecology LLP Tom Knight, Partner, Marches Ecology LLP Maurice Standish, Kingsway Design Peter McKenzie, James Jones & Sons Ltd Tony Silva, James Jones & Sons Ltd
Search Date	22/01/2021
Expiry Date	22/07/2021
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 (22/07/2021).
- The data was generated on the Search Date (22/01/2021) 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

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Search Location	Grid Reference
James Jones & Sons Ltd	SJ39384931

Bees, Wasps, Ants and Sawflies										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Andrena (Poecilandrena) labiata</i> (Red-girdled Mining Bee)	SJ386492	2 records, between 1991 and 14/05/1993	Recorder Name Withheld	1 Adult		Wrexham Ind. estate	Method: Netted	D1650/001/02 , D0217/001/04	RD2(UK)NA	4
<i>Andrena (Poecilandrena) labiata</i> (Red-girdled Mining Bee)	SJ385495	1993	Recorder Name Withheld		Field record	The Oaks		D0217/001/04	RD2(UK)NA	3
<i>Andrena (Poecilandrena) labiata</i> (Red-girdled Mining Bee)	SJ392502	2 records, both on 11/05/1999	Recorder Name Withheld	1 Adult; 1 Male	Netted	Owens Corning Factory	Method: Netted; Netted from the blue flower of Germander Speedwell (<i>Veronica chamaedrys</i>) near the new fishing pool	D1650/001/02 , D1453/001/01	RD2(UK)NA	4

Birds										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Accipiter gentilis</i> (Goshawk / Gwalch Marthin)	SJ34 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D0132/001/02	CITES, WCA1.1, WCA9, LBAP[CON]	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ39595004 (Selected from Interactive Map)	24/07/2016	Recorder Name Withheld	5 Full-Grown		Wrexham Industrial Estate		D1695/001/01	WBA	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ3948	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656- BGBW2009-16448539-106734640	D1852/002/01	WBA	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ3950	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656- BGBW2009-16448728-106734762	D1852/002/01	WBA	4
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ4048	3 records, between 24/01/2009 and 17/09/2017	Recorder Name Withheld	1; 6		Sutton Green	BirdTrack; Occurrence ID: NBN- GA000656-BGBW2009-16448858- 106734700	D1297/025/01 , D1852/002/01	WBA	4
<i>Aix galericulata</i> (Mandarin Duck / Hwyaden Gribog)	SJ3949	24/06/2016	Recorder Name Withheld	1	Reported to recorder	Wrexham, Industrial Estate, E	2 dead ducklings, hartched shells. Activity: UN. Survey: Observer data	D0062/008/01	INNS, WCA9	3
<i>Aix galericulata</i> (Mandarin Duck / Hwyaden Gribog)	SJ4048	17/09/2017	Recorder Name Withheld	4		Sutton Green	BirdTrack	D1297/025/01	INNS, WCA9	4
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ397495 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld				Shoot Size Range: 0-3km	D0132/001/02	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ3848	2 records, between 10/04/2009 and 24/04/2011	Recorder Name Withheld	2; 1	Reported to recorder	Parkey	Singing, roving record. Survey: Observer data; Activity: S. Survey: Observer data	D0062/008/01	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Anas crecca</i> (Teal / Corhwyaden)	SJ4048	31/12/2018	Recorder Name Withheld	2		Sutton Green		D1297/025/01	BDir2.1, CITES, UKBA, WBA, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Anas platyrhynchos</i> (Mallard / Hwyaden Wylt)	SJ39625003 (Selected from Interactive Map)	24/07/2016	Recorder Name Withheld	1 Full-Grown		Wrexham Industrial Estate		D1695/001/01	BDir2.1, UKBA, WBA, LBAP[CON, GWY]	4
<i>Anas platyrhynchos</i> (Mallard / Hwyaden Wylt)	SJ4048	3 records, between 24/02/2014 and 31/12/2018	Recorder Name Withheld	2; 54		Sutton Green	BirdTrack; Birdtrack. All in one flooded field pool	D1297/025/01	BDir2.1, UKBA, WBA, LBAP[CON, GWY]	4
<i>Anthus pratensis</i> (Meadow Pipit / Corhedydd y Waun)	SJ4048	24/02/2014	Recorder Name Withheld	1		Sutton Green	BirdTrack	D1297/025/01	Bern, UKBA, WBA, LBAP[CON]	4
<i>Branta canadensis</i> (Canada Goose / Gwydd Canada)	SJ3850	15/06/2008	Recorder Name Withheld	2		Wrexham, Industrial Estate	Birdtrack. Actvity: FL	D1297/025/01	BDir2.1, INNS, WCA9	4
<i>Cettia cetti</i> (Cetti's Warbler / Telor Cetti)	SJ34 (Selected from Interactive Map)	21/05/2017	Recorder Name Withheld	1 Adult Male		Site Name Withheld	Comments Withheld	D1117/001/01	WCA1.1, LBAP[ANG]	4
<i>Cygnus olor</i> (Mute Swan / Alarch Dof)	SJ4048	2 records, between 17/09/2017 and 31/12/2018	Recorder Name Withheld	4; 49		Sutton Green	BirdTrack	D1297/025/01	BDir2.2, UKBA, WBA, LBAP[CON]	4
<i>Cygnus olor</i> (Mute Swan / Alarch Dof)	SJ3850	15/03/2006	Recorder Name Withheld	2	Reported to recorder	Wrexham, Industrial Estate	Survey: Observer data	D0062/008/01	BDir2.2, UKBA, WBA, LBAP[CON]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Cygnus olor</i> (Mute Swan / Alarch Dof)	SJ4050	03/05/2004	Recorder Name Withheld	2	Reported to recorder	Isycoed	Inland. Survey: Observer data	D0062/008/01	BDir2.2, UKBA, WBA, LBAP[CON]	3
<i>Emberiza citrinella</i> (Yellowhammer / Bras Melyn)	SJ4049	24/04/2002	Recorder Name Withheld	3 Male	Reported to recorder	Isycoed, S	Survey: Observer data	D0062/008/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Emberiza citrinella</i> (Yellowhammer / Bras Melyn)	SJ4050	20/03/2002	Recorder Name Withheld	1 Male	Reported to recorder	Isycoed	Activity: S. Survey: Observer data	D0062/008/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Falco peregrinus</i> (Peregrine / Hebog Tramor)	SJ35 (Selected from Interactive Map)	01/06/2016	Recorder Name Withheld	2		Site Name Withheld	Comments Withheld	D1748/001/01	BDir1, Bern, CITES, WCA1.1, LBAP[ANG, CON, GWY]	4
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ38544978 (Selected from Interactive Map)	28/02/2015	Recorder Name Withheld	1 Full-Grown		Marlborough Road, Wrexham Industrial Estate	Hunting over this area of rough grassland throughout the day	D1117/001/01	Bern, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3949	16/04/2008	Recorder Name Withheld	2		Wrexham, Industrial Estate, E	Birdtrack	D1297/025/01	Bern, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3849	2 records, between 16/04/2008 and 17/03/2009	Recorder Name Withheld	1		Wrexham, Industrial Estate, W	Birdtrack	D1297/025/01	Bern, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3950	03/01/2008	Recorder Name Withheld	1	Reported to recorder	Isycoed, W	Survey: Observer data	D0062/008/01	Bern, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3850 (Selected from Interactive Map)	3 records, between 15/06/2008 and 05/06/2014	Recorder Name Withheld	1 Chick; 1	Live Sighting; Reported to recorder	Wrexham Industrial Estate	Nest found with adult female in attendance with 1 chick; Birdtrack. Activity: H; Survey: Observer data	D1117/001/01 , D1297/025/01 , D0062/008/01	Bern, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Gallinago gallinago</i> (Snipe / Giach Cyffredin)	SJ3848	10/04/2009	Recorder Name Withheld	1	Reported to recorder	Parkey	Roving record. Survey: Observer data	D0062/008/01	BDir2.1, UKBA, WBA, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ393491 (Approximate)	23/07/2016	Recorder Name Withheld	3+		WIE 10. The Club House		D1695/001/01	Bern, WBA, LBAP[ANG, CON, GWY]	4
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3849	6 records, between 03/10/2007 and 16/09/2010	Recorder Name Withheld	2; 6; 2 Adult; 3 Adult; 3 Juvenile	Reported to recorder	Wrexham, Industrial Estate, W	Survey: Observer data; 2 with young. Survey: Observer data; 3 young still on beam in warehouse. Survey: Observer data; still on same beam, parents trying to move young. Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[ANG, CON, GWY]	3
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ4048	17/09/2017	Recorder Name Withheld	3		Sutton Green	BirdTrack	D1297/025/01	Bern, WBA, LBAP[ANG, CON, GWY]	4
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3850	15/06/2008	Recorder Name Withheld	2		Wrexham, Industrial Estate	Birdtrack. Activity: H	D1297/025/01	Bern, WBA, LBAP[ANG, CON, GWY]	4
<i>Larus argentatus</i> (Herring Gull / Gwylan y Penwaig)	SJ393491 (Approximate)	23/07/2016	Recorder Name Withheld	4+		WIE 10. The Club House		D1695/001/01	BDir2.2, S7, UKBR, WBR, LBAP[CON, GWY]	4
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ393491 (Approximate)	2 records, between 23/07/2016 and 24/07/2016	Recorder Name Withheld	7+; 1 Adult Male; 1 Adult Female		WIE 10. The Club House	Male singing	D1695/001/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ3848	2 records, between 24/04/2011 and 19/06/2011	Recorder Name Withheld	4	Reported to recorder	Parkey	Activity: P. Survey: Observer data; Activity: T. Survey: Observer data	D0062/008/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Locustella naevia</i> (Grasshopper Warbler / Troellwr Bach)	SJ387501 (Selected from Interactive Map)	26/04/2011	Recorder Name Withheld	1 Adult	Auditory record	Bryn Lane Recycling Centre		D1117/001/01	S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	4
<i>Locustella naevia</i> (Grasshopper Warbler / Troellwr Bach)	SJ3848	24/04/2011	Recorder Name Withheld	4	Reported to recorder	Parkey	Activity: S. Survey: Observer data	D0062/008/01	S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3
<i>Muscicapa striata</i> (Spotted Flycatcher / Gwybedog Mannog)	SJ3850	15/06/2008	Recorder Name Withheld	1		Wrexham, Industrial Estate	Birdtrack. Actvity: S	D1297/025/01	Bern, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	4
<i>Numenius arquata</i> (Curlew / Gylfinir)	SJ39694988 (Selected from Interactive Map)	24/07/2016	Recorder Name Withheld	2 Full-Grown		Wrexham Industrial Estate		D1695/001/01	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ393491 (Approximate)	23/07/2016	Recorder Name Withheld			WIE 10. The Club House		D1695/001/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	4
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3849	26/01/2008 - 27/01/2008	Recorder Name Withheld			Wrexham Denbighshire	Occurrence ID: NBN-GA000567-BGBW2008-22135613-139526450	D1852/001/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	4
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3950	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16448728-106609266	D1852/002/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	4
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ4048	3 records, between 24/01/2009 and 24/02/2014	Recorder Name Withheld	50; 4+		Sutton Green	Birdtrack. Biggest Sparrow flock I have seen for a number of years, birds in and out of hedges both side of road.; BirdTrack; Occurrence ID: NBN-GA000656-BGBW2009-16448858-106609210	D1297/025/01 , D1852/002/01	S7, UKBR, WBA, LBAP[CON, FLI, GWY]	4
<i>Passer montanus</i> (Tree Sparrow / Golfan y Mynydd)	SJ4050	2 records, between 01/05/2006 and 09/01/2011	Recorder Name Withheld	1; 5	Reported to recorder	Isycoed	Survey: Observer data	D0062/008/01	S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ3948	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16448539-106179879	D1852/002/01	Bern, WBA, LBAP[CON]	4
<i>Phalacrocorax carbo</i> (Cormorant / Mulfran)	SJ4048	2 records, between 17/09/2017 and 31/12/2018	Recorder Name Withheld	4; 6		Sutton Green	BirdTrack	D1297/025/01	WBA, LBAP[CON, GWY]	4
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ3848	3 records, between 10/04/2009 and 24/04/2011	Recorder Name Withheld	1; 4; 3	Reported to recorder	Parkey	Roving record. Survey: Observer data; Activity: S. Survey: Observer data	D0062/008/01	UKBA, WBR, LBAP[CON]	3
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ3850949263 (Selected from Interactive Map)	16/05/2019	Recorder Name Withheld	1 Adult		Wrexham industrial estate	Heard only	D1117/001/01	Bern, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	4
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ392503 (Selected from Interactive Map)	08/04/2019	Recorder Name Withheld	1	Auditory record	Bryn Lane, Wrexham Industrial Estate		D1696/001/01	Bern, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	4
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ3848	2 records, between 24/04/2011 and 19/06/2011	Recorder Name Withheld	1; 2	Reported to recorder	Parkey	Survey: Observer data	D0062/008/01	Bern, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	3
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3948	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16448539-106179882	D1852/002/01	Bern, S7, UKBA, LBAP[CON]	4

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)	SJ4048	31/12/2018	Recorder Name Withheld	1		Sutton Green		D1297/025/01	Bern, S7, UKBA, LBAP[CON]	4
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3850	15/06/2008	Recorder Name Withheld	1		Wrexham, Industrial Estate	Birdtrack	D1297/025/01	Bern, S7, UKBA, LBAP[CON]	4
<i>Pyrrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ389489 (Selected from Interactive Map)	23/07/2016	Recorder Name Withheld	1 Adult Male		WIE 1. The Oaks LWS & River Clywedog		D1695/001/01	S7, UKBA, WBR, LBAP[CON, DEN, FLI, GWY]	4
<i>Pyrrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ386493 (Approximate)	23/07/2016	Recorder Name Withheld		Auditory record	WIE 1. The Oaks LWS & River Clywedog		D1695/001/01	S7, UKBA, WBR, LBAP[CON, DEN, FLI, GWY]	4
<i>Scolopax rusticola</i> (Woodcock / Cyffyllog)	SJ397495 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld				Shoot Size Range: 0-3km	D0132/001/02	BDir2.1, UKBR, WBA, LBAP[CON, DEN, FLI, GWY]	4
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ393491 (Approximate)	23/07/2016	Recorder Name Withheld	25+		WIE 10. The Club House		D1695/001/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	4
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ3849	01/03/2007	Recorder Name Withheld	50+	Reported to recorder	Wrexham, Industrial Estate, W	Birds gathering between Redwither pub and Firestone site. Survey: Observer data	D0062/008/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	3
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ3950	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16448728-106878562	D1852/002/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	4
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ4048	3 records, between 24/02/2014 and 31/12/2018	Recorder Name Withheld	5+; 8; 300+		Sutton Green	BirdTrack	D1297/025/01	BDir2.2, Bern, S7, UKBR, WBR, LBAP[CON, FLI, GWY]	4
<i>Sylvia communis</i> (Whitethroat / Llwydfon)	SJ3850949263 (Selected from Interactive Map)	16/05/2019	Recorder Name Withheld	3 Adult		Wrexham industrial estate		D1117/001/01	WBA, LBAP[CON]	4
<i>Sylvia communis</i> (Whitethroat / Llwydfon)	SJ3848	07/05/2009	Recorder Name Withheld	10+	Reported to recorder	Parkey	Roving record. Survey: Observer data	D0062/008/01	WBA, LBAP[CON]	3
<i>Turdus iliacus</i> (Redwing / Coch Dan Adain)	SJ4048	2 records, between 24/02/2014 and 31/12/2018	Recorder Name Withheld	10+		Sutton Green	BirdTrack	D1297/025/01	BDir2.2, UKBR, WBA, WCA1.1, LBAP[CON]	4
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3948	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16448539-106817408	D1852/002/01	BDir2.2, Bern, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3950	24/01/2009 - 25/01/2009	Recorder Name Withheld				Occurrence ID: NBN-GA000656-BGBW2009-16448728-106817475	D1852/002/01	BDir2.2, Bern, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3848	2 records, between 07/05/2009 and 26/04/2011	Recorder Name Withheld	4; 1	Reported to recorder	Parkey	Roving record. Survey: Observer data; 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 pilaris</i> (Fieldfare / Socan Eira)	SJ3950	30/10/2010	Recorder Name Withheld	50	Reported to recorder	Isycoed, W	Survey: Observer data	D0062/008/01	BDir2.2, UKBR, WBA, WCA1.1, LBAP[CON]	3
<i>Turdus pilaris</i> (Fieldfare / Socan Eira)	SJ4048	3 records, between 24/12/2013 and 31/12/2018	Recorder Name Withheld	12; 5+; 40+		Sutton Green	BirdTrack	D1297/025/01	BDir2.2, UKBR, WBA, WCA1.1, LBAP[CON]	4
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ34 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D0132/001/02	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)	SJ44	2 records, between 08/03/2011 and 16/06/2017	Recorder Name Withheld	1 Adult; 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)	SJ35	2 records, between 15/03/2006 and 20/03/2007	Recorder Name Withheld	1	Reported to recorder	Site Name Withheld	Comments Withheld	D1297/025/01 , D0062/008/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ45	29/01/2013	Recorder Name Withheld	1		Site Name Withheld	Comments Withheld	D1297/025/01	Bern, CITES, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ397495 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld				Shoot Size Range: 0-3km	D0132/001/02	BDir2.2, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4

Butterflies and Moths										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Chiasmia clathrata</i> (Latticed Heath / Seffyr Delltog)	SJ386492	22/06/2007	Recorder Name Withheld	2 Adult		Wrexham Ind. estate	Habitat: Grassland: neutral. Method: Daytime observation	D1285/001/03	S7, LBAP[GWY]	3
<i>Chiasmia clathrata</i> (Latticed Heath / Seffyr Delltog)	SJ392502	11/06/1999	Recorder Name Withheld	2 Adult		Owens Corning Factory	Habitat: Scrub. Method: Netted	D1285/001/03	S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ388493	19/05/2004	Recorder Name Withheld	4	Field record	Wrexham Ind Estate - S of Bryn Lane		D1373/001/05	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ386492	1991 - 1998	Recorder Name Withheld			The Oaks		D0217/001/04	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ3864749445	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ385493 (Estimated (Centroid of Site))	4 records, between 01/06/1998 and 18/05/2010	Recorder Name Withheld	2; 2 Adult; 7 Adult	Field record	Wrexham Industrial Estate	Breeding: No. Mature: Yes. Record type: Field record / observation; JVS's Map Ref SJ 384493 : also recorded PBF - not accepted yet	D0127/001/02 , D1373/001/05	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ3853349255	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ38824998 (Selected from Interactive Map)	2 records, both on 23/05/2018	Recorder Name Withheld	8	Live Sighting	Wrexham recycling Park		D1696/001/01 , D1748/002/01	RD1(UK)NT, S7, LBAP[GWY]	4
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ3849949354	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ392502	16/06/1999	Recorder Name Withheld	6		Owens Corning site, Wrexham Industrial Estate	Found near the old fishing pond	D1453/001/01	RD1(UK)NT, S7, LBAP[GWY]	4
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ38895016	2 records, both on 23/05/2018	Recorder Name Withheld	8 Adult		Wrexham Recycling Park Mitigation Area		D1373/001/05	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ388501	39 records, between 22/05/2012 and 24/06/2013	Recorder Name Withheld	2; 4; 3; 1; 6		Bryn Lane Wrexham Ind Estate S10	Grid reference type: Estimated (centroid of transect section)	D1924/001/01	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Diloba caeruleocephala</i> (Figure of Eight / Crwbach Ffigwr Wyth)	SJ392502	11/05/1999	Recorder Name Withheld	1 Larval		Owens Corning Factory	Habitat: Scrub. Method: Daytime observation	D1285/001/03	S7	3
<i>Ecliptopera silaceata</i> (Small Phoenix / Ffenics Bach)	SJ386492	1972	Recorder Name Withheld	1 Adult		Wrexham Ind Estate (Oaks Site)	Habitat: Scrub: scattered	D1285/001/03	S7, LBAP[GWY]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Ecliptopera silaceata</i> (Small Phoenix / Ffenics Bach)	SJ385495	1972 - 1973	Recorder Name Withheld			Wrexham Industrial Estate		D0217/001/04	S7, LBAP[GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ388493	19/05/2004	Recorder Name Withheld	4		Wrexham Ind Estate - S of Bryn Lane		D1858/001/02	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ388491	30/04/2007	Recorder Name Withheld	1		Off Oak Road Wrexham industrial Estate		D1117/001/01	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	4
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3878749233	21/05/2014	Recorder Name Withheld	2 Adult		The Oaks		D1373/001/05	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3877249242	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ387492	2 records, between 21/05/2006 and 22/05/2018	Recorder Name Withheld	2 Adult; 1		Wxm Ind Estate, Oak Road		D1373/001/05 , D1858/001/02	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3876049140	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ385493	10 records, between 29/05/2001 and 30/05/2010	Recorder Name Withheld	4 Adult; 7 Adult; 10 Adult; 2 Adult; 20 Adult; 15 Adult; 2	Field record	Wrexham Industrial Estate	JVS's Map Ref SJ 384493 : also recorded PBF - not accepted yet	D1373/001/05	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3850949263 (Selected from Interactive Map)	16/05/2019	Recorder Name Withheld	3 Adult		Wrexham industrial estate		D1117/001/01	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	4
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3849949354	21/05/2014	Recorder Name Withheld	2 Adult		The Oaks		D1373/001/05	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3845749320	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ384493	29/05/2001	Recorder Name Withheld	2		Wrexham Ind Estate		D1858/001/02	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ38895016	4 records, all on 23/05/2018	Recorder Name Withheld	6 Adult; 6	Live Sighting	Wrexham Recycling Park Mitigation Area		D1373/001/05 , D1696/001/01 , D1748/002/01	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ388501	25/05/2012	Recorder Name Withheld	1		Bryn Lane Wrexham Ind Estate S8	Grid reference type: Estimated (centroid of transect section)	D1924/001/01	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3849	2 records, between 12/05/2000 and 15/05/2000	Recorder Name Withheld			The Oaks	Approx. 20-25 adults	D0217/001/04	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3848	3 records, between 01/01/1995 and 12/05/2005	Recorder Name Withheld	2		SJ3848	Wrexham Ind Estate; Breeding: No. Mature: Yes. Record type: Field record / observation	D1858/001/02 , D0127/001/02	RD1(UK)VU, S7, LBAP[CON, FLI, GWY]	3
<i>Hemistola chrysoprasaria</i> (Small Emerald / Emralt Barf yr Hen Wr)	SJ386492	1973	Recorder Name Withheld	1 Adult		Wrexham Ind. estate	Habitat: Grassland: neutral. Method: MV Light Trap	D1285/001/03	S7, LBAP[GWY]	3
<i>Hemistola chrysoprasaria</i> (Small Emerald / Emralt Barf yr Hen Wr)	SJ385495	1972 - 1973	Recorder Name Withheld			Wrexham Industrial Estate		D0217/001/04	S7, LBAP[GWY]	3
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ386492	1991 - 1998	Recorder Name Withheld			The Oaks		D0217/001/04	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ392502	1999	Recorder Name Withheld			Owens Corning site, Wrexham Industrial Estate	Thriving colonies in two areas	D1453/001/01	RD1(UK)NT, S7, LBAP[GWY]	4
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ3848 (Estimated (Centroid of Site))	1995	Recorder Name Withheld	2		SJ3848	Breeding: No. Mature: Yes. Record type: Field record / observation	D0127/001/02	RD1(UK)NT, S7, LBAP[GWY]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ388493	19/05/2004	Recorder Name Withheld	3		Wrexham Ind Estate - S of Bryn Lane		D1858/001/02	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3881149445	29/04/2014	Recorder Name Withheld	3 Adult		Bryn Cottages/Oak Rd		D1373/001/05	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3880949454	24/05/2012	Recorder Name Withheld	3 Adult		Wrexham Industrial Estate: Bryn Cottages	Species survey	D1466/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38804945	24/05/2012	Recorder Name Withheld	3		Wrexham Industrial Estate: Bryn Cottages		D1858/001/02	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ386492	2 records, between 13/05/1993 and 01/06/1998	Recorder Name Withheld	2 Adult; 8 Adult		The Oaks		D0217/001/04	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3864649406	17/05/2011	Recorder Name Withheld	1 Adult		Wrexham Industrial Estate: Redwither	Species survey	D1466/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38644940	17/05/2011	Recorder Name Withheld	1		Wrexham Industrial Estate		D1858/001/02	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38624925	24/05/2012	Recorder Name Withheld	1		Wrexham Industrial Estate: Redwither		D1858/001/02	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3862549254	24/05/2012	Recorder Name Withheld	1 Adult		Wrexham Industrial Estate: Redwither	Species survey	D1466/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ385493	12 records, between May 1993 and 30/05/2010	Recorder Name Withheld	2; 2 Adult; 1 Adult; 6 Adult; 8 Adult; 5 Adult; 4 Adult		Wrexham Ind Estate	Breeding: No. Mature: Yes. Record type: Daytime observation; Breeding: No. Mature: Yes. Record type: Field record / observation	D1858/001/02 , D0127/001/02 , D1373/001/05	RD1(UK)VU, S7, LBAP[DEN, FLI]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3852849251	24/05/2012	Recorder Name Withheld	1 Adult		Wrexham Industrial Estate: Redwither	Species survey	D1466/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38524925	24/05/2012	Recorder Name Withheld	1		Wrexham Industrial Estate: Redwither		D1858/001/02	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38604969	2 records, both on 04/06/2015	Recorder Name Withheld	1 Adult		Abbey Road		D1373/001/05 , D1117/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3850949263 (Selected from Interactive Map)	16/05/2019	Recorder Name Withheld	2 Adult		Wrexham industrial estate		D1117/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	4
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3845749320	21/05/2014	Recorder Name Withheld	1 Adult		The Oaks		D1373/001/05	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38895016	4 records, all on 23/05/2018	Recorder Name Withheld	5 Adult; 5	Live Sighting	Wrexham Recycling Park Mitigation Area		D1373/001/05 , D1696/001/01 , D1748/002/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ388501	12 records, between 11/05/2012 and 29/05/2012	Recorder Name Withheld	3; 1; 2		Bryn Lane Wrexham Ind Estate S2	Grid reference type: Estimated (centroid of transect section)	D1924/001/01	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3849	2 records, between 12/05/2000 and 15/05/2000	Recorder Name Withheld	3 Adult; 11 Adult		The Oaks		D0217/001/04	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3848	12/05/2005	Recorder Name Withheld	1		SJ3848	Wrexham Ind Estate	D1858/001/02	RD1(UK)VU, S7, LBAP[DEN, FLI]	3
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar / Rhesen Lydan Dywyll)	SJ392502	13/07/1999	Recorder Name Withheld	3 Adult		Owens Corning Factory	Habitat: Scrub. Method: Netted	D1285/001/03	S7, LBAP[GWY]	3
<i>Timandra comae</i> (Blood-vein / Gwyfyn Gwythïen Goch)	SJ396489	04/08/2006	Recorder Name Withheld	1 Adult		Bowling bank Pond	Habitat: pond. Method: Netted	D1285/001/03	S7	3
<i>Tyria jacobaeae</i> (Cinnabar / Teigr y Benfelen)	SJ392502	16/06/1999	Recorder Name Withheld	2 Adult		Owens Corning Factory	Habitat: Scrub. Method: Netted	D1285/001/03	S7, LBAP[GWY]	3
<i>Watsonalla binaria</i> (Oak Hook-tip / Bachadain y Deri)	SJ386492	1972	Recorder Name Withheld	1 Adult		Wrexham Ind. estate	Habitat: Grassland: neutral. Method: MV Light	D1285/001/03	S7, LBAP[GWY]	3
<i>Watsonalla binaria</i> (Oak Hook-tip / Bachadain y Deri)	SJ385495	1972 - 1973	Recorder Name Withheld			Wrexham Industrial Estate		D0217/001/04	S7, LBAP[GWY]	3

Fish										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Anguilla anguilla</i> (Eel / Llysywen)	SJ395483	18/07/2002	Recorder Name Withheld	100 to 999 [Captured - Survey]		River Dee / Alyn, 213	Survey type: Electric Fishing	D1702/001/01	RD1(UK)CR, S7, LBAP[CON, GWY]	3
<i>Salmo salar</i> (Atlantic Salmon / Eog)	SJ395483	09/07/2001	Recorder Name Withheld	1 to 9 [Captured - Survey]		River Dee / Clywedog, 206	Survey type: Electric Fishing	D1702/001/01	Bern, HDir, RD2(UK), S7, LBAP[CON, DEN, FLI, GWY]	3
<i>Salmo salar</i> (Atlantic Salmon / Eog)	SJ396483	01/08/1994	Recorder Name Withheld			Higher Oak; Afon Clywedog		D1153/001/02	Bern, HDir, RD2(UK), S7, LBAP[CON, DEN, FLI, GWY]	3
<i>Salmo trutta</i> (Brown/Sea Trout / Siwin; Brithyll)	SJ396483	01/08/1994	Recorder Name Withheld			Higher Oak; Afon Clywedog		D1153/001/02	S7, LBAP[CON, GWY]	3

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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)	SJ3949 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D0132/001/02	EPS, WCA5, LBAP[ANG, DEN, FLI, SNP]	4
<i>Lepus europaeus</i> (Hare / Ysgyfarnog)	SJ397495 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld				Shoot Size Range: 0-3km	D0132/001/02	S7, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	1
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ4050	2 records, between 01/05/1945 and 01/05/1946	Recorder Name Withheld		Shot	Site Name Withheld	Comments Withheld	D1118/006/01	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	4
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ3948	12 records, between 20/07/1991 and 27/10/2009	Recorder Name Withheld	2 spraints	Tracks/Trail; Dung/Droppings/ Frass/Pellet, etc.	Site Name Withheld	Comments Withheld	D1558/001/01 , D1118/006/01 , D1153/001/02	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ3948	3 records, between 20/07/1991 and 06/11/2003	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D0045/001/02 , D1923/001/01	Bern, CITES, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3848	1983	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)	SJ3849	1983	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)	SJ3849	13/11/2007	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)	SJ3849	02/01/2003	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)	SJ3948	19/11/2008	Recorder Name Withheld		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/03	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3
<i>Mustela erminea</i> (Stoat / Carlwm)	SJ39045017 (Selected from Interactive Map)	01/06/2016	Recorder Name Withheld	1		Bryn Lane, Wrexham Industrial Estate		D1748/001/01	Bern, NRW, LBAP[ANG, CON, FLI]	4
<i>Myotis mystacinus</i> (Whiskered Bat / Ystlum Barfog)	SJ3849	28/09/1999	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>Neovison vison</i> (American Mink / Minc)	SJ397495 (Estimated (Centroid of Site))	2005 approx	Recorder Name Withheld				Shoot Size Range: 0-3km	D0132/001/02	INNS, WCA9	1
<i>Nyctalus noctula</i> (Noctule Bat / Ystlum Mawr)	SJ3849 (Approximate)	2 records, between 22/07/2016 and 23/07/2016	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D1695/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ3949	3 records, between 16/08/1993 and 18/08/1993	Recorder Name Withheld	32; 22; 8		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)	SJ3849 (Approximate)	2 records, between 22/07/2016 and 23/07/2016	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D1695/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ3948	1994	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

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)	SJ3849	1998	Recorder Name Withheld	60 (Exact)		Site Name Withheld	Comments Withheld	D1923/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Pipistrellus pygmaeus</i> (Soprano Pipistrelle / Ystlum Lleiaf Uchelsain)	SJ3849 (Approximate)	23/07/2016	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D1695/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, DEN, FLI, GWY, SNP]	4
<i>Plecotus auritus</i> (Brown Long-eared Bat / Ystlum Hirglust)	SJ3849	10/10/2005	Recorder Name Withheld	1 (Exact)		Site Name Withheld	Comments Withheld	D1923/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat / Ystlum Pedol Lleiaf)	SJ3849	08/09/2005	Recorder Name Withheld			Site Name Withheld	Comments Withheld	D1923/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3

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Other Invertebrates										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Acanthiophilus helianthi</i>	SJ3849	04/07/2000	Recorder Name Withheld			The Oaks		D0217/001/04	RD2(UK)N	3
<i>Diplapion stolidum</i>	SJ3849	04/07/2000	Recorder Name Withheld	1 Adult		The Oaks		D0217/001/04	RD2(UK)NB	3
<i>Lestes sponsa</i> (Emerald Damselfly / Mursen Werdd)	SJ396489	04/08/2006	Recorder Name Withheld	1 adult		Bowling Bank Pond		D1295/001/04	LBAP[SNP], LI[VC50]	3
<i>Lestes sponsa</i> (Emerald Damselfly / Mursen Werdd)	SJ396500	2 records, both on 01/08/1979	Recorder Name Withheld	Present adult				D0158/003/01 , D1295/001/04	LBAP[SNP], LI[VC50]	4
<i>Lestes sponsa</i> (Emerald Damselfly / Mursen Werdd)	SJ403491	2 records, both on 19/07/1979	Recorder Name Withheld	Present adult				D0158/003/01 , D1295/001/04	LBAP[SNP], LI[VC50]	4
<i>Neophytobius quadrinodosus</i>	SJ3849	04/07/2000	Recorder Name Withheld	1 Female		The Oaks		D0217/001/04	RD2(UK)NA	3
<i>Oxycera morrisii</i> (White-barred Soldier)	SJ392502	4 records, all on 17/07/1999	Recorder Name Withheld	1 Adult; 1		Owens Corning Factory	Malaise Trap; In malaise trap; iRecord (iRecord Import)	D1650/006/01 , D1453/001/01 , D1906/001/01 , D1844/001/03	RD2(UK)N	1
<i>Phaonia atriceps</i>	SJ392502	18/08/1999	Recorder Name Withheld	3		Owens Corning site, Wrexham Industrial Estate	In malaise trap	D1453/001/01	RD2(UK)N	1
<i>Pseudorchestes pratensis</i>	SJ3849	04/07/2000	Recorder Name Withheld	1 Adult		The Oaks		D0217/001/04	RD2(UK)NB	3
<i>Sympetrum sanguineum</i> (Ruddy Darter / Gwäell Rudd)	SJ38865016 (Selected from Interactive Map)	21/07/2014	Recorder Name Withheld	1 Adult Male		Bryn Lane, Wrexham Industrial Estate		D1748/001/01	LBAP[SNP], LI[VC50]	4

Plants										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Calamagrostis epigejos</i> (Wood Small-reed / Corsen Fach y Coed)	SJ3849	11/06/2011	Recorder Name Withheld			Wrexham Industrial Site	SJ38174894. Large patch on lip of depression	D1169/004/02	LBAP[GWY], LI[VC48, VC49, VC50, VC51]	3
<i>Cichorium intybus</i> (Chicory / Ysgello)	SJ385496	20/07/2015	Recorder Name Withheld	6		Wrexham Industrial Estate	Council Reserve	D1169/004/02	LI[VC49, VC50, VC51]	3
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ387494	2 records, both in 1998	Recorder Name Withheld			Redwither	Redwither.	D0216/001/03 , D1169/004/02	RD1(Wales)DD, LBAP[CON], LI[VC50]	4
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ386492	29/06/2014	Recorder Name Withheld			Wrexham Industrial Estate	4ft Tall	D1169/004/02	RD1(Wales)DD, LBAP[CON], LI[VC50]	3
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ3849	11/06/2011	Recorder Name Withheld			Wrexham Industrial Site	SJ3889.4915	D1169/004/02	RD1(Wales)DD, LBAP[CON], LI[VC50]	3
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ3848	11/06/2011	Recorder Name Withheld			Wrexham Industrial Site		D1169/004/02	RD1(Wales)DD, LBAP[CON], LI[VC50]	3
<i>Crocsmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i> (Montbretia / Crib-y-Ceiliog)	SJ3850	19/04/2014	Recorder Name Withheld			Wrexham Industrial Estate North		D1169/004/02	INNS, WCA9	3
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ3848	11/06/2011	Recorder Name Withheld			Wrexham Industrial Estate		D1169/004/02	INNS, WCA9	3
<i>Genista tinctoria</i> (Dyer's Greenweed / Melynog y Waun)	SJ386494	27/06/2007	Recorder Name Withheld			Wrexham Industrial Estate	Cefn Park: uncut grassy area	D1169/004/02	LI[VC49, VC50, VC51]	3
<i>Impatiens glandulifera</i> (Himalayan Balsam / Jac y Neidiwr)	SJ3891348912	20/10/2016	Recorder Name Withheld			Wrexham Industrial estate	wet woodland, HB throughout. Mark DINNS	D1586/014/01	INNS, WCA9	4
<i>Impatiens glandulifera</i> (Himalayan Balsam / Jac y Neidiwr)	SJ386493 (Approximate)	23/07/2016	Recorder Name Withheld			WIE 1. The Oaks LWS & River Clywedog		D1695/001/01	INNS, WCA9	4
<i>Impatiens glandulifera</i> (Himalayan Balsam / Jac y Neidiwr)	SJ3849	11/06/2011	Recorder Name Withheld			Wrexham Industrial Estate		D1169/004/02	INNS, WCA9	3
<i>Lathyrus nissolia</i> (Grass Vetchling / Ytbsen Feinddail)	SJ3848	2 records, between 29/06/2009 and 11/06/2011	Recorder Name Withheld			Wrexham Industrial Site	Widespread in the area	D1169/004/02	LI[VC49, VC50]	3
<i>Ononis spinosa</i> (Spiny Restharrow / Tagaradr Pigog)	SJ3848	11/08/2013	Recorder Name Withheld			Wrexham Industrial Estate	SJ381489. 5 plants. Track around pit, original place W	D1169/004/02	LI[VC49, VC50, VC52]	3
<i>Petasites hybridus</i> (Butterbur / Alan Mawr)	SJ3848	11/06/2011	Recorder Name Withheld			Wrexham Industrial Estate		D1169/004/02	LI[VC48, VC50]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Polemonium caeruleum</i> (Jacob's-ladder / Ysgol Jacob)	SJ3849	11/06/2011	Recorder Name Withheld			Wrexham Industrial Site	SJ3889.4915. 4th for VC.	D1169/004/02	RD2(UK)R, LBAP[CON]	3
<i>Populus nigra</i> (Black-poplar / Poplysen Ddu)	SJ39264879 (Supplied by Original Recorder)	4 records, between 24/02/2004 and 19/11/2008	Recorder Name Withheld	6; 3; 2		River Clywedog; Pickhill Bridge farm	Two tall trees only	D1446/001/01	LBAP[DEN, FLI, SNP, WRE], LI[VC52]	4
<i>Populus nigra subsp. betulifolia</i> (Black Poplar)	SJ4010049400	1994	Recorder Name Withheld	1 Male	Field record	B5130 Isycoed	Hedge - Location to be checked	D0225/001/01	LBAP[CON, DEN, FLI, SNP, WRE], LI[VC48, VC50, VC52]	4
<i>Populus nigra subsp. betulifolia</i> (Black Poplar)	SJ4050	29/07/2012	Recorder Name Withheld			Isycoed		D1169/004/02	LBAP[CON, DEN, FLI, SNP, WRE], LI[VC48, VC50, VC52]	3
<i>Ranunculus trichophyllus</i> (Thread-leaved Water-crowfoot / Crafant-y-Frân Feinddail)	SJ3950	1979	Recorder Name Withheld					D0216/001/03	LBAP[GWY], LI[VC48, VC49, VC50, VC52]	4
<i>Ricciocarpos natans</i> (Fringed Heartwort / Grisial-Lys Eddiog)	SJ397498 (Selected from Interactive Map)	24/07/2016	Recorder Name Withheld			Wrexham Industrial Estate		D1695/001/01	RD1(Wales)EN, LI[VC50]	4
<i>Salix viminalis x cinerea</i> = <i>S. x holosericea</i> (Silky-leaved Osier)	SJ3849	11/06/2011	Recorder Name Withheld			Wrexham Industrial Site	SJ38094918. On side of shallow ditch	D1169/004/02	LI[VC50, VC51]	3
<i>Sedum album</i> (White Stonecrop / Briweg Wen)	SJ386493 (Approximate)	2 records, both on 23/07/2016	Recorder Name Withheld			WIE 1. The Oaks LWS & River Clywedog		D1695/001/01	INNS	4
<i>Sedum album</i> (White Stonecrop / Briweg Wen)	SJ3849 (Selected from Interactive Map)	05/03/2020	Recorder Name Withheld			The Oaks LWS		D1117/001/01	INNS	4
<i>Silaum silaus</i> (Pepper-saxifrage / Ffenigl yr Hwch)	SJ387494	07/08/2009	Recorder Name Withheld			Wrexham Industrial Site		D1169/004/02	LI[VC50]	3
<i>Silaum silaus</i> (Pepper-saxifrage / Ffenigl yr Hwch)	SJ386492	29/06/2014	Recorder Name Withheld			Wrexham Industrial Estate	Wrexham Ind Estate (Oaks Site)	D1169/004/02	LI[VC50]	3
<i>Silaum silaus</i> (Pepper-saxifrage / Ffenigl yr Hwch)	SJ3848	11/06/2011	Recorder Name Withheld			Wrexham Industrial Site	SJ38104889.	D1169/004/02	LI[VC50]	3
<i>Sinapis arvensis</i> (Charlock / Mwstard Gwyllt)	SJ3850	19/04/2014	Recorder Name Withheld			Wrexham Industrial Estate North		D1169/004/02	RD1(Wales)VU	3
<i>Veronica catenata</i> (Pink Water-Speedwell / Graeanllys-y-Dwr Rhosliw)	SJ397498 (Selected from Interactive Map)	24/07/2016	Recorder Name Withheld			Wrexham Industrial Estate		D1695/001/01	LI[VC48, VC49, VC50]	4

Reptiles and Amphibians										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Anguis fragilis</i> (Slow-worm / Neidr Ddefaid)	SJ3849	2 records, both in 1999	Recorder Name Withheld			Wrexham Industrial Estate	Habitat: Scrub, grassl'd	D0035/002/01 , D1076/001/02	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ395500 (Selected from Interactive Map)	14/04/2010	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P39 cluster (Ponds 3,4,5,6)		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ38634948 (Supplied by Original Recorder)	23/07/2016	Recorder Name Withheld	1		WIE 1. The Oaks LWS & River Clywedog	Sub-Adult	D1695/001/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ3910550060 (Selected from Interactive Map)	03/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P12 (D)		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ3958050192 (Selected from Interactive Map)	03/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P17 (H)		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ390501	14/11/2015	Recorder Name Withheld	223	Pitfall Trap	Bryn Lane, Wrexham Industrial Estate	Trapped and translocated between October and November, mixture of adult and juveniles	D1672/001/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	4
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ3910250172 (Selected from Interactive Map)	5 records, between 03/05/2005 and 07/04/2010	Recorder Name Withheld	1 Adult (Sex Unknown); Adult (Sex Unknown); 2 Adult (Sex Unknown); 1 Juvenile (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P11 (C)		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ39345027	24/06/1992	Recorder Name Withheld					D1122/002/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ39035023	2 records, between 03/05/2005 and 24/03/2010	Recorder Name Withheld	2 Adult (Sex Unknown); 1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P32 (B)		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ38915018 (Selected from Interactive Map)	4 records, between 11/04/2007 and 03/05/2007	Recorder Name Withheld	1 Adult (Sex Unknown); 1	Torch Count; Bottle Trap	Wrexham Ind Estate - Central: Phase 1, Ditch		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Bufo bufo</i> (Common Toad / Llyffant Dafadennog)	SJ388501 (Selected from Interactive Map)	15/04/2013	Recorder Name Withheld	400 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - Central: Phase 1, General		D1320/014/01	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ391493 (Supplied by Original Recorder (Checked))	06/03/1999	Recorder Name Withheld	+		Wrexham Industrial Estate	Torch survey of 2+ ponds	D0026/036/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39094934	11/06/1992	Recorder Name Withheld					D1122/002/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39064980	11/06/1992	Recorder Name Withheld					D1122/002/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39714882	03/06/1992	Recorder Name Withheld					D1122/002/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3932449953 (Selected from Interactive Map)	3 records, between 03/05/2005 and 13/05/2005	Recorder Name Withheld	2 Adult (Sex Unknown); 4 Adult (Sex Unknown); 3 Adult Male; 1 Adult Female	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P15 (F)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3925549949 (Selected from Interactive Map)	20/05/2005	Recorder Name Withheld	1 Adult Male	Bottle Trap	Wrexham Ind Estate - East: P14 (E)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3973249879 (Selected from Interactive Map)	4 records, between 25/03/2010 and 03/06/2010	Recorder Name Withheld	1 Adult Female; 1 Adult Male; 1 Adult Female; 2 Adult Female	Bottle Trap	Wrexham Ind Estate - East: P19 (R)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39505001 (Selected from Interactive Map)	3 records, between 07/04/2010 and 26/04/2010	Recorder Name Withheld	1 Adult Male; 1 Adult Female; 28 Adult Female; 8 Adult Male; 7 Adult Female; 4 Adult Male	Torch Count	Wrexham Ind Estate - East: P38 (Pond 7)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3895149895 (Selected from Interactive Map)	4 records, between 03/05/2005 and 13/05/2005	Recorder Name Withheld	1 Adult Male; 3 Adult Female; 2 Adult Male; 3 Adult Female; 4 Adult (Sex Unknown); 3 Adult (Sex Unknown)	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P13 (V)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3962050012 (Selected from Interactive Map)	2 records, between 04/05/2005 and 25/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown); 1 Adult Male	Bottle Trap	Wrexham Ind Estate - East: P18 (G)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ395500 (Selected from Interactive Map)	4 records, between 07/04/2010 and 26/04/2010	Recorder Name Withheld	3 Adult Female; 2 Adult Male; 6 Adult Female; 1 Adult Female; 10 Adult Male; 12 Adult Female	Torch Count	Wrexham Ind Estate - East: P39 cluster (Ponds 3,4,5,6)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3950950068 (Selected from Interactive Map)	5 records, between 24/03/2010 and 26/04/2010	Recorder Name Withheld	5 Adult Male; 5 Adult Female; 5 Adult Male; 8 Adult Female; 9 Adult Male; 19; 7 Adult Female; 15 Adult Male	Torch Count	Wrexham Ind Estate - East: P36 (Pond 1)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3958050192 (Selected from Interactive Map)	22 records, between 03/05/2005 and 04/06/2013	Recorder Name Withheld	20 Adult (Sex Unknown); 4 Adult Female; 2 Adult Male; 2 Adult Male; 5 Adult Female; 2 Adult Male; 2 Adult Female; 3 Adult Male; 3 Adult Female; 1 Adult Male; 1 Adult Male; 1 Adult Female; 2 Adult Fema...	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P17 (H)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ390501	14/11/2015	Recorder Name Withheld	58	Pitfall Trap	Bryn Lane, Wrexham Industrial Estate	Trapped and translocated between October and November, mixture of adult and juveniles	D1672/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3910250172 (Selected from Interactive Map)	9 records, between 04/05/2005 and 03/06/2010	Recorder Name Withheld	1 Adult Male; 5 Adult Male; 2 Adult Female; 8 Adult Male; 11 Adult Female; 13 Adult Male; 6 Adult Female; 1 Adult Male; 2 Adult Female; 2 Adult Female; 8 Adult Male; 3 Adult Male; 5 Adult Female; 5 Ad...	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P11 (C)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ38905012	4 records, between 12/05/2005 and 24/05/2005	Recorder Name Withheld	15 Adult (Sex Unknown); 1 Adult (Sex Unknown); 3 Adult Male; 1 Adult Female; 16 Adult (Sex Unknown)	Torch Count; Bottle Trap	Wrexham Ind Estate - Central: P09 (X)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39525025	24/06/1992	Recorder Name Withheld					D1122/002/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3934250277 (Selected from Interactive Map)	15 records, between 13/05/2005 and 21/05/2013	Recorder Name Withheld	4 Adult Male; 1 Adult Female; 2 Adult Female; 5 Adult Male; 1 Adult Female; 7 Adult Male; 2 Adult Female; 1 Adult Male; 1 Adult Female; 1 Adult (Sex Unknown); 2 Adult Male; 1 Female; 4 Adult Male; 3 A...	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P09 (K)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ3945350289 (Selected from Interactive Map)	21 records, between 04/05/2005 and 04/06/2013	Recorder Name Withheld	1 Adult Male; 4 Adult Male; 3 Adult Female; 9 Adult Male; 4 Adult Female; 1 Adult Male; 1 Adult Female; 7 Adult Male; 5 Adult Female; 5 Adult Male; 3 Adult Female; 2 Adult Male; 3 Adult Female; 2 Adul...	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P08 (J)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39145026	03/05/2005	Recorder Name Withheld	2 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P33 (U)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39035023	9 records, between 12/05/2005 and 02/06/2010	Recorder Name Withheld	1 Adult Male; 1 Adult Female; 2 Adult Male; 1 Adult Female; 8 Adult (Sex Unknown); 3 Adult (Sex Unknown); 6 Adult (Sex Unknown); 4 Adult Male	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P32 (B)		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ38915018 (Selected from Interactive Map)	13 records, between 11/04/2007 and 22/05/2007	Recorder Name Withheld	12 Adult Female; 10 Adult Male; 13 Adult Female; 19 Male; 34 Female; 31 Male; 10 Female; 17 Male; 41 Female; 13 Male; 16 Female; Egg; 48 Male; 55 Female; 29 Male; 9 Female; 6 Male; 8 Female; 5 Male; 4...	Torch Count; Bottle Trap	Wrexham Ind Estate - Central: Phase 1, Ditch		D1320/014/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3973249879 (Selected from Interactive Map)	24/03/2010	Recorder Name Withheld	Frog Spawn	Torch Count	Wrexham Ind Estate - East: P19 (R)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ39505001 (Selected from Interactive Map)	07/04/2010	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P38 (Pond 7)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3962050012 (Selected from Interactive Map)	4 records, between 13/05/2013 and 04/06/2013	Recorder Name Withheld	Larva/Tadpole	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P18 (G)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ395500 (Selected from Interactive Map)	2 records, between 07/04/2010 and 21/04/2010	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P39 cluster (Ponds 3,4,5,6)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3910550060 (Selected from Interactive Map)	19/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P12 (D)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3888349963 (Supplied by Original Recorder)	17/05/2019	Recorder Name Withheld	2 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - Central: Bryn Lane, Phase 2, P01		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3888049984 (Supplied by Original Recorder)	2 records, between 22/04/2015 and 29/04/2019	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - Central: Bryn Lane, Phase 2, P02		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ390501	14/11/2015	Recorder Name Withheld	27	Pitfall Trap	Bryn Lane, Wrexham Industrial Estate	Trapped and translocated between October and November, mixture of adult and juveniles	D1672/001/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	4
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3910250172 (Selected from Interactive Map)	24/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P11 (C)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ39525025	24/06/1992	Recorder Name Withheld					D1122/002/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ38764858	09/06/1992	Recorder Name Withheld					D1122/002/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3934250277 (Selected from Interactive Map)	07/05/2013	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P09 (K)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ3945350289 (Selected from Interactive Map)	3 records, between 04/05/2005 and 24/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown); 4 Adult (Sex Unknown)	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P08 (J)		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ38915018 (Selected from Interactive Map)	03/05/2007	Recorder Name Withheld	1	Torch Count	Wrexham Ind Estate - Central: Phase 1, Ditch		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ388501 (Selected from Interactive Map)	3 records, between 15/04/2013 and 19/06/2013	Recorder Name Withheld	Frog Spawn; Larva/Tadpole; 17 Adult (Sex Unknown); 4 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - Central: Phase 1, General		D1320/014/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ391493 (Supplied by Original Recorder (Checked))	06/03/1999	Recorder Name Withheld	2 Male; 2 Female		Wrexham Industrial Estate	Torch survey of 2+ ponds	D0026/036/01	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)	SJ39604918 (Supplied by Original Recorder)	2 records, between 1992 and 17/06/1992	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)	SJ39604912 (Approximate)	1992	Recorder Name Withheld	Present		BICC cables		D0137/001/01	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)	SJ39094934 (Approximate)	2 records, between 1992 and 11/06/1992	Recorder Name Withheld	Present		BICC cables		D0137/001/01 , D1122/001/01	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)	SJ39614912 (Supplied by Original Recorder)	17/06/1992	Recorder Name Withheld					D1122/001/01	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)	SJ39584958 (Approximate)	3 records, between 1992 and 17/06/1992	Recorder Name Withheld	Present		Cae Farm		D0137/001/01 , D1118/011/03 , D1122/001/01	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)	SJ390493	3 records, all on 01/05/2004	Recorder Name Withheld	P Juvenile (Exact); P egg/ovum (Exact); 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)	SJ39044938 (Supplied by Original Recorder)	2 records, between 20/05/2004 and 09/06/2004	Recorder Name Withheld	6 Adult Male; 15 Adult Female; 1 Adult (Sex Unknown); 1 Adult Male; 7 Adult Female	Torch Count	Wrexham Ind Estate - East: P40		D1320/014/01	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)	SJ39264898 (Approximate)	1992	Recorder Name Withheld	Present		Diamond 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)	SJ39034939 (Supplied by Original Recorder)	11/06/1992	Recorder Name Withheld				Probable record (supplied by local resident)	D1122/001/01	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)	SJ39024932 (Supplied by Original Recorder)	11/06/1992	Recorder Name Withheld				Probable record (supplied by local resident)	D1122/001/01	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)	SJ39534896 (Supplied by Original Recorder)	2 records, between 1992 and 03/06/1992	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)	SJ39584896 (Approximate)	1992	Recorder Name Withheld	Present		Diamond Farm		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)	SJ39484970 (Approximate)	2 records, between 1992 and 17/06/1992	Recorder Name Withheld	Present				D0137/001/01 , D1122/001/01	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)	SJ39624898 (Supplied by Original Recorder)	03/06/1992	Recorder Name Withheld					D1122/001/01	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)	SJ39584888 (Supplied by Original Recorder)	03/06/1992	Recorder Name Withheld					D1122/001/01	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)	SJ39844943 (Supplied by Original Recorder)	2 records, between 1992 and 17/06/1992	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)	SJ39854915 (Approximate)	2 records, between 1992 and 03/06/1992	Recorder Name Withheld	Present		Cae Farm		D0137/001/01 , D1122/001/01	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)	SJ38944905 (Supplied by Original Recorder)	2 records, between 20/05/2004 and 09/06/2004	Recorder Name Withheld	1 Adult Male; 5 Adult Female; 7 Adult Female	Torch Count	Wrexham Ind Estate - Central: P17		D1320/014/01	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)	SJ39064980 (Supplied by Original Recorder)	2 records, between 1992 and 11/06/1992	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)	SJ39714882 (Supplied by Original Recorder)	2 records, between 1992 and 03/06/1992	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)	SJ39404992 (Supplied by Original Recorder)	2 records, between 1992 and 17/06/1992	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)	SJ388496	3 records, all on 04/04/2005	Recorder Name Withheld	231 Adult (Exact); 2 egg/ovum (Exact); 11 Juvenile (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)	SJ393499	03/05/2005 - 25/05/2005	Recorder Name Withheld	9 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)	SJ3932649952	Before 23/03/2007	Recorder Name Withheld	9 Great Crested Newt (05)		Wrexham Industrial Estate	Terrestrial record	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)	SJ3932449953 (Selected from Interactive Map)	2 records, between 03/05/2005 and 12/05/2005	Recorder Name Withheld	9 Adult (Sex Unknown); 2 Adult Male	Torch Count	Wrexham Ind Estate - East: P15 (F)		D1320/014/01	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)	SJ3925549949 (Selected from Interactive Map)	03/05/2005	Recorder Name Withheld	1 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P14 (E)		D1320/014/01	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)	SJ397498	03/05/2005 - 25/05/2005	Recorder Name Withheld	8 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)	SJ392499	03/05/2005 - 25/05/2005	Recorder Name Withheld	1 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)	SJ3925249954	Before 23/03/2007	Recorder Name Withheld	1 Great Crested Newt (05)		Wrexham Industrial Estate	Terrestrial record	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)	SJ39794880 (Approximate)	2 records, between 1992 and 03/06/1992	Recorder Name Withheld	Present		Higher Oak		D0137/001/01 , D1122/001/01	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)	SJ3972949880	Before 23/03/2007	Recorder Name Withheld	8 Great Crested Newt (05)		School Farm		D1118/011/03	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4

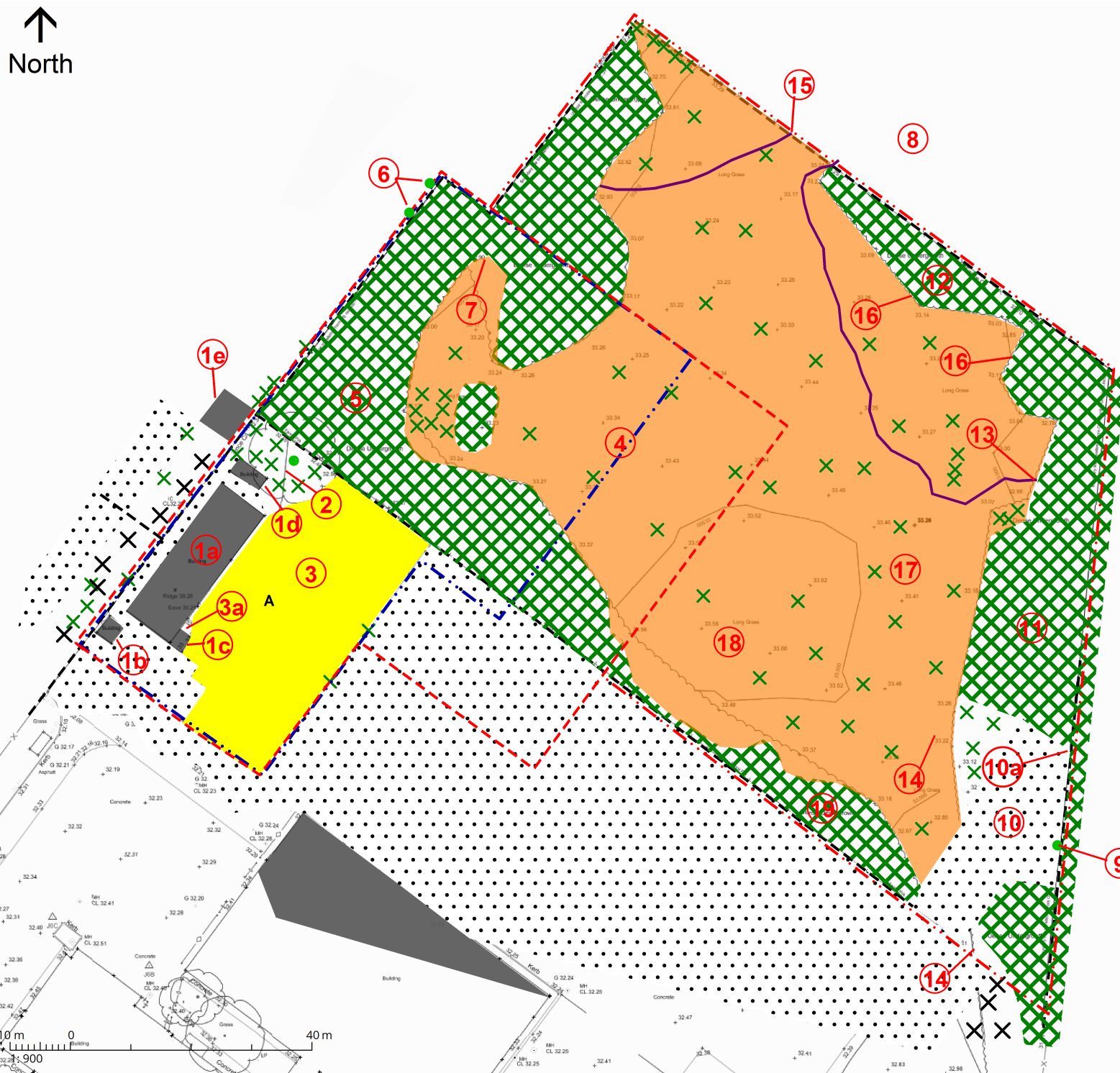
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ3973249879 (Selected from Interactive Map)	12 records, between 13/05/2005 and 13/05/2013	Recorder Name Withheld	5 Adult Male; 2 Adult Female; 1 Adult (Sex Unknown); 2 Adult Male; 6 Adult Female; 1 Adult Male; 2 Adult Female; 1 Adult Male; 3 Adult Female; 3 Adult Female; 7 Adult Male; 2 Adult Male; 1 Adult Femal...	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P19 (R)		D1320/014/01	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)	SJ389498	03/05/2005 - 25/05/2005	Recorder Name Withheld	13 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)	SJ39505001 (Selected from Interactive Map)	2 records, between 07/04/2010 and 14/04/2010	Recorder Name Withheld	2 Adult Male; 3 Adult Female; 2 Adult Male; Egg	Torch Count	Wrexham Ind Estate - East: P38 (Pond 7)		D1320/014/01	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)	SJ3895149895 (Selected from Interactive Map)	8 records, between 03/05/2005 and 14/04/2010	Recorder Name Withheld	1 Adult Male; 1 Adult Female; 3 Adult Male; 4 Adult Female; 4 Adult (Sex Unknown); 5 Adult Male; 6 Adult Female; 5 Adult Male; 8 Adult Female; 10; 8 Adult (Sex Unknown)	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P13 (V)		D1320/014/01	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)	SJ39924980 (Approximate)	2 records, between 1992 and 17/06/1992	Recorder Name Withheld	Present		Barn farm		D0137/001/01 , D1122/001/01	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)	SJ39604861 (Approximate)	1992	Recorder Name Withheld	Present		The Smithy		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)	SJ38934990 (Supplied by Original Recorder)	17/06/1992	Recorder Name Withheld				Probable record (supplied by local resident)	D1122/001/01	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)	SJ395500 (Selected from Interactive Map)	3 records, between 07/04/2010 and 21/04/2010	Recorder Name Withheld	1 Adult Female; 4 Adult Male; 5 Adult Female	Torch Count	Wrexham Ind Estate - East: P39 cluster (Ponds 3,4,5,6)		D1320/014/01	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)	SJ39624859 (Supplied by Original Recorder)	03/06/1992	Recorder Name Withheld				Probable record (supplied by local resident)	D1122/001/01	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)	SJ3950950068 (Selected from Interactive Map)	3 records, between 24/03/2010 and 14/04/2010	Recorder Name Withheld	1 Adult Male; 2 Adult Female; Egg; 2 Adult Male; 3 Adult Female; 1 Adult Male; 1 Adult Female	Torch Count	Wrexham Ind Estate - East: P36 (Pond 1)		D1320/014/01	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)	SJ3910550060 (Selected from Interactive Map)	03/05/2005	Recorder Name Withheld	1 Adult Male	Torch Count	Wrexham Ind Estate - East: P12 (D)		D1320/014/01	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)	SJ390500	03/05/2005 - 25/05/2005	Recorder Name Withheld	1 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)	SJ3911650079	Before 23/03/2007	Recorder Name Withheld	I GCN 05 (Terr Record)		Wrexham Industrial Estate		D1118/011/03	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4

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)	SJ39774860 (Supplied by Original Recorder)	2 records, between 1992 and 05/05/1992	Recorder Name Withheld	Present				D1122/001/01 , D1118/011/03	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)	SJ3888349963 (Supplied by Original Recorder)	29 records, between 25/04/2014 and 08/05/2020	Recorder Name Withheld	Egg; 2 Adult Female; 1 Adult Male; 3 Male; 2 Female; 1 Male; 1 Female; 2 Male; 3 Female; 2 Adult Male; 3 Adult Female; 1 Juvenile (Sex Unknown); 1 Adult Female; 8 Adult Male; 4 Adult Female	Not Applicable; Torch Count	Wrexham Ind Estate - Central: Bryn Lane, Phase 2, P01		D1320/014/01	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)	SJ39704855 (Approximate)	2 records, between 1992 and 05/05/1992	Recorder Name Withheld	Present		The Smithy		D0137/001/01 , D1122/001/01	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)	SJ388499	5 records, between 11/04/2007 and 22/05/2007	Recorder Name Withheld	1 Adult Male (Exact); P egg/ovum (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)	SJ3888049984 (Supplied by Original Recorder)	32 records, between 25/04/2014 and 08/05/2020	Recorder Name Withheld	4 Adult Male; 3 Adult Female; Egg; 2 Adult Female; 2 Male; 2 Female; 1 Adult Male; 1 Adult Female; 2 Adult Male; 3 Adult Male; 1 Female; 1 Male	Torch Count; Not Applicable	Wrexham Ind Estate - Central: Bryn Lane, Phase 2, P02		D1320/014/01	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)	SJ3888349996 (Supplied by Original Recorder)	19 records, between 22/04/2015 and 08/05/2020	Recorder Name Withheld	2 Adult Male; 2 Adult Female; Egg; 1 Male; 3 Adult Female; 1 Adult Male; 5 Adult Male; 1 Female; 1 Adult (Sex Unknown)	Torch Count; Not Applicable	Wrexham Ind Estate - Central: Bryn Lane, Phase 2, P03		D1320/014/01	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)	SJ389500	03/05/2005 - 25/05/2005	Recorder Name Withheld	10 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)	SJ396501	03/05/2005 - 25/05/2005	Recorder Name Withheld	13 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)	SJ3957950187	Before 23/03/2007	Recorder Name Withheld	13 Great Crested Newt (05)		Wrexham Industrial Estate		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)	SJ3958050192 (Selected from Interactive Map)	8 records, between 03/05/2005 and 23/04/2013	Recorder Name Withheld	5 Adult (Sex Unknown); 1 Adult Male; 1 Adult Female; 4 Adult Male; 9 Adult Female; 1 Adult Male; 1 Adult Male; 2 Adult Female	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P17 (H)		D1320/014/01	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)	SJ390501	14/11/2015	Recorder Name Withheld	5 Adult	Pitfall Trap	Bryn Lane, Wrexham Industrial Estate	Trapped and translocated between October and November	D1672/001/01	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)	SJ3910250172 (Selected from Interactive Map)	4 records, between 03/05/2005 and 28/04/2010	Recorder Name Withheld	1 Adult (Sex Unknown); 1 Adult Male; 2 Adult Male; 1 Adult Female; 7 Adult Male; 1 Adult Female	Torch Count; Bottle Trap	Wrexham Ind Estate - East: P11 (C)		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)	SJ38905012	2 records, between 12/05/2005 and 20/05/2005	Recorder Name Withheld	5 Adult (Sex Unknown); 1 Adult Male; 1 Adult Female	Torch Count; Bottle Trap	Wrexham Ind Estate - Central: P09 (X)		D1320/014/01	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)	SJ389501	9 records, between 19/04/2007 and 22/05/2007	Recorder Name Withheld	2 Adult Female (Exact); 7 Adult Male (Exact); 3 Adult Female (Exact); 2 Adult Male (Exact); 3 Adult Male (Exact); 8 Adult Male (Exact); 1 Adult Female (Exact); P egg/ovum (Exact); 1 Adult Male (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)	SJ392502	03/05/2005 - 25/05/2005	Recorder Name Withheld	6 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)	SJ3920050242	Before 23/03/2007	Recorder Name Withheld	6 Great Crested Newt (05)		Wrexham Industrial Estate		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)	SJ39525025 (Supplied by Original Recorder)	24/06/1992	Recorder Name Withheld				Probable record (supplied by local resident)	D1122/001/01	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)	SJ3910250227	Before 23/03/2007	Recorder Name Withheld	Max Count 1 GCN (Terrestrial)		Wrexham Industrial Estate		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)	SJ38764858 (Approximate)	2 records, between 1992 and 09/06/1992	Recorder Name Withheld	Present		Pickhill Bridge farm		D0137/001/01 , D1122/001/01	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)	SJ39345027 (Approximate)	2 records, between 1992 and 24/06/1992	Recorder Name Withheld	Present		Cheetham Owens Fibreglass		D0137/001/01 , D1122/001/01	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)	SJ3934250277 (Selected from Interactive Map)	25/05/2005	Recorder Name Withheld	1 Adult Female	Bottle Trap	Wrexham Ind Estate - East: P09 (K)		D1320/014/01	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)	SJ38744858	May 2015	Recorder Name Withheld	Peak count; 5		Pickhill, Pond 1	GCN survey	D1725/001/01	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)	SJ3945350289 (Selected from Interactive Map)	21 records, between 04/05/2005 and 04/06/2013	Recorder Name Withheld	1 Adult Male; 2 Adult Male; 1 Adult Female; 5 Adult Male; 9 Adult Female; 1 Adult Male; 1 Adult (Sex Unknown); 6 Adult Male; 7 Adult Female; 11 Adult (Sex Unknown); 14 Adult (Sex Unknown); 3 Adult Mal...	Bottle Trap; Torch Count	Wrexham Ind Estate - East: P08 (J)		D1320/014/01	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)	SJ39145026	03/05/2005	Recorder Name Withheld	6 Adult (Sex Unknown)	Torch Count	Wrexham Ind Estate - East: P33 (U)		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)	SJ3903250230	Before 23/03/2007	Recorder Name Withheld	Max Count 2 GCN (05)		Wrexham Industrial Estate		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)	SJ39035023 (Selected from Interactive Map)	4 records, between 24/05/2005 and 08/04/2019	Recorder Name Withheld	1 Egg; 1 Adult Female; 3 Adult Male; 1 Adult Female; 2 Adult (Sex Unknown)	Bottle Trap; Torch Count	Bryn Lane, Wrexham Industrial Estate	Egg search - confirmed present.	D1696/001/01 , D1320/014/01	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)	SJ38915018 (Selected from Interactive Map)	7 records, between 11/04/2007 and 22/05/2007	Recorder Name Withheld	1 Adult Male; 2 Male; Egg; 7 Male; 2 Female; 9 Male; 5 Female; 4 Male; 2 Male; 1 Female	Bottle Trap; Torch Count	Wrexham Ind Estate - Central: Phase 1, Ditch		D1320/014/01	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)	SJ388501 (Selected from Interactive Map)	6 records, between 11/04/2007 and 19/06/2013	Recorder Name Withheld	14 Maximum Count; 17 Adult Male; 11 Adult Female; Egg; 2 Adult Male; 9 Adult Female; Egg; 10 Adult Male; 12 Adult Female; Egg; P Adult Female (Exact); 1 Adult Female (Exact)	Live Sighting; Torch Count	Bryn Lane Recycling Centre	Tourch light survey	D1117/001/01 , D1320/014/01 , D1923/001/01	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)	SJ390502	2 records, both on 03/05/2005	Recorder Name Withheld	2 Adult (Exact); 1 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)	SJ3919250294	Before 23/03/2007	Recorder Name Withheld			Wrexham Industrial Estate		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)	SJ389502	03/05/2005 - 25/05/2005	Recorder Name Withheld	1 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)	SJ394503	03/05/2005 - 25/05/2005	Recorder Name Withheld	3 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)	SJ395503	03/05/2005 - 25/05/2005	Recorder Name Withheld	6 Adult (Exact)				D1923/001/01	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Vipera berus</i> (Adder / Gwiber)	SJ3849	2 records, both in 1999	Recorder Name Withheld			Wrexham Industrial Estate	Habitat: Scrub, grassl'd	D0035/002/01 , D1076/001/02	Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4

Statutory Sites returned by search	None
Wildlife Sites intersecting 1000m buffer	W337: Wrexham Industrial Estate (371m)
Ancient Woodland sites (if searched)	None
Phase I Habitats intersecting 1000m buffer (Habitat at central point shown in red, if found)	A.1.1.2: Planted Broad-leaved Woodland (0.27% / 8,482 sq.m), A.1.2.2: Planted Coniferous Woodland (0.26% / 8,143 sq.m), A.2.1: Dense Scrub (8.24% / 258,688 sq.m), B.2.2: Semi-improved Neutral Grassland (4.14% / 130,057 sq.m), B.4: Improved Grassland (51.04% / 1,603,320 sq.m), C.3.1: Tall Ruderal Herb (0.26% / 8,106 sq.m), G.1: Standing Water (0.53% / 16,644 sq.m), G.2: Running Water (0.69% / 21,779 sq.m), J.1.1: Arable (5.03% / 158,150 sq.m), J.1.2: Amenity Grassland (4.1% / 128,871 sq.m) , J.1.3: Ephemeral/Short Perennial (0.34% / 10,767 sq.m), J.3.6: Buildings (21.24% / 667,123 sq.m), J.4: Bare Ground (0.07% / 2,335 sq.m), NA: Not Accessed Land (1.41% / 44,434 sq.m)



-  Dense/ continuous scrub
-  Individual broad-leaved tree
-  Scattered scrub
-  Unimproved neutral grassland
-  Amenity grassland
-  Ephemeral/ short perennial
-  Building
-  Hard-standing
-  Fence
-  Approximate survey site boundary
-  Wider survey site boundary
-  Approximate proposed development site
-  Badger path
-  Target Note

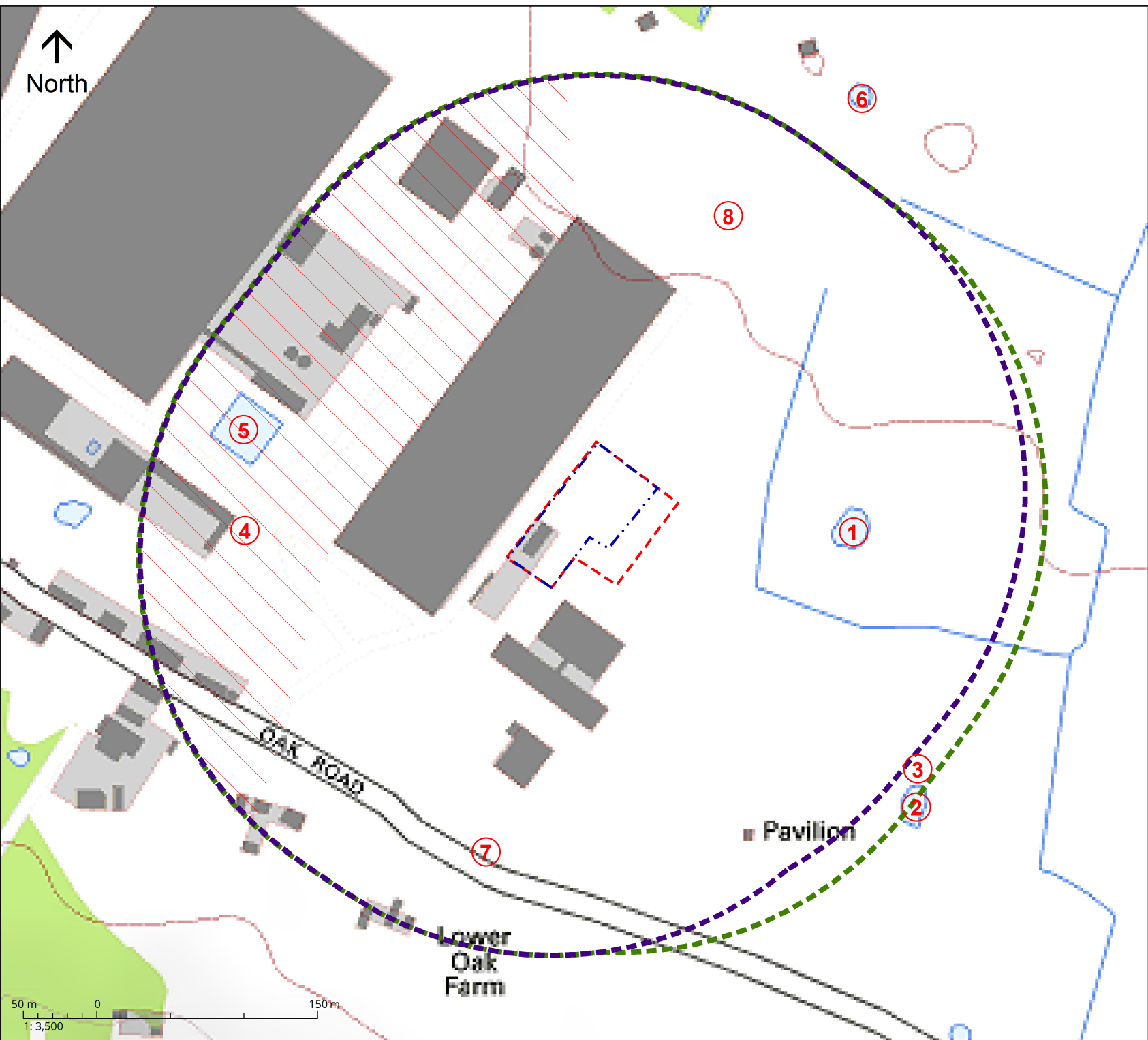
C442 Proposed Development at James Jones & Sons Ltd, off Oak Road, Wrexham Industrial Estate, Wrexham - Ecological Appraisal

Figure 1 - Extended Phase 1 Habitat Survey

Date: 21/05/2021

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- Approximate survey site boundary
- Approximate proposed development site
- 250 m buffer from proposed development site
- 250 m buffer from survey site
- Refer to text
- Approximate area excluded from walk-over/ survey
- Refer to text
- Number

1. Subject to detailed GCN survey (2 visits). Small breeding population.
2. Subject to detailed GCN survey (2 visits). Medium breeding population.
- 3 & 6. Confirmed absent during pond-scoping exercise.
- 4 & 5. Discounted further to desk study due to barriers between pond and site.
7. Subject to detailed GCN survey (2 visits). Small breeding population.
8. Dry throughout detailed GCN survey.

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Figure 2 - Ponds within 250 m of Proposed Development/ Survey Site

Date: 07/06/2021

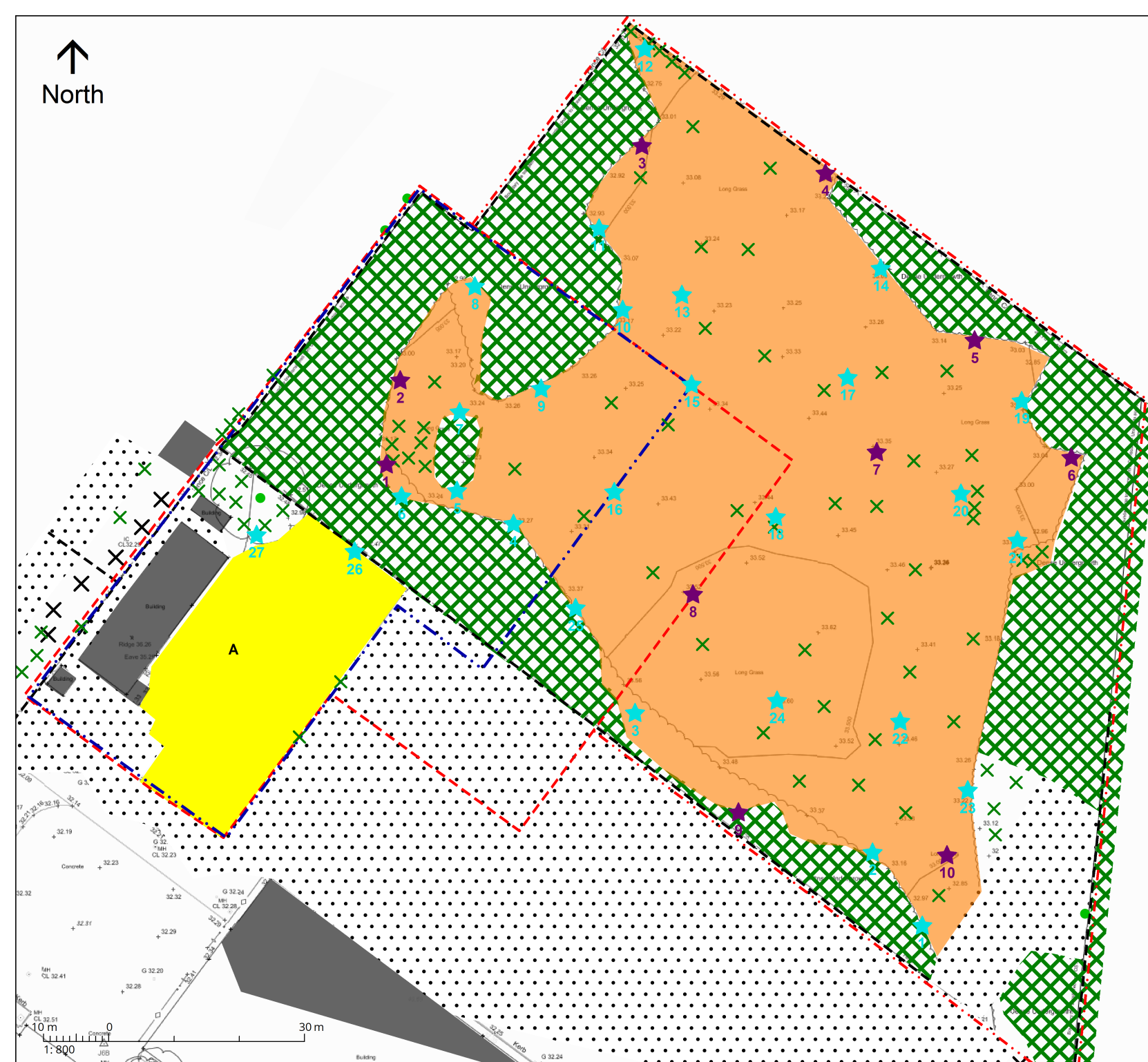


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- ★ Reptile refugia [tin]
- ★ Reptile refugia [felt]

Refer to *Figure 1* for Extended
Phase 1 Habitat Survey key



**C442 Proposed Development at James
Jones & Sons Ltd, off Oak Road, Wrexham
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**Figure 3 - Reptile Presence/ Absence
Survey**

Date: 23/06/2021

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