

Report Title	Proposed New Primary School, Phoenix Drive, Brymbo, Wrexham – Extended Phase 1 Habitat Survey
Date issued	17th February 2017
Author	Tom Knight
Report Version	C321/ 1.0
Client	Wrexham County Borough Council
Contract Ref.	C321

this report was produced by



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Quality Assurance

Survey/ Assessment Work Schedule		
Survey/Assessment Type	Surveyors/ Author	Date
Background data search	Tom Knight	February 2017
Extended Phase 1 Habitat Survey	Tom Knight	09/02/17

Review Schedule				
Issue	Date	Author	Reviewed by	Approved by
1.0	17/02/17	Tom Knight	Max Ellison	Max Ellison

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Figure 1 – Extended Phase 1 Habitat Survey

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Marches Ecology was commissioned by Wrexham County Borough Council (WCBC) to undertake an ecological background data search and an Extended Phase 1 Habitat Survey of land off Phoenix Drive, Brymbo, Wrexham (approximate OS Grid Ref. SJ 296 534). The land is part of the former Brymbo Steelworks site. This report is provided as supporting information to a planning application for outline consent (Planning ref. P/2017/0105) to construct a new primary school.
- 1.1.2 This survey report has three principal aims:
- to provide an initial appraisal of the ecological value of the site and local ecological resource;
 - to detail further surveys that may be required; and
 - to identify potential development constraints relating to ecology and outline potential mitigation measures where possible.
- 1.1.3 This report was produced by Tom Knight of Marches Ecology. Tom Knight is an ecologist with over seventeen 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).
 - PgDip Conservation Management.
 - BSc (Hons) Environmental Studies.
 - C&G Biological Surveying.

1.2 The Proposal

- 1.2.1 A preliminary vision for the school building and grounds is presented on a WCBC plan entitled '*Block Plan*', PD2014/031, dwg no. 03, dated January 2017. This plan is for illustration purposes only; the exact location of the school within the site has not been confirmed. Briefly this plan shows a vehicular and pedestrian road access to a car park and drop-off/ delivery areas. The new two-storey school would comprise a single building. The remaining land provides hard and soft play areas as well as a 'Grass Habitat Area'. The Design and Access Statement (WCBC 2016) provides dimensions for the new building of 69-71m by 23-25 m and 9-11 m high. The car park would provide approximately 50 spaces. It is proposed that the school would accommodate 315 full time pupils with 45 nursery places. The soft landscaping would include a wildlife garden and habitat areas.
- 1.2.2 No further detailed information regarding the proposed development has been provided.

1.3 Planning Policy

Introduction

- 1.3.1 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

- 1.3.2 Planning Policy Wales (PPW) sets out national land use planning policies (Welsh Government 2016). Chapter 5 is of particular relevance and is entitled 'Conserving and Improving Natural Heritage and the Coast'. With specific reference to development proposals the following key statements are made:
- *'Biodiversity and landscape considerations must be taken into account in determining individual applications and contributing to the implementation of specific projects. The effect of a development proposal on the wildlife or landscape of any area can be a material consideration'.*
 - *'When considering any development proposal... local planning authorities should consider environmental impact, so as to avoid, wherever possible, adverse effects on the environment'.*
- 1.3.3 Chapter 5 further covers statutory designations, protected species and specific habitats/ areas. National policy statements are listed at the end of the Chapter and cross-referenced to paragraphs.
- Technical Advice Note 5*
- 1.3.4 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.
- 1.3.5 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);*

¹ References to the relevant part of PPW.

- 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

- 1.3.6 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

- 1.3.7 The Wrexham Unitary Development Plan (UDP) was adopted in February 2005. It will be replaced (currently scheduled for adoption in 2018) by the Local Development Plan. The UDP '*...provides a framework for local decision making and the reconciliation of development and conservation interests...*'.

Relevant strategic and general development policies include:

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

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

- *Policy EC1. Within Green Barriers, development will only be granted planning permission if it is for agriculture, forestry, essential facilities for outdoor sport and recreation, cemeteries and other uses of land which maintain the openness of the Green Barrier and do not conflict with the purpose of including land within it.*

- *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

- 1.3.8 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 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.
- 1.3.9 The Wrexham Biodiversity Action Plan (WBAP) is also listed as supplementary planning guidance on the WCBC website. However this reference is out-of-date, the WBAP has been archived and is no longer available.

1.4 Legislation

Introduction

- 1.4.1 This sub-section provides a brief summary of key legislation relevant to ecology/ nature conservation and the proposal. 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 2010, as amended (The Regulations)

- 1.4.2 Transposes 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 Newts (*Triturus cristatus*).

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

- 1.4.3 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)

- 1.4.4 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)

- 1.4.5 *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*.

Environment (Wales) Act 2016

- 1.4.6 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)

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

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 A desk study was undertaken to provide background information on the ecological status of the survey site and its surroundings (a 1 km search area centred on the survey site was defined). Information was requested from Cofnod, Natural Resources Wales (NRW), WCBC, Clwyd Badger Group and Clwyd Bat Group. 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*). No response was received from Clwyd Bat Group.

2.2 Field Survey

Extended Phase 1 Habitat Survey

- 2.2.1 The Extended Phase 1 Habitat Survey was carried out on 9th February 2017 by Tom Knight of Marches Ecology. The Extended Phase 1 Habitat plan is provided as *Figure 1*. The survey focussed on land within the site boundary (henceforth referred to as the 'survey site', refer to *Figure 1*). Immediately adjacent habitat was considered where deemed appropriate and viewed from the survey site boundary where possible. The weather during the survey was cloudy and cold with a moderate breeze.
- 2.2.2 The standard initial habitat survey method is Phase 1 Habitat Survey. It 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.
- 2.2.3 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 is necessarily a more holistic approach than Phase 1 Habitat Survey and provides an understanding of habitat use by faunal groups (IEEM 2005). This 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. Target notes are recorded for habitat and features of possible botanical interest and features relating to animals including protected/ notable vertebrates that are likely to occur in the region and within the survey site. Evidence of activity was noted when encountered. The Target Notes are provided in *Section 5* and shown on *Figure 1*.
- 2.2.4 In addition to the habitat map and target notes, a plant species list was compiled (provided in *Table 1, Section 7*). Plant nomenclature in this report follows Stace (2010). February is outside the accepted survey period for Extended Phase 1 Habitat Surveys and some

flowering species would not be evident at this time. 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 habitat for Great Crested Newts was assessed.
- 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).

2.3 Survey Constraints

2.3.1 The following may be considered survey constraints:

- The Extended Phase 1 Habitat Survey was undertaken outside the accepted optimal period for such surveys.
- None of the survey site boundaries are physically marked. On the northeast and northwest sides it was assumed that the boundary was the top of the slope. The site is contiguous with a larger area of similar habitat to the south.
- Access permission was not provided to private land beyond the survey site boundary for the Extended Phase 1 Habitat Survey.

3 BASELINE ECOLOGICAL CONDITIONS

3.1 Designated Sites

- 3.1.1 There is one statutory designated site within 1 km of the survey site: Brymbo Fossil Forest Site of Special Scientific Interest (SSSI). This SSSI is located to the west of the survey site on the opposite side of Phoenix Drive. This site was designated for its geological/geomorphological interest and as such is beyond the remit of this report.
- 3.1.2 There are two non-statutory designated Wildlife Sites (WS) located partly or wholly within 1 km of the survey site: Brymbo Pony Fields and Mount Zion. Brymbo Pony Fields WS is located approximately 142 m to the northeast of the survey site at its closest point while Mount Zion is approximately 870 m to the west. Brymbo Pony Fields was designated due to the semi-improved grassland and hedgerows present. Mount Zion supports a mosaic of habitats including a waterbody, semi-improved grassland, patches of scrub and Bracken. It is noted for its bird interest. Due to the nature and scale of the proposal no impacts on these designated sites are predicted; they will not be considered further in this report.

3.2 Habitats and Flora

Context

- 3.2.1 The survey site extends to approximately 2.22 hectares of land and is located towards the northern end of the former Brymbo Steelworks site, Wrexham. The survey site comprises a level area of ground that has previously been cleared and formed for future development. It is characterised by ephemeral/ sparse grassland vegetation with some patches of more established grassland and scattered young scrub/ saplings.
- 3.2.2 To the northwest and northeast/ east the ground slopes down and away from the site. These slopes have been landscaped and extensively planted with largely native broad-leaved trees. Railway Road is located at the base of the slope to the northwest. Phoenix Drive is located to the west. Further to the northwest and west there is Brymbo Heritage Area and other plots allocated for future development. The northeast and northwest survey site boundaries are assumed to be at the top of the slope. The southern boundary is not defined and the survey site is contiguous with a larger, similar area of habitat.
- 3.2.3 There are seven 'Ancient Woodland Sites' within 1 km of the survey site. The closest of these sites is located on the western edge of Brymbo Fossil Forest.

Site Description

Introduction

- 3.2.4 The Extended Phase 1 Habitat map is provided as *Figure 1*. The Target Notes (numbered 1 to 9) are provided in *Section 5* and shown on *Figure 1*.

Ephemeral Vegetation and Grassland

- 3.2.5 Most of the survey site is characterised by ephemeral vegetation/ sparse grassland that is fairly species-poor (*Target Note 6*). The proportion of bare ground varies between around 25% and over 75%. The vegetation includes frequent *Agrostis capillaris* (Common Bent), locally frequent *Festuca rubra* (Red Fescue), *Agrostis stolonifera* (Creeping Bent), *Bellis perennis* (Daisy), occasional to locally frequent *Lotus corniculatus* (Common Bird's-foot-trefoil), occasional *Medicago lupulina* (Black Medick), *Taraxacum officinale* (Dandelion), *Plantago lanceolata* (Ribwort Plantain) and small amounts of *Ranunculus repens* (Creeping

Buttercup) and *Hypochaeris radicata* (Cat's-ear). This vegetation appears to have developed on slag/ shale material. Locally there are small areas where the grassland is more developed. Small amounts of *Poa compressa* (Flattened Meadow-grass) and *Catapodium rigidum* (Fern-grass) were noted. Small areas of surface water were present throughout the survey site.



- 3.2.6 There are two areas of more established grassland within the survey site (*Target Notes 2 and 7*). The unimproved neutral grassland at *Target Note 2* is moderately species-rich and is dominated by Common Bent with frequent *Cynosurus cristatus* (Crested Dog's-tail), Red Fescue, Common Bird's-foot-trefoil, locally frequent *Holcus lanatus* (Yorkshire-fog), occasional Red Clover and *Centaurea nigra* (Common Knapweed).
- 3.2.7 The unimproved neutral grassland at *Target Note 7* includes scattered scrub/ saplings. The sward composition of this grassland is variable but is moderately species-rich. It is largely dominated by Common Bent with frequent Red Clover, locally frequent Red Fescue, Yorkshire-fog, *Dactylis glomerata* (Cock's-foot), Cat's-ear, occasional *Elytrigia repens* (Common Couch), Ribwort Plantain, *Senecio jacobaea* (Common Ragwort) and lesser amounts of Crested Dog's-tail, *Calluna vulgaris* (Heather) and *Hypericum perforatum* (Perforate St. John's-wort). *Anthyllis vulneraria* (Kidney Vetch) was recorded throughout and is locally abundant. Small amounts of Flattened Meadow-grass was noted. A single Orchid spike was recorded though it is possible that there may be more. The species could not be confirmed. There is one small stand of *Phragmites australis* (Common Reed) which suggests impeded drainage and one stand of *Melilotus* sp. (Mellilot). This grassland grades into the ephemeral vegetation at *Target Note 6*.
- 3.2.8 The scrub/ saplings at *Target Note 7* appear to be approximately 5-8 years old and some have been periodically cut. The largest sapling had an approximate diameter at breast height (dbh) of 0.05 m. The scrub includes frequent *Salix cinerea* (Grey Willow), *Salix caprea* (Goat Willow) and *Betula pendula* (Silver Birch), occasional *Buddleja davidii* (Butterfly-bush) and lesser amounts of *Populus nigra* agg. (Black-poplar) and *Cytisus scoparius* (Broom).



Other Habitat

- 3.2.9 There is a soil/ rock stock-pile that measures approximately 30 m long by 12 m wide and 1.5 m high at *Target Note 8*. It includes some large rocks some of which contain fossils. The vegetation on top of the stock-pile is similar to that described at *Target Note 7* with frequent Kidney Vetch.



- 3.2.10 Small amounts of scattered scrub are found throughout the site including that on a low bund at *Target Note 4*. The scrub at *Target Note 4* is approximately 2-2.5 m tall and is dominated by Grey Willow, Goat Willow and Silver Birch with a small amount of Black-poplar.

- 3.2.11 A small stand of tall ruderal vegetation is located along the western site boundary. There is a shallow, dry ditch along most of the northwest and northeast boundaries.
- 3.2.12 Cofnod provided a number of plant records for 'Brymbo Steelworks Site' (Grid Ref. SJ 29 53). Species of possible relevance to this report include *Cotoneaster simonsii* (Himalayan Cotoneaster), *Fallopia japonica* (Japanese Knotweed) and *Rosa rugosa* (Japanese Rose).

Adjacent Habitat

- 3.2.13 The sloping ground to the immediate northwest and northeast of the survey site is characterised by young broad-leaved plantation woodland. The trees/ shrubs include *Ilex aquifolium* (Holly), Silver Birch, *Sorbus aucuparia* (Rowan), *Alnus glutinosa* (Alder), Grey Willow, *Ulex europaeus* (Gorse) and a small amount of *Larix* sp. (Larch). The trees appear to be approximately 10-15 years old; the plantation currently has a fairly open structure. Beneath the trees the ground layer is characterised by generally species-poor, unmanaged, unimproved neutral grassland. Due to its open nature the habitat provided is a mosaic of young trees and unmanaged grassland. The cutting by Railway Road has a slope angle of approximately 45° and extends up to approximately 20 m above the level of the road.



3.3 Species/ Species Groups

Badger

- 3.3.1 No setts were recorded within the survey site. Opportunities for sett excavation within the survey site are more-or-less limited to the stockpile at *Target Note 8*. The sloping ground to the northwest and northeast is likely to provide better opportunities though due to the open nature of the planted woodland dense cover is limited to small patches of Gorse/ *Rubus fruticosus* agg. (Bramble) scrub.

- 3.3.2 Clwyd Badger Group provided seven sett records for the 1 km search area. There is a cluster of records to the west of the survey site and a second cluster to the northeast, with single records further to the north and southeast. The closest of these sett records to the survey site is approximately 500 m to the west.
- 3.3.3 Evidence of Badger activity was recorded at one location within the survey site. The footprints appeared to be from one animal travelling in one direction.
- 3.3.4 The habitat within the survey site is of limited potential value for foraging. While this cannot be confirmed it appears that the substrate across much of the site is slag/ shale material. This may limit the available soil fauna including earthworms.

Bats

- 3.3.5 There are no features that offer potential roosting opportunities within the survey site.
- 3.3.6 The ephemeral vegetation/ sparse grassland that characterises most of the survey site is likely to be of negligible/ limited potential value for foraging bats. The small areas of more established grassland may be of limited potential value. This value may be reduced to some extent due to the lack of structural/ habitat diversity and as the survey site affords no areas of shelter. Similarly the site offers no linear or other features along which bat species that use such features may commute. The plantation woodland adjacent to the survey site may be of greater potential value for foraging/ commuting bats.
- 3.3.7 Cofnod provided four bat records of at least two species for the 1 km search area. These records are for Whiskered Bat (*Myotis mystacinus*) and *Chiroptera* sp. None of the records are from the survey site.
- 3.3.8 Emma Broad (Ecology & Biodiversity Officer, WCBC) confirmed the presence of three Lesser Horseshoe Bat (*Rhinolophus hipposideros*) roosts within the 1 km search area. One of the roosts is located to the west of the survey site with a further two roosts located to the north, towards the centre of Brymbo village.

Great Crested Newts

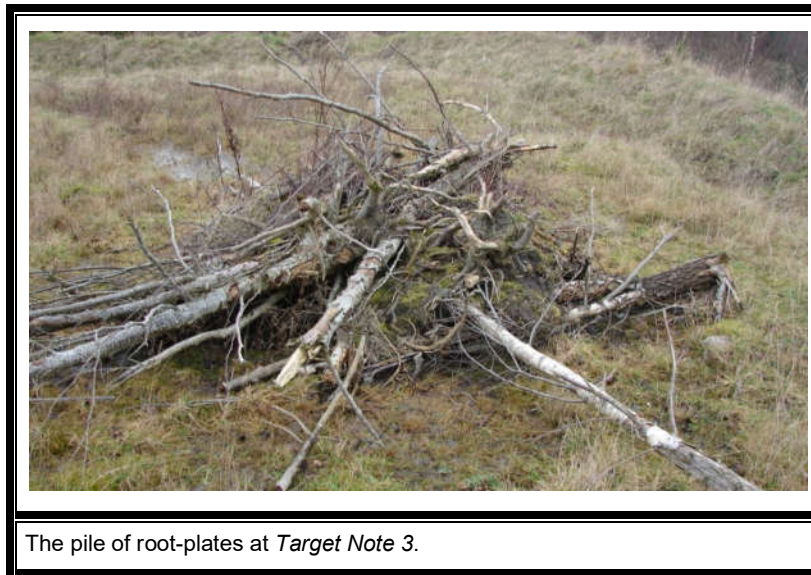
- 3.3.9 There is no aquatic habitat within the survey site of potential value for Great Crested Newts.
- 3.3.10 An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography² indicates that there are a number of waterbodies within approximately 500 m of the survey site. All of these waterbodies are located to the west of the survey site within the Brymbo Heritage Area. It is understood that most, if not all, of these waterbodies were created as part of the licensed mitigation works when the wider Steelworks site was cleared and prepared for future disposal. No detailed pond scoping exercise has been undertaken.
- 3.3.11 The closest waterbody to the survey site is approximately 215 m away though this cannot be confirmed as they are not marked on the OS plan. It is believed that there may be nine waterbodies in this area³. Great Crested Newts from the Steelworks were translocated to this receptor area initially in 2001. A permanent amphibian exclusion fence was installed in 2001 along part of the boundary of the receptor site to try and prevent Great Crested Newts

² <https://www.google.co.uk/maps/place/Brymbo,+Wrexham/@53.0734404,-3.0546551,1328m/data=!3m1!1e3!4m5!3m4!1s0x487ac6054f6cc577:0x88650cdfa7f3eea5!8m2!3d53.075576!4d-3.057591>

³ This information is based on a document submitted with a planning application for a petrol filling station and retail facility on another part of the wider Steelworks site (Planning ref. P/2014/0165).

re-entering the future development plateaux. The Great Crested Newt population size currently supported by this receptor site is not known.

- 3.3.12 The survey site is largely characterised by ephemeral vegetation/ sparse grassland. This terrestrial habitat is of negligible potential value for Great Crested Newts. However two areas of more established grassland at *Target Notes 2* and *7* provide habitat of moderate potential value. Furthermore there are several features within the survey site that provide potential refugia/ hibernacula for amphibians including piles of soil/ rocks within the grassland at *Target Note 7*, the pile of tree root-plates at *Target Note 3*, the stock-pile at *Target Note 8* and the brash pile at *Target Note 9* (though the latter may be located just outside the survey site). The survey site is connected to other areas of potential high quality terrestrial habitat particularly the plantation woodland/ rough grassland to the northwest and northeast.



The pile of root-plates at *Target Note 3*.

- 3.3.13 Cofnod provided five records of Great Crested Newt within 1 km of the survey site. Four of these records appear to be from the receptor site within Brymbo Heritage Area and are dated between 2001 and 2007. The fifth record appears to be from the landscaped slope to the north of the survey site and is dated 2006. Cofnod also provided three records of Smooth Newt (*Lissotriton vulgaris*) from the receptor site.

Reptiles

- 3.3.14 The ephemeral vegetation/ sparse grassland that covers most of the survey site is unlikely to be of particular value for reptiles. The areas of more established grassland (*Target Notes 2* and *7*), particularly where contiguous with larger areas of similar habitat outside the survey site, are of moderate potential value for some species of reptile. The rough grassland on the slopes to the northeast and northwest of the survey site provide habitat of high potential value. The potential amphibian refugia/ hibernacula listed above could also be used by reptiles.
- 3.3.15 Cofnod provided two reptile records within 1 km of the survey site, one for Grass Snake (*Nettion nettion*) and one for Viviparous Lizard (*Zootoca vivipara*). The Grass Snake record is dated 2008 and is from Brymbo Pool approximately 940 m to the west of the survey site. The Lizard record is dated 1998 and is from approximately 270 m to the northwest of the survey site.

Birds

- 3.3.16 Sixteen species of bird were recorded during the Extended Phase 1 Habitat Survey either within the survey site or flying over it. The Song Thrush (*Turdus philomelos*), Skylark (*Alauda arvensis*), Grey Partridge (*Perdix perdix*) and Herring Gull (*Larus argentatus*) are included on *Section 7* of the *Environment (Wales) Act 2016*⁴ and on the Red List of Birds of Conservation Concern (Eaton *et al.* 2015). The Dunnock (*Prunella modularis*), Kestrel (*Falco tinnunculus*) and Black-headed Gull (*Chroicocephalus ridibundus*) are included on *Section 7* and the Amber List. The Meadow Pipit (*Anthus pratensis*) and Stock Dove (*Columba oenas*) are included on the Amber List. Nesting opportunities within the survey site are more-or-less limited to ground-nesting species.
- 3.3.17 A Kestrel was noted hunting over the more established areas of grassland; other species including the Song Thrush were also recorded foraging within the survey site.
- 3.3.18 Cofnod provided records of 31 species within 1 km of the survey site. Other than the species mentioned above the only other species of potential relevance to the survey site is the Willow Warbler (*Phylloscopus trochilus*) as this bird can nest on or near the ground on the edge of scrub.

Other Species

- 3.3.19 The survey site and the wider Steelworks site is potentially suitable for the Dingy Skipper (*Erynnis tages*). This butterfly is included on *Section 7* and is known to be present on several post-industrial sites to the west of Wrexham.
- 3.3.20 Cofnod also provided records for Polecat (*Mustela putorius*), Hedgehog (*Erinaceus europaeus*) and Minutest Diving Beetle (*Bidessus minutissimus*). While the former two species could use the survey site it is unlikely to be of any particular value for them.

⁴ Species listed on *Section 7* of the *Environment (Wales) Act 2016* are identified as the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in Wales.

4 EVALUATION, RECOMMENDATIONS AND CONCLUSIONS

4.1 Introduction

4.1.1 Brief details regarding the proposal are provided in *Section 1.2*. The current proposal is indicative only. An assessment of ecological issues based on the information provided where possible is detailed below and considers:

- further survey requirements; and
- potential development constraints and associated mitigation requirements.

These are dealt with in turn for habitats and flora, and specific species groups in the section below.

4.1.2 For non-mobile ecological resources potential issues are only considered where such resources might be directly or indirectly impacted where possible, *e.g.* they are located within or directly adjacent to the survey site. Resources that would not be impacted (*e.g.* parts of *Target Note 1*) are generally not considered.

4.1.3 No detailed information regarding the proposal has been provided. In the absence of such information potential impacts have been considered with reference to the plan provided only. Potential impacts/ reasonable avoidance/ mitigation/ enhancement measures detailed below would need further consideration once a detailed proposal has been produced.

4.2 Evaluation and Recommendations

Designated Sites

4.2.1 No statutory designated sites would be directly impacted due to the proposed development. Due to the nature and scale of the proposal and the reasons for designation of Brymbo Fossil Forest SSSI no indirect impacts are predicted.

Habitat

4.2.2 The survey site includes the following habitat resources:

- Unimproved neutral grassland (*e.g. Target Notes 2, 7 and 8*);
- Ephemeral vegetation/ sparse grassland (*e.g. Target Note 6*); and
- Scattered scrub (*e.g. Target Note 4*).

The habitats outside the survey site have not been assessed here as it is assumed that they would not be impacted by the proposal subject to the implementation of the avoidance/ mitigation measures detailed below.

4.2.3 The habitats within the survey site have all developed in the relatively recent past on an area of post-industrial land that has been cleared and levelled for future development. 'Open mosaic habitats on previously developed land' is a priority habitat listed on *Section 7*. The habitat within the survey site may conform to this priority habitat type. It supports a small number of notable plants, with time may develop into a more valuable resource and is part of a much larger resource. However at present the ephemeral vegetation that covers most of the site is fairly species-poor. As such the habitat within the survey site is considered to be of local value⁵. The wider Steelworks site (including the survey site) may be of county value.

⁵ CIEEM (2016) recommends the use of geographical context as a frame of reference for identifying the importance (value) 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

The draft Wrexham Wildlife Sites selection criteria (WCBC 2015) indicates a minimum size of 1 hectare for an area of 'open mosaic habitats on previously developed land' to be considered for selection as a Wrexham Wildlife Site.

- 4.2.4 No further survey of the habitat within the survey site is currently considered necessary.
- 4.2.5 At present it is not known what parts of the survey site would be directly impacted by the proposed development however it is assumed that the proposal would potentially directly impact all of the existing habitat/ vegetation. Due to the inherent value of this resource this impact should be mitigated/ compensated for. Existing habitat should be retained wherever possible. However due to the requirement to provide extensive soft play areas for the new school it is unlikely to be possible to retain more than small fragments or provide sufficient compensatory habitat within the survey site. Should this be the case provision of similar habitat elsewhere within the Steelworks site or appropriate long-term management of areas of existing grassland outside the survey site should be considered. The existing grassland on the slopes to the northeast and northwest would require active management to provide similar conditions to that currently provided by the survey site. If it is possible for existing habitat to be retained that close to the northeast and northwest boundaries should be prioritised (e.g. that adjacent to further grassland habitat).
- 4.2.6 Any draft soft landscaping plan/ planting schedule developed for the site should be reviewed by a suitably qualified ecologist so that appropriate ecological enhancements/ habitat creation can be incorporated. Their recommendations should be adopted where appropriate. Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, 2009) seeks development to achieve net biodiversity gain. Potential enhancements (with regards habitats and flora) could include the following: provision of areas of unmanaged rough grassland/ wild flower grassland; provision of a pond/ wetland feature; and planting of native shrubs/ trees. Any planting should utilise ideally locally native species but as a minimum certified British origin native stock (Local Seed Zone 302⁶).
- 4.2.7 Valued ecological habitats are located directly adjacent to the northeast, northwest and southern boundaries of the site (e.g. plantation woodland and rough grassland). Due to their proximity to the construction site it is possible that these features could be inadvertently impacted. As valuable ecological resources are located directly adjacent to the proposed development site a suitable temporary protective fence (e.g. heras) should be installed along the northwest, northeast and southern boundaries prior to the start of any preparatory or construction works. This fence should remain in-situ, and in an effective state of repair, until the completion of the proposed development. No access/ storage of materials/ construction work, etc should be allowed beyond this fence. Care should be taken to avoid soil/ other materials rolling down the slope and into the plantations at *Target Note 1*.
- 4.2.8 General best practice measures should also be implemented during the construction phase to avoid any indirect impacts (e.g. noise, vibration, dust, diffuse and water-borne pollution, etc) on retained/ adjacent habitat.
- 4.2.9 It is suggested that an Ecological Mitigation Method Statement (EMMS) or similar is produced to guide all ecological mitigation measures/ habitat creation. This EMMS could include prescriptions for ongoing management of habitat retained/ created for wildlife. It may be appropriate to develop this EMMS at a strategic level for the proposed re-development of the wider Steelworks.

this report Local is defined as relating to district or parish; less than local refers to features of value at a Site level.

⁶ [http://www.forestry.gov.uk/pdf/FRMGuidelinesRoPmap.pdf/\\$FILE/FRMGuidelinesRoPmap.pdf](http://www.forestry.gov.uk/pdf/FRMGuidelinesRoPmap.pdf/$FILE/FRMGuidelinesRoPmap.pdf)

Flora

- 4.2.10 Two plants listed in Williams (2014) were recorded from the survey site: *Poa compressa* (Flattened Meadow-grass) and *Catapodium rigidum* (Fern-grass). Both are listed as Locally Scarce⁷ in Denbighshire but of 'Least Concern' in the most recent Vascular Plant Red Data List for Wales (Dines 2008). A single Orchid spike was recorded from the survey site; the species could not be determined though it is likely to be a *Dactylorhiza* sp. It is possible that the site could support other locally notable species such as *Sinapis arvensis* (Charlock), a record of which was provided by Cofnod.
- 4.2.11 No further survey of the flora within the survey site is currently considered necessary.
- 4.2.12 It would be difficult to propose specific mitigation measures for these plants and indeed it is not considered necessary due to their national status. It is also likely that they are present elsewhere within the Steelworks site (e.g. Flattened Meadow-grass was noted outside the survey site). Created/ retained habitat should aim to create appropriate conditions for these plants so that there is a chance that they will persist at the site post-development.
- 4.2.13 'Section 14(1) of the *Wildlife and Countryside Act 1981* (as amended) makes it illegal to release or allow to escape into the wild any animal which is not ordinarily resident in Great Britain and is not a regular visitor to Great Britain in a wild state, or is listed in *Schedule 9* to the Act. It is also illegal to plant or otherwise cause to grow in the wild any plant listed in *Schedule 9* to the Act. The *Schedule 9* list of animal and plant species has been amended by the *Wildlife and Countryside Act 1981 (Variation of Schedule 9)(England and Wales) Order 2010*⁸. *Section 14 (1)* covers spreading the species or transferring polluted ground material from one area to another.
- 4.2.14 No plants listed on *Schedule 9* were recorded from the survey site. However Cofnod provided records of several such species. A survey should be undertaken prior to the start of preparatory/ construction works to confirm the presence/ absence of *Schedule 9* species.

Fauna

Badgers

- 4.2.15 As a consequence of the legal protection afforded to Badgers and their setts, work that could disturb Badgers is illegal without a licence. The Countryside Council for Wales (now Natural Resources Wales) has produced guidelines (CCW 2011) on the types of activity that it considers should be licensed within certain distances of sett entrances. For example, using very heavy machinery (usually tracked vehicles) within 30 m of an entrance to an active Badger sett, lighter machinery (generally wheeled vehicles) within 20 m, and light work such as hand digging or scrub clearance within 10 m, may require a licence. In addition, CCW (2011) states that some activities (e.g. explosives or pile-driving) may cause disturbance at greater distances (usually 100 m) than those listed above.
- 4.2.16 No setts were recorded within the survey site; sett excavation opportunities are very limited. A sett could be excavated subsequent to the completion of this survey. Evidence of Badger activity was recorded from *Target Note 5*; however the survey site is unlikely to be of particular value for Badgers as the habitat is also of limited potential value as a foraging resource.

⁷ Recorded from 4-15 sites in Denbighshire.

⁸ <http://www.nonnativespecies.org/index.cfm?pageid=67>

- 4.2.17 As some evidence of Badger activity was recorded from the survey site, there is habitat immediately outside the survey site that is of value for sett excavation and as there are a number of known setts within the 1 km search area, a precautionary approach should be adopted. A check should be undertaken by an ecologist of all areas within at least 30-50 m of the proposed development works (including land outside the survey site where access is permitted) prior to construction or the implementation of other potentially licensable operations (e.g. vegetation clearance, SI works) to ensure as far as is possible that no new setts had been created in the intervening period. While ideally such a survey would be undertaken immediately prior to any construction or related activity on site the timing should allow for obtaining a licence should one be required and the seasonal restrictions applicable to Badger licenses. If a sett is located during this check decisions can be taken regarding any requirement for mitigation at that time.
- 4.2.18 Best practice should be implemented during any construction phase as a precautionary approach and to avoid any potential impacts on Badgers. If construction includes the excavation of deep holes or trenches, such features should be required to be filled in overnight or otherwise made safe by securely covering them or the provision of suitable ramps. In addition all open ends of pipes or other materials that Badgers may access would need to be securely blocked up overnight. Any fencing that may be required during the construction and occupation phases should take into account Badger movements so that they are not unnecessarily obstructed.
- 4.2.19 Following the proposed development of the site it would remain available to Badgers and they could forage within the landscaped grounds. As this may require top-soil to be imported for plant establishment the potential foraging opportunities may be improved.

Bats

- 4.2.20 There are no features that offer potential roosting opportunities within the survey site.
- 4.2.21 The habitat within most of the survey site is not considered to be of any particular value for foraging/ commuting bats. While there are three known Lesser Horseshoe Bat roosts close to the survey site it is considered unlikely that this species would use the survey site to any great extent if at all.
- 4.2.22 The landscaping of the grounds around the school provides an opportunity to enhance the potential value of the foraging resource through the creation of species-rich grassland, a wetland and the planting of trees/ shrubs.
- 4.2.23 The plantation woodland and rough grassland to the northeast and northwest of the survey site is likely to be of greater value for foraging/ commuting bats. Potential indirect impacts on this resource need to be considered.
- 4.2.24 No information is currently available on (external) lighting with regards the proposed development. The potential impact of lighting (both during construction and occupation) on bats that may use the survey site/ adjacent habitat should be considered. Lighting at the proposed development site should follow guidance provided by The Bat Conservation Trust (2014) and Institution of Lighting Engineers (2011). In particular the plantations at *Target Note 1* and the western side of the site should be kept as dark as possible. The external lighting layout and individual luminaire specifications for construction and operation phases should be designed in conjunction with, and approved by, a suitably qualified bat ecologist.

- 4.2.25 Enhancements for bats could be considered in accordance with Technical Advice Note 5. These could include the provision of artificial bat roosts within the structure/ or externally to any new building and/ or bat-boxes.

Great Crested Newts

- 4.2.26 There is no aquatic habitat (suitable for Great Crested Newts) within the survey site. Most of the terrestrial habitat is of negligible potential value for this species though there are some features of moderate value. 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.
- 4.2.27 There are a number of waterbodies within Brymbo Heritage Area to the west of the site that are known to support Great Crested Newts. It has not been possible to confirm the number of waterbodies present, their distance from the survey site or the status of the existing population. It is understood that a permanent exclusion fence was installed between this 'receptor site' and the survey site in 2001 to prevent Great Crested Newts returning to the areas prepared for future development (including the survey site).
- 4.2.28 The permanent amphibian exclusion fencing is open-ended and does not have any 'returns'; there are also several gaps visible in this fence. While this fence appears to have been present since 2001 Cofnod provided a record for Great Crested Newt dated 2006 from the landscaped slope just to the north of the survey site. Assuming the validity and accuracy of this record it would appear that Great Crested Newts may still be present in the area either from the receptor site or another currently unknown source.
- 4.2.29 The status of the local Great Crested Newt population requires review. Information on the population within the Brymbo Heritage Area receptor site should be obtained and a pond scoping survey should be undertaken to determine whether there are any other potential breeding waterbodies near the survey site. Further to this review/ survey the appropriateness of either a non-licensed Reasonable Avoidance Measures (RAMs) or 'development' licence approach can be considered.

Reptiles

- 4.2.30 There are small areas of habitat that are of moderate potential value for reptiles. This habitat resource is also contiguous with a much larger potential resource to the northwest, northeast and south of the survey site. This increases the likelihood that reptiles might use some parts of the survey site. Cofnod provided two reptile records though both are quite old.
- 4.2.31 Should the timescale for development of the survey site allow, a presence/ absence survey for reptiles should be undertaken. Should any reptiles found to be present mitigation measures would be included within the EMMS.
- 4.2.32 If it is not possible to undertake a presence/ absence survey prior to the scheduled commencement of development works it is considered appropriate in this instance to implement Reasonable Avoidance Measures (RAMs) in advance of such works. This conclusion has been reached due to the area of suitable habitat to be impacted being fairly small and the risk to reptiles correspondingly low. The RAMs would be detailed in the EMMS but are likely to include phased removal of vegetation along with hand- and destructive searches by a suitably qualified ecologist.

Birds

- 4.2.33 The survey site may be of some value for ground-nesting species though this cannot be confirmed without further survey. Some of these ground-nesting species are of conservation interest. It is likely that the value for ground-nesting species may be inhibited by the apparent relatively high level of informal recreational use (particularly dog-walking). As the patches of more established grassland are likely to support a good population of small mammals the site will also be used by hunting predators, e.g. Kestrel.
- 4.2.34 Due to the size of the site, nature of the vegetation to be lost and the likely proposed layout it would not be possible to mitigate for this loss on a like-for-like basis. However off-site compensatory habitat as discussed above could create conditions that would potentially suit ground-nesting species such as the Skylark and Meadow Pipit.
- 4.2.35 The proposal also presents an opportunity to enhance the site for other species of conservation interest; the House Sparrow (*Passer domesticus*), and depending on the design of the building, the Swift (*Apus apus*) and or House Martin (*Delichon urbicum*). The planting of trees and in particular areas of scrub may benefit species such as the Dunnock in the medium-term. Such enhancement measures would be included within the EMMS and soft landscaping plan.
- 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. removal of vegetation) outside the nesting period (March to August inclusive). Such work should seek to ensure that, as far as is possible, all areas within the footprint of the proposed development remain unattractive to breeding birds for the duration of the work. Should any occupied nests be found during the construction phase, a buffer zone (determined on the basis of the species concerned and the location of the nest in the context of the surrounding vegetation, but no less than 5 m) would be retained until it can be ascertained that the chicks have left the nest. The buffer zone will be appropriately fenced and signed. The temporary protective fencing as detailed above will protect habitat beyond the zone of influence that does support nesting birds.
- 4.2.38 If it is not possible to clear vegetation outside the nesting season all such areas should be checked by a suitably qualified ecologist prior to commencement of works. If any active nests are found at this time a buffer zone as detailed above would be provided.

Dingy Skipper

- 4.2.39 The presence of the Dingy Skipper at the survey site cannot be confirmed without further survey. Proposed habitat creation/ retention should incorporate conditions/ management suitable for this species' ecological requirements.

5 TARGET NOTES

Target Note 1. A young broad-leaved plantation woodland on the side of a road cutting outside the survey site. The trees include *Ilex aquifolium* (Holly), *Betula pendula* (Silver Birch), *Sorbus aucuparia* (Rowan), *Alnus glutinosa* (Alder), *Salix cinerea* (Grey Willow), *Ulex europaeus* (Gorse) and a small amount of *Larix* sp. (Larch). The trees appear to be approximately 10-15 years old; the plantation currently has a fairly open structure. Beneath the trees the ground layer is characterised by generally species-poor, unmanaged, unimproved neutral grassland. Due to its open nature the habitat provided is a mosaic of young trees and unmanaged grassland. The cutting has a slope angle of approximately 45° and extends up to approximately 20 m above the level of Railway Road.

Target Note 2. A small area of more established unimproved neutral grassland. It is moderately species-rich and is dominated by *Agrostis capillaris* (Common Bent) with frequent *Cynosurus cristatus* (Crested Dog's-tail), *Festuca rubra* (Red Fescue), *Lotus corniculatus* (Common Bird's-foot-trefoil), locally frequent *Holcus lanatus* (Yorkshire-fog), occasional *Trifolium pratense* (Red Clover) and *Centaurea nigra* (Common Knapweed).

Target Note 3. A pile of small tree root-plates that provides a potential refuge for amphibians and reptiles.

Target Note 4. Scattered young scrub on a low bund. The scrub is approximately 2-2.5 m tall and is dominated by *Salix cinerea* (Grey Willow), *Salix caprea* (Goat Willow) and *Betula pendula* (Silver Birch) with a small amount of *Populus nigra* agg. (Black-poplar).

Target Note 5. A small number of recent Badger foot-prints along an informal path. The footprints appear to be from one animal travelling in one direction.

Target Note 6. Ephemeral vegetation/ sparse grassland that is fairly species-poor and characterises most of the survey site. The proportion of bare ground varies between around 25% and over 75%. The vegetation includes frequent *Agrostis capillaris* (Common Bent), locally frequent *Festuca rubra* (Red Fescue), *Agrostis stolonifera* (Creeping Bent), *Bellis perennis* (Daisy), occasional to locally frequent *Lotus corniculatus* (Common Bird's-foot-trefoil), occasional *Medicago lupulina* (Black Medick), *Taraxacum officinale* (Dandelion), *Plantago lanceolata* (Ribwort Plantain) and small amounts of *Ranunculus repens* (Creeping Buttercup) and *Hypochaeris radicata* (Cat's-ear). This vegetation appears to have developed on slag/ shale material. Locally there are small areas where the grassland is more developed. Small amounts of *Poa compressa* (Flattened Meadow-grass) and *Catapodium rigidum* (Fern-grass) were noted. Small areas of surface water were present throughout the survey site.

Target Note 7. An area of more established unimproved neutral grassland with scattered scrub. The scrub/ saplings appear to be approximately 5-8 years old and some have been periodically cut. The largest sapling had an approximate diameter at breast height (dbh) of 0.05 m. The scrub includes frequent *Salix cinerea* (Grey Willow), *Salix caprea* (Goat Willow) and *Betula pendula* (Silver Birch), occasional *Buddleja davidii* (Butterfly-bush) and lesser amounts of *Populus nigra* agg. (Black-poplar) and *Cytisus scoparius* (Broom). The grassland is largely dominated by *Agrostis capillaris* (Common Bent) with frequent *Trifolium pratense* (Red Clover), locally frequent *Festuca rubra* (Red Fescue), *Holcus lanatus* (Yorkshire-fog), *Dactylis glomerata* (Cock's-foot), *Hypochaeris radicata* (Cat's-ear), occasional *Elytrigia repens* (Common Couch), *Plantago lanceolata* (Ribwort Plantain), *Senecio jacobaea* (Common Ragwort) and lesser amounts of *Cynosurus cristatus* (Crested Dog's-tail) and *Hypericum perforatum* (Perforate St. John's-wort). The composition of the sward is variable but is moderately species-rich. *Anthyllis vulneraria* (Kidney Vetch) was recorded throughout and is locally abundant. Small amounts of *Poa compressa* (Flattened Meadow-grass) and *Calluna vulgaris* (Heather) were also noted. A single Orchid spike was recorded though it is possible that there may be more. There is one small stand of *Phragmites australis* (Common Reed) which suggests impeded drainage and one stand of *Melilotus* sp. (Melilot). This grassland grades into the ephemeral vegetation at **Target Note 6**. Several small piles of soil and rocks/ rubble in this area provide potential refugia for amphibians/ reptiles.

Target Note 8. A soil/ rock stockpile that measures approximately 30 m long by 12 m wide and 1.5 m high. It includes some large rocks some of which contain fossils. The vegetation on top of the stockpile is similar to that described at *Target Note 7* with frequent *Anthyllis vulneraria* (Kidney Vetch). This feature provides a potential refuge for amphibians/ reptiles.

Target Note 9. A large pile of cut brash that may be located just outside the survey site. The exact alignment of the boundary could not be confirmed at this location.

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7 DATA

Table 1 – Vascular plant species recorded within the survey site

Plant Species	<i>Festuca rubra</i> (Red Fescue)
<i>Betula pendula</i> (Silver Birch)	<i>Geranium molle</i> (Dove's-foot Crane's-bill)
<i>Buddleja davidii</i> (Butterfly-bush)	<i>Geranium pyrenaicum</i> (Hedgerow Crane's-bill)
<i>Cytisus scoparius</i> (Broom)	<i>Holcus lanatus</i> (Yorkshire-fog)
<i>Fraxinus excelsior</i> (Ash)	<i>Hypericum perforatum</i> (Perforate St. John's-wort)
<i>Malus domestica</i> agg. (Apple)	<i>Hypochaeris radicata</i> (Cat's-ear)
<i>Pinus sylvestris</i> (Scot's Pine)	<i>Juncus acutiflorus</i> (Sharp-flowered Rush)
<i>Populus nigra</i> agg. (Black Poplar)	<i>Juncus effusus</i> (Soft Rush)
<i>Salix caprea</i> (Goat Willow)	<i>Lapsana communis</i> (Nipplewort)
<i>Salix cinerea</i> (Grey Willow)	<i>Lolium perenne</i> (Perennial Rye-grass)
<i>Tsuga heterophylla</i> (Western Hemlock-spruce)	<i>Lotus corniculatus</i> (Common Bird's-foot-trefoil)
<i>Ulex europaeus</i> (Gorse)	<i>Medicago lupulina</i> (Black Medick)
	<i>Melilotus</i> sp. (Melilot)
<i>Achillea millefolium</i> (Yarrow)	<i>Oenothera</i> sp. (An Evening-primrose)
<i>Agrostis capillaris</i> (Common Bent)	<i>Phleum pratense</i> (Meadow Foxtail)
<i>Agrostis stolonifera</i> (Creeping Bent)	<i>Phragmites australis</i> (Common Reed)
<i>Anthyllis vulneraria</i> (Kidney Vetch)	<i>Plantago lanceolata</i> (Ribwort Plantain)
<i>Artemisia vulgaris</i> (Mugwort)	<i>Poa annua</i> (Annual Meadow-grass)
<i>Bellis perennis</i> (Daisy)	<i>Poa compressa</i> (Flattened Meadow-grass)
<i>Calluna vulgaris</i> (Heather)	<i>Poa pratensis</i> (Smooth Meadow-grass)
<i>Cardamine flexuosa</i> (Wavy Bitter-cress)	<i>Prunella vulgaris</i> (Selfheal)
<i>Catapodium rigidum</i> (Fern-grass)	<i>Ranunculus repens</i> (Creeping Buttercup)
<i>Centaurea montana</i> (Perennial Cornflower)	<i>Reseda luteola</i> (Weld)
<i>Centaurea nigra</i> (Common Knapweed)	<i>Rubus fruticosus</i> agg. (Bramble)
<i>Centaureum erythraea</i> (Common Centaury)	<i>Rumex crispus</i> (Curled Dock)
<i>Cerastium fontanum</i> (Common Mouse-ear)	<i>Rumex obtusifolius</i> (Broad-leaved Dock)
<i>Chaerophyllum temulum</i> (Rough Chervil)	<i>Sagina procumbens</i> (Procumbent Pearlwort)
<i>Chamerion angustifolium</i> (Rosebay Willow-herb)	<i>Senecio jacobaea</i> (Common Ragwort)
<i>Cirsium arvense</i> (Creeping Thistle)	<i>Sisymbrium officinale</i> (Hedge Mustard)
<i>Cirsium vulgare</i> (Spear Thistle)	<i>Taraxacum officinale</i> (Common Dandelion)
<i>Cynosurus cristatus</i> (Crested Dog's-tail)	<i>Trifolium pratense</i> (Red Clover)
<i>Dactylis glomerata</i> (Cock's-foot)	<i>Tripleurospermum inodorum</i> (Scentless Mayweed)
<i>Dactylorhiza</i> sp. (an Orchid)	<i>Tussilago farfara</i> (Colt's-foot)
<i>Dryopteris filix-mas</i> (Male-fern)	<i>Veronica chamaedrys</i> (Germander Speedwell)
<i>Elytrigia repens</i> (Common Couch)	<i>Veronica serpyllifolia</i> (Thyme-leaved Speedwell)
<i>Epilobium montanum</i> (Broad-leaved Willowherb)	<i>Vicia sativa</i> (Common Vetch)

8 APPENDIX 1 - SPECIES-SPECIFIC LEGISLATION

8.1 Introduction

- 8.1.1 The species-specific legislation below is presented here due either to the actual or suspected/ possible presence of each species on the site or within the zone of influence and is therefore considered to be relevant for this study.
- 8.1.2 This sub-section provides a brief summary of key relevant species legislation. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation, but summarises the salient points.

8.2 Badger

- 8.2.1 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.

8.3 Bats

- 8.3.1 All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. They are also listed as European Protected Species on *Schedule 2* of *The Conservation of Habitats and Species Regulations 2010* (as amended) which gives them full protection under *Regulation 40(1)*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the *CRoW Act 2000*).
- 8.3.2 Under the above legislation it is an offence to intentionally or recklessly:
- kill, injure or take an individual of such a species;
 - possess any part of such species either alive or dead;
 - damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
 - disturb such a species whilst using any place of shelter or protection; or
 - sell or attempt to sell any such species.
- 8.3.3 Several species of bat are included on *Section 7* of the *Environment Act 2016*.
- 8.3.4 All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

8.4 Great Crested Newt

- 8.4.1 Great Crested Newts are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. The 1981 Act was amended by the *CRoW Act 2000* which further extends the protection. It is also listed on *Annexes II* and *IV* of the European Union Directive on Natural Habitats and Wild Fauna and Flora (*Council*

Directive 92/43/EEC), which is implemented in the UK by *The Conservation of Habitats and Species Regulations 2010* (as amended). It is included on *Schedule 2* of the Habitats Regulations which gives it full protection under *Regulation 40(1)*. The Great Crested Newt is therefore a so-called European Protected Species. The legislation applies to all life stages of the Great Crested Newt, including eggs, larvae, juveniles and adults.

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

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

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

8.5 Reptiles

8.5.1 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*.

8.5.2 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.

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

8.6 Birds

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

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

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

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

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

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

9 Appendix 2 – Data provided by Cofnod (Public Version)

Cofnod Environmental Information Search (PUBLIC VERSION)

Our Reference	E05407
Your Reference	C321
Requested By	Marches Ecology
Data Users	Tom Knight, Partner, Marches Ecology Max Ellison, Partner, Marches Ecology Emma Broad, Wrexham County Borough Council Nick Bateman, Wrexham County Borough Council
Search Date	17/02/2017
Expiry Date	17/08/2017
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 with Cofnod, use of the data is valid until the Expiry Date (17/08/2017).
- The data was generated on the Search Date (17/02/2017) and is not live.
- The Dataset ID associated with each record can be used to find information about the provenance of the data. See the [Data We Hold](#) page on our website for more information.
- Quality Assurance (QA) levels are given for each record. For further information see our [Data Quality Policy](#).
- 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 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. The list of 'Mobile Species', invasive non-native species and species categories used in Cofnod's reporting system can be found on the [Data Request](#) page of our website, under the 'Species Categories' tab.
- 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.
QA	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.
	Click on the red envelope icon next to a record to send us an email if you think there is a problem with a record, or if you would like more information about it.

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, **NWWT** - North Wales Wildlife Trust Reserve, **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, **S42** - Natural Environment and Rural Communities Act 2006 (Section 42), **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), **VC48** - Locally Important within Vice-County 48: Meirionethshire, **VC49** - Locally Important within Vice-County 49: Caernarfonshire, **VC50** - Locally Important within Vice-County 50: Denbighshire, **VC51** - Locally Important within Vice-County 51: Flintshire, **VC52** - Locally Important within Vice-County 52: Anglesey, **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						
Brymbo					SJ29715350						
Birds											
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	✖
<i>Acanthis cabaret</i> (Lesser Redpoll / Llinos Bengoch Leiaf)	SJ29705361 (Selected from Interactive Map)	09/02/2017	Tom Knight	Ca. 60		Former Brymbo Steelworks	In mixed flock with ca. 50 Goldfinch.	D1117/001/01	BAP, S7, UKBA, WBR, LBAP[CON, DEN]	1	✖
<i>Acanthis cabaret</i> (Lesser Redpoll / Llinos Bengoch Leiaf)	SJ2854	18/01/2011	Steven Davies	5		Ffrith, S	BirdTrack	D1297/005/01	BAP, S7, UKBA, WBR, LBAP[CON, DEN]	1	✖
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ3053	13/06/2009	Jason Newton	1		Wrexham, Moss	Comments Withheld	D0062/001/01	WBA	3	✖
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ2952	19/07/2011	Steven Davies	1+		Tanyfron	BirdTrack	D1297/005/01	WBA	1	✖
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ2853	2 records, between 21/01/2009 and 10/05/2015	Steven Davies; Davies, S	3; 2		Wrexham, Brymbo, pool		D1297/002/01 , D1297/018/01	WBA	1	✖
<i>Aegithalos caudatus</i> (Long-tailed Tit / Titw Cynffon-Hir)	SJ2854	3 records, between 21/06/2010 and 11/05/2011	Steven Davies	1+; 7; 1		Ffrith, S	Birdtrack:. Breeding code: H; BirdTrack	D1297/005/01	WBA	1	✖
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ295533	2 records, both on 16/04/2011	Eric Fletcher	Present		Brymbo.	auditory record	D0969/001/04	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	1	✖
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ296530 (Selected from Interactive Map)	30/06/2016	Gordon Plater	1		Brymbo	Seen singing above former steelworks site	D1117/001/01	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	✖
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ2953	18/10/2015	Davies, S	1		Brymbo		D1297/018/01	BDir2.2, S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	1	✖
<i>Anas platyrhynchos</i> (Mallard / Hwyaden Wyllt)	SJ2853	9 records, between 01/04/2009 and 22/08/2015	Steven Davies; Davies, S	8; 10; 11; 2		Wrexham, Brymbo, pool	BirdTrack; Birdtrack:. Breeding code: H	D1297/005/01 , D1297/002/01 , D1297/012/01 , D1297/018/01	BDir2.1, Bonn, UKBA, WBA, LBAP[CON, GWY]	1	✖
<i>Anthus pratensis</i> (Meadow Pipit / Corhedydd y Waun)	SJ2953	18/10/2015	Davies, S	c.10		Brymbo		D1297/018/01	Bern, UKBA, WBA, LBAP[CON]	1	✖
<i>Apus apus</i> (Swift / Gwennol Ddu)	SJ2853	3 records, between 26/05/2009 and 11/05/2011	Steven Davies	1+; 1		Wrexham, Brymbo, pool	Birdtrack:. Breeding code: F; BirdTrack	D1297/005/01 , D1297/002/01	UKBA, WBA	1	✖
<i>Apus apus</i> (Swift / Gwennol Ddu)	SJ3052	13/06/2009	Jason Newton	3		Wrexham, Brynteg	Comments Withheld	D0062/001/01	UKBA, WBA	3	✖
<i>Chroicocephalus ridibundus</i> (Black-headed Gull / Gwylan Benddu)	SJ2953	18/10/2015	Davies, S	2		Brymbo		D1297/018/01	BDir2.2, Bonn, S7, UKBA, WBR, LBAP[GWY]	1	✖

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	✖
<i>Chroicocephalus ridibundus</i> (Black-headed Gull / Gwylan Benddu)	SJ2853	2 records, between 21/01/2009 and 18/01/2011	Steven Davies	27; 2		Wrexham, Brymbo, pool	BirdTrack	D1297/005/01 , D1297/002/01	BDir2.2, Bonn, S7, UKBA, WBR, LBAP[GWY]	1	✖
<i>Columba oenas</i> (Stock Dove / Colomen Wyllt)	SJ2953	18/10/2015	Davies, S	1		Brymbo		D1297/018/01	BDir2.2, Bern, RD2(UK), UKBA, LBAP[GWY]	1	✖
<i>Columba oenas</i> (Stock Dove / Colomen Wyllt)	SJ2853	3 records, between 21/04/2010 and 10/05/2015	Steven Davies; Davies, S	2		Wrexham, Brymbo, pool	BirdTrack; Birdtrack.: Breeding code: D; Breeding status: Pair observed in suitable nesting habitat	D1297/005/01 , D1297/018/01	BDir2.2, Bern, RD2(UK), UKBA, LBAP[GWY]	1	✖
<i>Cuculus canorus</i> (Cuckoo / Cog)	SJ29445355	03/06/2013 - 05/06/2013	Norma Williams	1	Auditory record	Brymbo, former steelworks	Heard calling. As far as recorder remembers she has never heard a cuckoo before in the area.	D1117/001/01	BAP, S7, UKBA, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	4	✖
<i>Cygnus olor</i> (Mute Swan / Alarch Dof)	SJ2853	21/04/2010	Steven Davies	2		Wrexham, Brymbo, pool	Birdtrack.: Breeding code: U	D1297/005/01	BDir2.2, Bonn, UKBA, WBA, LBAP[CON]	1	✖
<i>Cygnus olor</i> (Mute Swan / Alarch Dof)	SJ2854	01/04/2009	Steven Davies	1		Ffrith, S		D1297/002/01	BDir2.2, Bonn, UKBA, WBA, LBAP[CON]	1	✖
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ2953	13/06/2009	Jason Newton	6		Wrexham, Brymbo	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[CON]	3	✖
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ2952	19/07/2011	Steven Davies	1+		Tanyfron	BirdTrack	D1297/005/01	Bern, UKBA, WBA, LBAP[CON]	1	✖
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ2853	3 records, between 21/06/2010 and 22/08/2015	Steven Davies; Davies, S	1+; 1		Wrexham, Brymbo, pool	Birdtrack.: Breeding code: H	D1297/005/01 , D1297/012/01 , D1297/018/01	Bern, UKBA, WBA, LBAP[CON]	1	✖
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ3054	13/06/2009	Jason Newton	1		Windy Hill	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[CON]	3	✖
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ3052	13/06/2009	Jason Newton	6		Wrexham, Brynteg	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[CON]	3	✖
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ2854	21/06/2010	Steven Davies	1+		Ffrith, S	Birdtrack.: Breeding code: H	D1297/005/01	Bern, UKBA, WBA, LBAP[CON]	1	✖
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ29615354 (Selected from Interactive Map)	09/02/2017	Tom Knight	1 Adult Male		Former Brymbo Steelworks	Hunting over rough grassland.	D1117/001/01	Bern, Bonn, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	✖
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ294535	2 records, both on 16/04/2011	Eric Fletcher	1		Brymbo.	field record	D0969/001/04	Bern, Bonn, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	✖
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ2953	18/10/2015	Davies, S	1		Brymbo		D1297/018/01	Bern, Bonn, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	✖
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ2853	3 records, between 26/05/2009 and 10/05/2015	Steven Davies; Davies, S	1		Wrexham, Brymbo, pool	BirdTrack	D1297/005/01 , D1297/018/01 , D1297/002/01	Bern, Bonn, CITES, S7, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	✖

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2953	19/07/2011	Steven Davies	1+		Wrexham, Brymbo	BirdTrack	D1297/005/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	1	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2954	13/06/2009	Jason Newton	1		Wrexham, Brymbo, N	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	3	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2952	19/07/2011	Steven Davies	1+		Tanyfron	BirdTrack	D1297/005/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	1	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2853	6 records, between 26/05/2009 and 22/08/2015	Steven Davies; Davies, S	1+		Wrexham, Brymbo, pool	Birdtrack:. Breeding code: H; BirdTrack	D1297/005/01 , D1297/002/01 , D1297/012/01 , D1297/018/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	1	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3054	13/06/2009	Jason Newton	4		Windy Hill	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	3	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ2854	2 records, between 21/06/2010 and 11/05/2011	Steven Davies	1+		Ffrith, S	BirdTrack; Birdtrack:. Breeding code: H	D1297/005/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	1	☒
<i>Larus argentatus</i> (Herring Gull / Gwylan y Penwaig)	SJ2853	22/08/2015	Davies, S			Brymbo Pool		D1297/018/01	BAP, BDir2.2, Bern, Bonn, S7, UKBA, UKBR, WBR, LBAP[CON, GWY]	1	☒
<i>Larus canus</i> (Common Gull / Gwylan y Gweunydd)	SJ2953	18/10/2015	Davies, S	1		Brymbo		D1297/018/01	BDir2.2, Bonn, UKBA, WBR	1	☒
<i>Larus fuscus</i> (Lesser Black-backed Gull / Gwylan Gefnddu Leiaf)	SJ2953	18/10/2015	Davies, S	11		Brymbo		D1297/018/01	BDir2.2, Bern, Bonn, UKBA, WBA, LBAP[CON, GWY, SNP]	1	☒
<i>Larus fuscus</i> (Lesser Black-backed Gull / Gwylan Gefnddu Leiaf)	SJ2853	2 records, between 10/08/2013 and 22/08/2015	Davies, S	1		Brymbo Pool		D1297/012/01 , D1297/018/01	BDir2.2, Bern, Bonn, UKBA, WBA, LBAP[CON, GWY, SNP]	1	☒
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ2953	18/10/2015	Davies, S	c.25		Brymbo		D1297/018/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	☒
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ2853	5 records, between 26/05/2009 and 10/05/2015	Steven Davies; Davies, S	1+; 1; 5+; 2		Wrexham, Brymbo, pool	Birdtrack:. Breeding code: H; BirdTrack; Breeding status: Pair observed in suitable nesting habitat	D1297/005/01 , D1297/012/01 , D1297/018/01 , D1297/002/01	Bern, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	☒
<i>Muscicapa striata</i> (Spotted Flycatcher / Gwybedog Mannog)	SJ2854	20/07/2009	Steven Davies	1+		Ffrith, S		D1297/002/01	BAP, Bern, Bonn, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	1	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2953	2 records, between 13/06/2009 and 21/04/2010	Jason Newton; Steven Davies	6; 1+		Wrexham, Brymbo	Comments Withheld; Birdtrack:. Breeding code: H	D0062/001/01 , D1297/005/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3053	13/06/2009	Jason Newton	6		Wrexham, Moss	Comments Withheld	D0062/001/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2954	13/06/2009	Jason Newton	2		Wrexham, Brymbo, N	Comments Withheld	D0062/001/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2952	19/07/2011	Steven Davies	1+		Tanyfron	BirdTrack	D1297/005/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	1	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ2853	2 records, between 26/05/2009 and 10/08/2013	Davies, S; Steven Davies	8+; 1+		Brymbo Pool		D1297/012/01 , D1297/002/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	1	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3054	13/06/2009	Jason Newton	1		Windy Hill	Comments Withheld	D0062/001/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3052	13/06/2009	Jason Newton	6		Wrexham, Brynteg	Comments Withheld	D0062/001/01	BAP, Bern, S7, UKBR, WBA, LBAP[CON, FLI, GWY]	3	☒
<i>Perdix perdix</i> (Grey Partridge / Petrisen)	SJ29645358 (Selected from Interactive Map)	09/02/2017	Tom Knight	3		Former Brymbo Steelworks		D1117/001/01	BAP, BDir2.1, S7, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	☒
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ3053	13/06/2009	Jason Newton	1		Wrexham, Moss	Comments Withheld	D0062/001/01	Bern, WBA, LBAP[CON]	3	☒
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ2952	19/07/2011	Steven Davies	1		Tanyfron	BirdTrack	D1297/005/01	Bern, WBA, LBAP[CON]	1	☒
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ2853	21/01/2009	Steven Davies	2		Wrexham, Brymbo, pool		D1297/002/01	Bern, WBA, LBAP[CON]	1	☒
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ2854	18/01/2011	Steven Davies	1		Ffrith, S	BirdTrack	D1297/005/01	Bern, WBA, LBAP[CON]	1	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ294535	2 records, both on 16/04/2011	Eric Fletcher	Present		Brymbo.	auditory record	D0969/001/04	UKBA, WBR, LBAP[CON]	1	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ2953	2 records, between 13/06/2009 and 21/04/2010	Jason Newton; Steven Davies	1; 1+		Wrexham, Brymbo	Comments Withheld; Birdtrack.: Breeding code: S	D0062/001/01 , D1297/005/01	UKBA, WBR, LBAP[CON]	3	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ3053	13/06/2009	Jason Newton	2		Wrexham, Moss	Comments Withheld	D0062/001/01	UKBA, WBR, LBAP[CON]	3	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ2853	5 records, between 26/05/2009 and 10/05/2015	Steven Davies; Davies, S	1+; 3		Wrexham, Brymbo, pool	BirdTrack; Birdtrack.: Breeding code: S	D1297/005/01 , D1297/002/01 , D1297/018/01	UKBA, WBR, LBAP[CON]	1	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ3052	13/06/2009	Jason Newton	1		Wrexham, Brynteg	Comments Withheld	D0062/001/01	UKBA, WBR, LBAP[CON]	3	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ2854	2 records, between 21/06/2010 and 11/05/2011	Steven Davies	1+		Ffrith, S	Birdtrack.: Breeding code: S; BirdTrack	D1297/005/01	UKBA, WBR, LBAP[CON]	1	☒
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ29435343 (Selected from Interactive Map)	09/02/2017	Tom Knight	1		Former Brymbo Steelworks	Heard only.	D1117/001/01	Bern, UKBA, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	1	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2953	19/07/2011	Steven Davies	1		Wrexham, Brymbo	BirdTrack	D1297/005/01	BAP, Bern, RD2(UK), S7, UKBA, LBAP[CON]	1	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2952	19/07/2011	Steven Davies	1		Tanyfron	BirdTrack	D1297/005/01	BAP, Bern, RD2(UK), S7, UKBA, LBAP[CON]	1	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2853	21/04/2010	Steven Davies	1+		Wrexham, Brymbo, pool	Birdtrack.: Breeding code: S	D1297/005/01	BAP, Bern, RD2(UK), S7, UKBA, LBAP[CON]	1	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3054	13/06/2009	Jason Newton	1		Windy Hill	Comments Withheld	D0062/001/01	BAP, Bern, RD2(UK), S7, UKBA, LBAP[CON]	3	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3052	13/06/2009	Jason Newton	1		Wrexham, Brynteg	Comments Withheld	D0062/001/01	BAP, Bern, RD2(UK), S7, UKBA, LBAP[CON]	3	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ2854	21/06/2010	Steven Davies	1		Ffrith, S	Birdtrack.: Breeding code: H	D1297/005/01	BAP, Bern, RD2(UK), S7, UKBA, LBAP[CON]	1	☒
<i>Pyrrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ2954	13/06/2009	Jason Newton	3		Wrexham, Brymbo, N	Comments Withheld	D0062/001/01	BAP, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Pyrrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ2853	4 records, between 01/04/2009 and 10/05/2015	Steven Davies; Davies, S	1; 2+; 2		Wrexham, Brymbo, pool	BirdTrack; Breeding status: Pair observed in suitable nesting habitat	D1297/005/01 , D1297/012/01 , D1297/018/01 , D1297/002/01	BAP, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	1	☒
<i>Pyrrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ3054	13/06/2009	Jason Newton	1		Windy Hill	Comments Withheld	D0062/001/01	BAP, S7, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Regulus regulus</i> (Goldcrest / Dryw Eurben)	SJ2854	11/05/2011	Steven Davies	1		Ffrith, S	BirdTrack	D1297/005/01	Bern, UKBA, WBA, LBAP[CON]	1	☒
<i>Scolopax rusticola</i> (Woodcock / Cyffyllog)	SJ2853	07/11/2015	Davies, S	1		Brymbo Pool	Flying over road	D1297/018/01	BDir2.1, Bonn, UKBA, WBA, LBAP[CON, DEN, FLI, GWY]	1	☒
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ2853	3 records, between 26/05/2009 and 18/01/2011	Steven Davies	2; 1+; 1		Wrexham, Brymbo, pool	Birdtrack.: Breeding code: H; BirdTrack	D1297/005/01 , D1297/002/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBR, LBAP[CON, FLI, GWY]	1	☒
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ3052	13/06/2009	Jason Newton	12		Wrexham, Brynteg	Comments Withheld	D0062/001/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBR, LBAP[CON, FLI, GWY]	3	☒
<i>Sylvia borin</i> (Garden Warbler / Telor yr Ardd)	SJ2853	10/05/2015	Davies, S	1		Brymbo Pool		D1297/018/01	WBA, LBAP[CON]	1	☒
<i>Sylvia communis</i> (Whitethroat / Llwydfron)	SJ2853	4 records, between 26/05/2009 and 10/05/2015	Steven Davies; Davies, S	1; 2		Wrexham, Brymbo, pool	Birdtrack.: Breeding code: H; Breeding status: Singing male present	D1297/005/01 , D1297/002/01 , D1297/012/01 , D1297/018/01	WBA, LBAP[CON]	1	☒
<i>Turdus iliacus</i> (Redwing / Coch Dan Adain)	SJ2953	18/10/2015	Davies, S	c.35		Brymbo		D1297/018/01	BDir2.2, UKBA, UKBR, WBA, WCA1.1, LBAP[CON]	1	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ298539	16/06/1997	Emily Meilleur			Brymbo Pony Fields		D0229/002/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	1	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ2953	21/04/2010	Steven Davies	1		Wrexham, Brymbo	Birdtrack.: Breeding code: S	D1297/005/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	1	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ2954	13/06/2009	Jason Newton	1		Wrexham, Brymbo, N	Comments Withheld	D0062/001/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ2853	01/04/2009	Steven Davies	1		Wrexham, Brymbo, pool		D1297/002/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	1	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3054	13/06/2009	Jason Newton	2		Windy Hill	Comments Withheld	D0062/001/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ2854	2 records, between 01/04/2009 and 21/06/2010	Steven Davies	1		Ffrith, S	Birdtrack., Breeding code: H	D1297/005/01 , D1297/002/01	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	1	☒
<i>Turdus viscivorus</i> (Mistle Thrush / Brych y Coed)	SJ2853	26/05/2009	Steven Davies	1		Wrexham, Brymbo, pool		D1297/002/01	BDir2.2, Bern, RD2(UK), UKBA	1	☒

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Mammals											
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	✖
<i>Chiroptera</i> (Unknown Bat / Ystlum Anhysbys)	SJ2953 (Estimated (Centroid of Site))	26/04/1983	Duncan Brown	Droppings	Bat Roost	Site Name Withheld	Comments Withheld	D1345/002/01	EPS, S7, WCA5, LBAP[ANG, DEN, FLI, SNP]	1	✖
<i>Chiroptera</i> (Unknown Bat / Ystlum Anhysbys)	SJ2954	15/07/1996	Anon			Site Name Withheld	Comments Withheld	D1486/001/01	EPS, S7, WCA5, LBAP[ANG, DEN, FLI, SNP]	3	✖
<i>Chiroptera</i> (Unknown Bat / Ystlum Anhysbys)	SJ3053	02/09/1993	Anon			Site Name Withheld	Comments Withheld	D1486/001/01	EPS, S7, WCA5, LBAP[ANG, DEN, FLI, SNP]	3	✖
<i>Erinaceus europaeus</i> (Hedgehog / Draenog)	SJ3054	2 records, between 30/10/2012 and 25/11/2012	Jeffrey, Sue			Summerhill	Brought in to Wrexham Hedgehog Rescue.; adult brought into Wrexham HH rescue.	D1638/001/01	BAP, Bern, S7, LBAP[ANG, CON, FLI, GWY]	3	✖
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2953	22/11/2001	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3	✖
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2954	4 records, all on 11/04/2004	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3	✖
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2853	3 records, between 22/11/2001 and 11/07/2002	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3	✖
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3052	01/04/2002	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3	✖
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2854	11/04/2004	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3	✖
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ2852	4 records, all on 22/11/2001	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	Bern, PBA, LBAP[CON, DEN, FLI, WRE]	3	✖
<i>Mustela putorius</i> (Polecat / Ffwlbart)	SJ304539 (Selected from Interactive Map)	2 records, both in April 2015	Ifan Davies	1 Adult	Live Sighting	Cerner Road, Moss, Brymbo, Wrexham	Classification: True polecat	D1544/001/01 , D1544/002/01	BAP, Bern, HDir, RD2(UK), S7, LBAP[CON, FLI, GWY, SNP]	4	✖
<i>Myotis mystacinus</i> (Whiskered Bat / Ystlum Barfog)	SJ2953 (Estimated (Centroid of Site))	July 1981	Duncan Brown	1 Adult Female; 1 Juvenile Male	Dead	Site Name Withheld	Comments Withheld	D1345/002/01	Bern, Bonn, EPS, HDir, RD2(UK), WCA5, LBAP[ANG, DEN, FLI, GWY, SNP]	1	✖

Other Invertebrates										
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA
<i>Bidessus minutissimus</i> (Minutest Diving Beetle)	SJ29295352 (Estimated (From Recorder's Map))	July 2001	C. Turtle			Brymbo Steelworks; Pond 2	Part of a relocation project from contaminated tanks nearby.	D0351/001/01	BAP, RD1(UK), S7, LBAP[CON, DEN, GWY]	1

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Plants											
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	✖
<i>Acaulon muticum</i> (Rounded Pygmy-moss)	SJ3052	1905	Jones, D.A.			Brynteg	S.I.	D1075/001/03	RD2(UK), LI[VC48, VC50, VC52]	3	✖
<i>Brassica oleracea</i> (Wild Cabbage / Bresychen Wylt)	SJ2854	24/05/1972	Tom Edmondson			Hope Mountain	quarry faces	D0101/001/01	RD2(UK), LBAP[ANG, CON]	4	✖
<i>Buxus sempervirens</i> (Box / Pren Bocs)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	1st for 10km sq. planted?	D1169/004/02	RD1(UK), RD2(UK), LBAP[CON]	3	✖
<i>Centaureum erythraea</i> (Common Centaury / Y Ganrhi Goch)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site		D1169/004/02	RD1(UK)	3	✖
<i>Cotoneaster simonsii</i> (Himalayan Cotoneaster / Cotoneaster Simons)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	1st for 10km sq	D1169/004/02	INNS, WCA9	3	✖
<i>Crassula helmsii</i> (New Zealand Pigmyweed / Corchwyn Seland Newydd)	SJ2853	2 records, between 23/10/2015 and 03/06/2016	Stead, M.O.; Denbs Group (Williams, D.)			Brymbo Pool	Significant patches around the Fishing Pool	D1169/004/02	INNS, WCA9	3	✖
<i>Crocospia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i> (Montbretia / Crib-y-Ceiliog)	SJ2854	23/10/2015	Denbs Group (Williams, D.)			Mount Sion		D1169/004/02	INNS, WCA9	3	✖
<i>Elodea nuttallii</i> (Nuttall's Waterweed / Ffugalaw Nuttall)	SJ2853	2 records, between 23/10/2015 and 03/06/2016	Stead, M.O.; Denbs Group (Williams, D.)			Brymbo Pool		D1169/004/02	INNS	3	✖
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	1st for 10km sq. Quite widespread across the site	D1169/004/02	INNS, WCA9	3	✖
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ3053	03/06/1987	Morgan, Ms V.M.			Pentre Broughton, Brynteg	Associated species with Senecio cambrensis.	D1169/004/02	INNS, WCA9	3	✖
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ3052	22/08/2012	Williams, D.			Pentre Broughton		D1169/004/02	INNS, WCA9	3	✖
<i>Fallopia japonica</i> (Japanese Knotweed / Clymog Japan)	SJ2854	23/10/2015	Denbs Group (Williams, D.)			Mount Sion		D1169/004/02	INNS, WCA9	3	✖
<i>Hyacinthoides non-scripta</i> (Bluebell / Clychau'r Gog)	SJ2853	03/06/2016	Stead, M.O.			Brymbo Pool		D1169/004/02	WCA8, LBAP[ANG, CON, FLI, SNP]	3	✖
<i>Hyacinthoides non-scripta</i> (Bluebell / Clychau'r Gog)	SJ2854	23/10/2015	Denbs Group (Williams, D.)			Mount Sion		D1169/004/02	WCA8, LBAP[ANG, CON, FLI, SNP]	3	✖
<i>Lamium galeobdolon</i> subsp. <i>argentatum</i> (Variegated Yellow Archangel)	SJ2853	03/06/2016	Stead, M.O.			Brymbo Pool		D1169/004/02	INNS, WCA9	3	✖

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	☒
<i>Lamiastrum galeobdolon</i> <i>subsp. argentatum</i> (Variegated Yellow Archangel)	SJ2854	23/10/2015	Denbs Group (Williams, D.)			Mount Sion		D1169/004/02	INNS, WCA9	3	☒
<i>Meconopsis cambrica</i> (Welsh Poppy / Pabi Cymreig)	SJ2853	03/06/2016	Stead, M.O.			Brymbo Pool		D1169/004/02	RD2(UK), LBAP[CON, DEN]	3	☒
<i>Microbryum curvicolle</i> (Swan-necked Earth-moss)	SJ3052	1917	Jones, D.A.			Brynteg	Recorded as <i>Microbryum curvicolle</i> .	D1075/001/03	LI[VC49, VC50, VC52]	3	☒
<i>Microbryum davallianum</i> (Smallest Pottia)	SJ3052	1917	Jones, D.A.			Brynteg		D1075/001/03	RD2(UK), LI[VC50]	3	☒
<i>Populus nigra</i> agg.	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	1st for 10km sq. planted.	D1169/004/02	LBAP[DEN, FLI, SNP, WRE]	3	☒
<i>Prunus laurocerasus</i> (Cherry Laurel / Coeden Lawrgeirios)	SJ2854	23/10/2015	Denbs Group (Williams, D.)			Mount Sion		D1169/004/02	INNS	3	☒
<i>Prunus lusitanica</i> (Portugal Laurel / Coeden Lawrgeirios Portiwgal)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	4th for vc, 1st for 10km sq. planted	D1169/004/02	INNS	3	☒
<i>Rosa rugosa</i> (Japanese Rose / Rhosyn Japan)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	4th for 10km sq, 1st for 10km sq.	D1169/004/02	INNS, WCA9	3	☒
<i>Rosa rugosa</i> (Japanese Rose / Rhosyn Japan)	SJ2854	23/10/2015	Denbs Group (Williams, D.)			Mount Sion		D1169/004/02	INNS, WCA9	3	☒
<i>Sedum album</i> (White Stonecrop / Briweg Wen)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site		D1169/004/02	INNS	3	☒
<i>Senecio cambrensis</i> (Welsh Groundsel / Creulys Gymreig)	SJ294538	2 records, between 1987 and 03/06/1987	Morgan, Ms V.M.; Anon	16		Brymbo	At least sixteen plants in the car park of the English Methodist Chapel. Associated species listed.	D1169/004/02 , D0821/001/01	RD1(UK), RD2(UK), WVP, LBAP[CON, FLI]	3	☒
<i>Senecio cambrensis</i> (Welsh Groundsel / Creulys Gymreig)	SJ305530 (Approximate)	1987	Anon			Brynteg		D0821/001/01	RD1(UK), RD2(UK), WVP, LBAP[CON, FLI]	3	☒
<i>Senecio cambrensis</i> (Welsh Groundsel / Creulys Gymreig)	SJ3052	22/08/2012	Williams, D.			Pentre Broughton	To be confirmed	D1169/004/02	RD1(UK), RD2(UK), WVP, LBAP[CON, FLI]	3	☒
<i>Silene vulgaris</i> (Bladder Campion / Gludlys Codrwtth)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site		D1169/004/02	WVP, LI[VC52]	3	☒
<i>Sinapis arvensis</i> (Charlock / Mwstard Gwyllt)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site	1st for 10km sq.	D1169/004/02	WVP	3	☒
<i>Vicia sativa subsp. nigra</i> (Narrow-leaved Vetch)	SJ2953	31/07/2010	BSBI			Brymbo Steelworks Site		D1169/004/02	WVP	3	☒

Reptiles and Amphibians											
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	QA	✖
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ29355352 (Estimated (From Recorder's Map))	July 2001	C. Turtle	>1		Brymbo Steelworks; Pond 4	Part of a relocation project from contaminated tanks nearby. 1.2 newts / 2m of shoreline.	D0351/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4	✖
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ29335351 (Estimated (From Recorder's Map))	July 2001	C. Turtle	Juvenile		Brymbo Steelworks; Pond 3	Part of a relocation project from contaminated tanks nearby.	D0351/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4	✖
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ29295352 (Estimated (From Recorder's Map))	July 2001	C. Turtle	>1		Brymbo Steelworks; Pond 2	Part of a relocation project from contaminated tanks nearby.	D0351/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4	✖
<i>Natrix natrix</i> (Grass Snake / Neidr y Gwair)	SJ287538	May 2008	Chris Jones	Adult		Brymbo Pool	At fishery	D0035/002/01	BAP, Bern, S7, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	✖
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ297536	12/06/2006	Adrian Bayley			Site Name Withheld	Comments Withheld	D1317/001/02	BAP, Bern, EPS, HDir, RD1(UK), RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	✖
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ29355352 (Estimated (From Recorder's Map))	July 2001	C. Turtle	1 Juvenile		Brymbo Steelworks; Pond 4	Part of a relocation project from contaminated tanks nearby.	D0351/001/01	BAP, Bern, EPS, HDir, RD1(UK), RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4	✖
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ29335351 (Estimated (From Recorder's Map))	July 2001	C. Turtle	Juvenile		Brymbo Steelworks; Pond 3	Part of a relocation project from contaminated tanks nearby.	D0351/001/01	BAP, Bern, EPS, HDir, RD1(UK), RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4	✖
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ29255354 (Estimated (Centroid of Site))	March 2004 - August 2004	C. Turtle	Adult; Juvenile		Brymbo Steelworks		D1310/001/01	BAP, Bern, EPS, HDir, RD1(UK), RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4	✖
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ2921453568	Before 23/03/2007	Anon			Brymbo Steel Works Mitigation Pool		D1118/011/03	BAP, Bern, EPS, HDir, RD1(UK), RD2(UK), S7, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4	✖
<i>Zootoca vivipara</i> (Common Lizard / Madfall)	SJ293536	1998	Anon			Brymbo	Bank adjacent to development site	D0035/002/01	BAP, Bern, S7, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	✖

Statutory Sites intersecting 1000m buffer	SSSI: 2961: Coedwig Ffossil Brymbo Fossil Forest (148m)
Wildlife Sites intersecting 1000m buffer	W204: Brymbo Pony Fields (206m), W203: Mount Zion (951m)
NWWT Reserves intersecting 1000m buffer	None
RSPB Reserves intersecting 1000m buffer	None
RIGS intersecting 1000m buffer	211: Brymbo Fossil Forest (130m)
Ancient Woodland intersecting 1000m buffer	50192: Ancient Woodland Site of Unknown Category (195m), 49551: Ancient Woodland Site of Unknown Category (238m), 29999: Ancient Semi Natural Woodland (500m), 50191: Ancient Woodland Site of Unknown Category (576m), 49550: Ancient Woodland Site of Unknown Category (602m), 32245: Ancient Semi Natural Woodland (689m), 32246: Ancient Semi Natural Woodland (799m)
Phase I Habitats intersecting 1000m buffer (Habitat at central point shown in red, if found)	A.1.1.1: Semi-natural Broad-leaved Woodland (5.9% / 185,414 sq.m), A.1.2.2: Planted Coniferous Woodland (0.23% / 7,313 sq.m), A.2.1: Dense Scrub (0.92% / 28,866 sq.m), B.1.2: Semi-improved Acid Grassland (0.02% / 772 sq.m), B.2.2: Semi-improved Neutral Grassland (7.07% / 222,220 sq.m), B.4: Improved Grassland (37.4% / 1,174,837 sq.m), C.1.1: Bracken (0.27% / 8,452 sq.m), C.3.1: Tall Ruderal Herb (0.54% / 17,037 sq.m), G.1: Standing Water (0.14% / 4,481 sq.m), I.2.1: Quarry (0.06% / 1,939 sq.m), J.1.1: Arable (0.26% / 8,265 sq.m), J.1.2: Amenity Grassland (2.71% / 85,045 sq.m), J.1.3: Ephemeral/Short Perennial (6.29% / 197,566 sq.m), J.1.5: Gardens (0.55% / 17,215 sq.m), J.3.4: Caravan Site (0.04% / 1,180 sq.m), J.3.6: Buildings (26.98% / 847,394 sq.m) , J.3.7: Track (0.29% / 9,161 sq.m), J.4: Bare Ground (0.32% / 10,046 sq.m), NA: Not Accessed Land (0.55% / 17,331 sq.m)



RAILWAY ROAD

Tracks

Track

PHOENIX DRIVE

10 m 0 60 m
1:1,250

- Broad-leaved plantation woodland
- Scattered scrub
- Unimproved neutral grassland
- Tall ruderal
- Ephemeral/ short perennial
- Hard-standing
- Running water
- Dry ditch
- Fence
- Badger path
- Survey site boundary
- Target Note

**C321 Proposed New Primary School,
Phoenix Drive, Brymbo, Wrexham -
Extended Phase 1 Habitat Survey**

**Figure 1 - Extended Phase 1 Habitat
Survey**

Date: 16/02/2017

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