

Report Title	Hafod y Wern Community Primary School, Deva Way, Wrexham - Extended Phase 1 Habitat Survey
Client	Wrexham County Borough Council
Date	March 2011

this report was produced by



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Figure 1 – Extended Phase 1 Habitat map

Appendix 1 – Data provided by Cofnod (Public Version)

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Marches Ecology was commissioned by Wrexham County Borough Council (WCBC) to undertake an Extended Phase 1 Habitat Survey of Hafod y Wern Community Primary School, Deva Way, Wrexham (OS Grid Ref. SJ 348 503). The location of the survey site is shown in *Figure 1*.
- 1.1.2 There is no information available on any proposed development at this stage. As such, this report is provided as background information to inform any future proposal for development at the school and to detail any associated potential ecological constraints. The 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.
- 1.1.3 This work comprised a review of ecological background data to provide contextual information and an Extended Phase 1 Habitat Survey. The Extended Phase 1 Habitat Survey was undertaken on 24th February 2011. This report presents the findings of this data review and survey.

1.2 Legislation and Policy

Introduction

- 1.2.1 This sub-section provides a brief summary of key relevant 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.

Badgers

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

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

Bats

- 1.2.3 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 which gives them full protection under *Regulation 40(1)*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act).

1.2.4 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.

1.2.5 Several species of bat are included as Priority Species in the UK Biodiversity Action Plan (UK BAP) and also as species of principal importance for the conservation of biological diversity in Wales under *Section 42* of the *Natural Environment and Rural Communities Act 2006* (NERC Act 2006). Several species of bat are identified as a priority species or species of conservation concern within the WBAP (Wrexham County Borough, 2003).

1.2.6 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.

Great Crested Newt

1.2.7 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 *Countryside and Rights of Way Act 2000* (the CRoW Act) 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*. 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.

1.2.8 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.

1.2.9 The Great Crested Newt is a priority species in the UK Biodiversity Action Plan (UK Biodiversity Steering Group 1995, 1998a & b), which includes objectives and targets to protect and restore newt habitats and to create new sites through habitat management and re-creation. *Section 42* of the *Natural Environment and Rural Communities Act 2006* (NERC Act 2006) provides a list of habitats and species of principal importance for the conservation of biological diversity in Wales. The Great Crested Newt is included on this list. The Great

Crested Newt is also identified as a priority species in the Wrexham Biodiversity Action Plan (Wrexham County Borough, 2003).

Reptiles

- 1.2.10 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.
- 1.2.11 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.
- 1.2.12 All four of the above listed reptiles are UK BAP priority species and are also included in *Section 42* of the *NERC Act 2006*. In the WBAP (Wrexham County Borough, 2003), Grass Snake, Slow-worm and Adder are identified as species of conservation concern, and Viviparous Lizard as locally threatened.

Birds

- 1.2.13 All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the *Countryside and Rights of Way Act 2000*.
- 1.2.14 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.
- 1.2.15 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.
- 1.2.16 *Section 74(2)* of the *Countryside and Rights of Way Act 2000* (now under *Section 42* of the *Natural Environment and Rural Communities Act 2006*) requires the government to prepare and publish a list of species and habitats that it considers to be of principal importance for the conservation of biological diversity in Wales. This list includes several birds. *Section 74* places a duty on the government to have regard, in exercising all its functions, to conserve biological diversity in accordance with the United Nations Convention on Biodiversity.
- 1.2.17 *Sections 40 to 42* of the *Natural Environment and Rural Communities Act 2006* (NERC Act) replace *S74* of the CRow Act. *Section 40* of the NERC Act extends to all public authorities (includes local planning authorities) the existing *S74* duty to have regard to biodiversity as far as is consistent with the proper exercise of their functions.

1.3 Structure of this Report

1.3.1 The remainder of this report is structured as follows:

Section 2 describes the methodology;

Section 3 describes the results;

Section 4 provides the conclusions and outlines ecological issues including potential mitigation; and

Section 5 contains the target notes.

Further sections give references and tables of data.

2 METHODOLOGY

2.1 Ecological Background Data Search

2.1.1 Ecological information was gathered from archival sources to provide background information on the ecological status of the survey site and its surroundings. Information was requested from Matthew Ellis (Countryside Council for Wales), Emma Broad (Wrexham County Borough Council, Biodiversity Officer) and Cofnod (North Wales Environmental Information Service).

2.1.2 Statutory organisations and other relevant bodies were contacted to request the following information for a 1 km search area around the survey site:

- international and national statutory sites for nature conservation (e.g. RAMSAR, SPA, SAC, SSSI, LNR);
- non-statutory designated sites for nature conservation (e.g. Wildlife Sites);
- Ancient Woodland, or long-established semi-natural woodland;
- species protected by the *Wildlife and Countryside Act 1981* (as amended);
- species protected by European directives;
- species listed under *Section 42* of the *Natural Environment and Rural Communities Act 2006* (NERC Act);
- red data book species;
- species and habitats listed in the UK and Wrexham Biodiversity Action Plan (BAP); and
- other species listed as scarce or notable in literature issued by conservation organisations or learned societies.

2.1.3 Information was requested on other organisations and other relevant local wildlife groups to contact, e.g. bat, local mammal, herpetofauna and bird groups. In addition widely available contextual information was consulted as follows:

- the National Biodiversity Network Gateway (<http://www.searchnbn.net>);
- UK BAP;
- Wrexham BAP¹; and
- the Countryside Council for Wales 'Protected Sites' web-site <http://www.ccw.gov.uk/interactive-maps/protected-areas-map.aspx>.

2.1.4 *Table 1* lists the statutory organisations and other relevant bodies that were contacted and presents a brief description of the consultation process.

¹ http://www.wrexham.gov.uk/english/planning_portal/biodiversity/wxmbap.htm

Table 1 – Summary of consultation.

Organisation	Contact date	Date reply received and summary
Countryside Council for Wales (Matthew Ellis, Regional Species and Biodiversity Officer)	31 st January 2011.	14th February 2011. Email received with attached map. Map provides records for bats, reptiles and Great Crested Newt within an area largely in excess of 1 km from the survey site.
Wrexham County Council (Emma Broad, Biodiversity Officer)	31 st January 2011.	01st February 2011. Email received detailing that there are no Wildlife Sites within the 1 km search area.
Cofnod (North Wales Environmental Information Service)	31 st January 2011.	07th February 2011. Comprehensive report and associated maps received indicating protected/ notable species records within 1 km of the site. Species records include data provided by the following organisations: Clwyd Badger Group (sett records), Clwyd Bird Recording Group, North East Wales Amphibian and Reptile Network, NE Wales Bat Roosts Database, Countryside Council for Wales and the National Biodiversity Network, as well as records uploaded onto the Cofnod Online Recording System.

2.2 Extended Phase 1 Habitat Survey

- 2.2.1 The Extended Phase 1 Habitat Survey was carried out on 24th February 2011 by Max Ellson of Marches Ecology. The weather was dry and mild with occasional light cloud. The survey focussed on land within the site boundary (referred to henceforth as 'the survey site'). Immediately adjacent habitat was considered where deemed appropriate and viewed from the survey site boundary.
- 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 2003) 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 vertebrates.

- 2.2.4 In addition to the habitat map and target notes, a plant species list was compiled (provided in *Table 2, Section 7*). Plant nomenclature in this report follows Stace (2010).
- 2.2.5 February is a sub-optimal time of year for general botanical recording, as many flowering species may not be visible. 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.
- 2.2.6 Habitats and other features were assessed for protected and other notable vertebrates that are likely to occur in the region and within the survey site. Evidence of activity was noted when encountered. In addition a subjective assessment of the relative ecological value of the survey area, based on professional experience, was completed. Further information describing the methods employed for particular species where deemed relevant to the site are provided in the following sections. Target notes were made for features of interest, and these are given in *Section 5* and mapped on *Figure 1*.

Badger

- 2.2.7 Areas that might be used by Badger (*Meles meles*) for foraging and sett building were assessed during the Extended Phase 1 Habitat Survey. Incidental foraging signs, tree scratching, paths, latrines and setts were recorded if found (Harris *et al.*, 1989). The survey site was fully accessed and immediately adjacent land was viewed from within the access boundaries wherever possible.

Bats

- 2.2.8 The survey for bats during the Extended Phase 1 Habitat Survey involved making an assessment of the habitat for foraging, and assessing locations for roosting. Trees and built structures are briefly described and features that increase the likelihood of them being used for bat-roosting are identified (given as Target Notes in *Section 5*). If any definite signs of bats had been found (such as droppings and feeding remains), they would have been recorded.
- 2.2.9 A brief external inspection of each tree within or close to the survey site was completed. No ladders or other climbing equipment were used during this inspection. Cracks were not inspected internally and it is therefore possible that bats or evidence of bats could have been overlooked if located out of view. The methodology for the bat assessment was carried out from surveyor experience and followed methodologies adapted from Bat Conservation Trust (2007).

Assessment of Bat-roost Potential - Trees

- 2.2.10 Trees were classified on roosting opportunities for bats, and the general condition of the tree. Potential bat roosting features including any significant cracks, splits, hollows or holes in the trunk or branches, areas of loose bark, and features such as dense *Hedera helix* (Ivy) cover, or branches that overlap were also recorded. This information enabled each tree to be categorised as follows.
- *High Bat Roost Potential.* Trees with good bat roost potential have numerous or extensive cavities, such as major sections of hollow trunk. They are likely to be used by bats and could be suitable for a maternity roost.

- *Moderate Bat Roost Potential.* Trees with moderate bat roost potential are those with small holes such as woodpecker nest-holes, or cracks. They could be used by individual bats and might be suitable for a maternity roost or other types of roost.
- *Limited Bat Roost Potential.* Trees with limited bat roost potential are those with superficial cracks and holes or small sections of loose bark and/or dense growths of *Hedera helix* (Ivy). They might be used as occasional or transient roosts, but are unlikely to be suitable for large colonies.
- *No Bat Roost Potential.* Trees with no bat roosting potential are those with no holes or cracks, often young trees in good condition. This category was used to identify and discount features or locations of a type which can in some cases potentially be suitable for roosting bats.

2.2.11 Buildings were also subject to an external inspection; this followed a similar assessment procedure to that outlined above for trees.

Great Crested Newt

2.2.12 The quality of terrestrial and aquatic habitat for Great Crested Newt (*Triturus cristatus*) was assessed during the Extended Phase 1 Habitat Survey. The assessment of aquatic habitat was based on the Habitat Suitability Index (Oldham, *et al.* 2000) that identifies several criteria that influence the suitability of ponds for Great Crested Newts. These criteria are as follows:

- Geographic location;
- Pond area (Dimensions);
- Pond permanence (Will it dry out?);
- Water quality (Clarity, eutrophic status and substrate);
- Pond shading (Percentage of the pond that is shaded);
- Presence of wildfowl and/ or fish;
- Pond density/ isolation (Is the pond isolated or near other water bodies?);
- Surrounding terrestrial habitat ("newt friendly habitat");
- Macrophyte content (Including marginal and aquatic vegetation); and
- Barriers to the proposed works (Major roads, rivers, large expanses of developed land).

Reptiles

2.2.13 The Extended Phase 1 Habitat Survey concentrated on qualitative assessment of the habitat for reptiles. The survey involved identifying areas that are suitable for reptiles; potential basking areas, hibernation sites and foraging habitat. English Nature (2004) provides further information on the distribution and ecology of the four widespread species. Habitat requirements differ between species but can be summarised as follows after Edgar *et al.* (2010):

- Viviparous Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one of their favoured habitats is rough grassland.
- Slow-worms (*Anguis fragilis*) use similar habitats to Viviparous Lizards, and are often found in rough grassland, gardens and derelict land.
- Grass Snakes (*Natrix natrix*) have broadly similar requirements to Viviparous Lizards with a greater reliance on ponds and wetlands for their food source.

- Adders (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath.

Birds

- 2.2.14 The habitat within the survey site was assessed for its potential value for breeding birds during the Extended Phase 1 Habitat Survey. Breeding and wintering bird assemblages can only be described by specific surveys at appropriate times of year.

3 RESULTS

3.1 Ecological Background Data Search

Statutory and Non-statutory Designated Sites

3.1.1 There are no statutory designated sites within 1 km of the survey site. The closest such site is Sontley Marsh Site of Special Scientific Interest (SSSI), located approximately 2.1 km from the survey site boundary at its closest point. SSSIs are of national importance and are designated under *The Wildlife and Countryside Act 1981 (as amended)*, and are also affected by the *CRow Act 2000*.

3.1.2 There are no non-statutory designated sites (Wildlife Site) within 1 km of the survey site. In addition, the information provided by Cofnod indicates that there is no Ancient Woodland within the 1 km search area.

Species

3.1.3 Cofnod provided the following species records for the 1 km search area:

- **Category 1 Species:** species with International or UK legal protection, *Section 42* [NERC] Species and UK BAP Priority Species.

No **Category 2 Species** (Global Red List, British Red Data Book, Rare & Scarce, and Welsh Red and Amber Birds & Welsh Vascular Plant Red Data List (where these are not identified in Category 1)) or **Category 3 Species** (LBAP Species not identified under Categories 1 and 2) were provided for the 1 km search area.

3.1.4 Data on the following species groups was provided for the 1 km search area:

- mammals (Badger, a *Chiroptera* bat species, Brown Long-eared Bat, Common Pipistrelle and Pipistrelle); and
- amphibians (Great Crested Newt).

A number of records were also supplied for outside the 1 km search area, including for amphibians (Common Toad and Common Frog), reptiles (Viviparous Lizard and Slow-worm) and birds; these are not detailed further in this report.

3.1.5 Cofnod provide two sets of species records – a ‘Confidential’ set which includes detailed grid references and which are not authorised for release into the public domain, and an additional ‘Public Version’ where the accuracy of some of the grid references has been reduced (*i.e.* whereby six-figure grid references have been reduced to four-figure grid references). The Confidential data set has been issued to the client as part of this study, however ‘Public Version’ records are utilised in this document (the full report of which is provided as *Appendix 1*). Although this has not allowed exact measurement of the distance from the survey site or location of the records, the reduced accuracy is not considered to affect the overall conclusions provided. A few records have a six-figure grid reference which has enabled an approximate measurement of the distance from the survey site boundary to be undertaken. In these cases, distances are recorded approximately from the edge of the survey site. The survey site is located in the 1 km grid square: SJ 3450.

- 3.1.6 In addition to bird records supplied with four figure grid references (but outside of the 1 km search area, refer above), a large number of bird records were provided for either the 10 km grid square SJ34 or SJ35. These records are detailed in the 'Confidential' set only. However as the location detailed for these records is at the 10 km grid level, use of this data in this report is not considered necessary.
- 3.1.7 Maps indicating the location of the records were provided by Cofnod, although these were not included in the 'Public Version'. In summary, there are records for the following within the 1 km search area:
- Mammals –
 - One record for Badger (sett) from SJ 3550 (dated 2001) – this 1 km grid square is located immediately adjacent to the 1 km grid square in which the survey site is located.
 - Five records of *Chiroptera* bat from SJ 3449 (dated between 1986 and 1999) – this 1 km grid square is located immediately adjacent to the 1 km grid square in which the survey site is located.
 - Two records of Brown Long-eared Bat (*Plecotus auritus*) from SJ 3450 (dated 1999) – the 1 km grid square in which the survey site is located, and SJ 3451 (dated 1996) (from an immediately adjacent 1 km grid square).
 - One record of Common Pipistrelle (*Pipistrellus pipistrellus*) from SJ 3449 (dated 1999), from an immediately adjacent 1 km grid square.
 - One record of Pipistrelle (*Pipistrellus* sp.) from SJ 3449 (dated 2004), from an immediately adjacent 1 km grid square.
 - Amphibians –
 - One record of Great Crested Newt (*Triturus cristatus*) from SJ 354 508 ('Hullah Farm Pond', dated 1999), a location approximately 640 m to the northeast of the survey site.
- 3.1.8 Some of the above records for bats and Great Crested Newt were replicated in data provided directly by CCW; no additional records to that supplied by Cofnod were provided. The map supplied by CCW indicates the locations of these records, none of them are associated with the survey site or its immediate environs. A review of species records on the NBN website did not provide any additional records.

Wrexham Biodiversity Action Plan

- 3.1.9 One habitat identified as a priority habitat in the Wrexham Biodiversity Action Plan (WBAP) is of potential relevance to the survey site – Garden². The WBAP states that 22 UK priority species were selected for Wrexham County Borough of which seven currently have Species Action Plans (SAPs). Those of potential relevance to the site are limited to Great Crested Newt and Song Thrush. The WBAP also includes a 'Provisional List of Locally Important/ Endangered Species'.

² THE WBAP notes that 'Garden' also relates to 'those areas of garden (including wildlife areas) created within school grounds'.

3.2 Extended Phase 1 Habitat Survey

Site Description

- 3.2.1 The survey site is located adjacent to Deva Way within the eastern fringes of Wrexham; specifically an area of residential housing/ amenity parkland known as Caia Park. The area subject to survey extends to approximately 3.7 hectares. It is located approximately 1.2 km to the east of Wrexham town centre. Wrexham *Landmap*³ identifies the survey site as within character area 10: Wrexham Town. The Landmap citation notes that this character area is 'dominated by buildings and other development with the underlying physical landscape covered over or altered to a significant extent'. The Landmap citation further notes that 'built areas of Wrexham town are of low ecological interest, but mature trees, gardens, open spaces, former industrial sites, ponds and rivers provide valuable habitats. Disused railway lines, Acton Park and the River Gwenfro provide the largest natural habitats within Wrexham town.'
- 3.2.2 The survey site is entirely bounded by fencing. Deva Way and Prince Charles Road are located along the length of the northern and eastern boundaries of the survey site respectively. Residential housing estates are located further to the north and east. Intensively managed amenity parkland dominate the landscape to the immediate south and west of the survey site (an area known as the Dunks); to the south of the survey site this includes a children's play area.

Habitat and Flora

- 3.2.3 The survey site is dominated by two main school buildings, amenity grassland and hard-standing. The Extended Phase 1 Habitat map is provided as *Figure 1*. Habitat types recorded within the survey site are as follows:
- Individual broad-leaved trees;
 - Rough (neutral) and amenity grassland;
 - Introduced shrub plantings;
 - Buildings; and
 - Hard-standing/ bare ground.

Trees

- 3.2.4 Individual (mature/ semi-mature) broad-leaved trees are located at *Target Notes 3, 4, 10 and 11*. These include five *Populus* cf. *nigra* ssp. 'Italica' (Lombardy-poplar) trees, two *Fraxinus excelsior* (Ash) trees and one *Tilia xeuropaea* (Lime) tree. Other trees indicated on *Figure 1* comprise recently planted saplings – species present include *Acer pseudoplatanus* (Sycamore), *Tilia xeuropaea* (Lime), *Acer* sp (Maple), *Betula* sp. (Birch), *Quercus robur* (Pedunculate Oak), *Prunus* sp. (ornamental Cherry), *Prunus* sp. (ornamental Plum) and *Malus* cf. *domestica* (Apple).

Grassland

- 3.2.5 The grassland resource within the survey site is dominated by regularly mown amenity grassland (for example *Target Note 5*, see photos overleaf). This is mostly relatively species-poor being dominated by *Lolium perenne* (Perennial Rye-grass) with occasional

³ http://www.wrexham.gov.uk/english/planning_portal/landmap/spg.htm

other grass species. Common grassland forbs/ herbs are scattered throughout, at various levels of abundance.



Amenity grassland – LHS looking north towards the building at *Target Note 13*, RHS looking southeast towards the building at *Target Note 13*.

- 3.2.6 A stand of rough (neutral) grassland is located at *Target Note 7*; see photo below. This resource appears to be largely unmanaged. The sward is variously dominated by either *Holcus lanatus* (Yorkshire-fog) or *Arrhenatherum elatius* (False Oat-grass) with locally abundant *Festuca rubra* (Red Fescue), and a range of coarse-leaved grasses scattered throughout. *Carex* cf. *hirta* (Hairy Sedge) is locally frequent and *Juncus effusus* (Soft-rush) is also occasional. Common grassland forbs and tall herbs (some characteristic of wet grassland) are scattered throughout, such as locally abundant *Epilobium hirsutum* (Great Willowherb), occasional *Filipendula ulmaria* (Meadowsweet), *Ranunculus repens* (Creeping Buttercup), *Taraxacum* sect. *Ruderalia* (Common Dandelion), *Plantago lanceolata* (Ribwort Plantain), *Senecio jacobaea* (Common Ragwort), *Rumex obtusifolius* (Broad-leaved Dock), and rarely *Equisetum* cf. *arvense* (Field Horsetail) and *Potentilla reptans* (Creeping Cinquefoil).



Rough grassland at *Target Note 7*.

Other habitat

- 3.2.7 Other habitat within the survey site is limited to the two main school building complexes (*Target Notes 1 and 13*), occasional areas of introduced shrub plantings (*Target Note 12*) and areas of hard-standing/ bare ground. The buildings are further detailed below with regards bats. A complex of soft-play areas, raised beds (with bark), a small area of amenity grassland with associated small planted beds, and hard-standing is located at *Target Note 2*.
- 3.2.8 A very small depression is located at *Target Note 7a* (too small to map on *Figure 1*); it was approximately 1 m by 2.5 m in size and held standing water to 0.15 m deep. This feature was full of leaf litter and dominated by *Glyceria fluitans* (Floating Sweet-grass) – no open water was present. It is likely to dry out in summer months.

Immediately adjacent land

- 3.2.9 A row of mature *Populus* cf. *nigra* ssp. 'Italica' (Lombardy-poplar) trees, and occasional *Salix* cf. *fragilis* (Crack Willow) trees is located at *Target Note 6*, adjacent to (outside) the school boundary fence (the mapping provided on *Figure 1* in relation to this feature is indicative only).
- 3.2.10 Immediately adjacent to the western boundary of the survey site a stand of rough grassland and tall-herb vegetation with associated scrub and young trees is located at *Target Note 8* with a mature *Populus* cf. *nigra* ssp. 'Italica' (Lombardy-poplar) tree at *Target Note 8a*. A small stand of wet scrub woodland is located at *Target Note 9*. This includes a small area of shallow water (*Target Note 9a*). This feature appeared to hold water (of poor quality) of no more than a few centimetres deep with abundant *Glyceria fluitans* (Floating Sweet-grass); it is likely to dry out in summer months.

Fauna

Badger

- 3.2.11 No setts or signs of Badger activity were recorded within the survey site. The habitats that characterise the survey site (dominated by amenity grassland, buildings and hard-standing) are of negligible potential value for sett construction. No habitat of any discernable potential value for sett construction is located on immediately adjacent land either. Although the amenity grassland within the survey site does provide potential foraging opportunities for Badger; a similar resource is located to the south and west of the survey site. Furthermore the survey site is located within an urban location. As such, the likelihood of Badger being present in the locality is considered negligible.

Bats

- 3.2.12 The following tree within the survey site is considered to provide moderate bat roost potential:
- A mature *Tilia xeuropaea* (Lime) tree at *Target Note 4*. This tree has a diameter at breast height of approximately 1.2 m and an approximate height of 20 m. Although it appears to be in mostly good condition two rot holes were observed (both at the end of branch stumps adjacent to the main trunk) of approximately 0.05 m and 0.1 m diameters. It is unclear how deep these rot holes are and/ or if they are associated with internal cavities.

3.2.13 The following trees/ groups of trees within the survey site are considered to provide no more than limited bat roost potential:

- Two mature *Populus cf. nigra* ssp. 'Italica' (Lombardy-poplar) trees at *Target Note 3*.

Two semi-mature *Fraxinus excelsior* (Ash) trees at *Target Note 10*, and three semi-mature *Populus cf. nigra* ssp. 'Italica' (Lombardy-poplar) trees at *Target Note 1*, are not considered to provide bat roost potential. Other trees indicated on *Figure 1* are recently planted saplings with no bat roost potential.

3.2.14 Two buildings/ complexes are located within the survey site – at *Target Notes 1* and *13*. No internal access was provided to these buildings and they were not assessed in detail. Both of the two 'Hafod y Wern Community Primary School' buildings/ complexes are considered to provide bat roost potential, albeit no more than limited.

3.2.15 The building/ complex at *Target Note 1* (see photo below) appears to mainly comprise one-storey and is mostly constructed of brick walls with felted flat (or slightly pitched) roofs. Frequently many of the building sides comprise windows. Overall the buildings appear in good condition. The building/ complex at *Target Note 13* (see photo below) is of a similar character/ construction/ condition as that at *Target Note 1*.



The two 'Hafod y Wern Community Primary School' buildings/ complexes – LHS, an example of the building at *Target Note 1*, RHS an example of the building at *Target Note 13*.

3.2.16 At *Target Note 1a* a small potential gap was noted to be associated with the junction of a flat and pitched roof. At *Target Note 13a* potential gaps were noted where part of a corrugated roof was separating from the building structure beneath (see photo overleaf). Such features may provide suitable opportunities for individual or small numbers of roosting bats and also may allow access (for bats) into internal spaces (if present).



Potential gaps at *Target Note 13a* (where corrugated roof separates from brick walls).

- 3.2.17 The habitats that dominate the survey site (amenity grassland and hard-standing) are unlikely to be of any particular value for foraging bats. The stand of rough grassland at *Target Note 7* may provide comparatively more value, especially when considered in combination with the area of adjoining rough grassland/ tall-herbs and scrub woodland immediately adjacent to the survey site boundary (*Target Notes 8 and 9*). Bats may forage around any external lighting provided within the school grounds.
- 3.2.18 The line of mature trees adjacent to the southern boundary of the survey site (*Target Note 6*) may also offer some potential foraging opportunities/ linear features for species that prefer to forage/ commute along such landmarks.

Great Crested Newt

- 3.2.19 There is no aquatic habitat (suitable for breeding Great Crested Newts) within the survey site. The small depression at *Target Note 7a* is full of leaf litter and is thought likely to dry out; it is not considered to be a potential breeding waterbody. The vast majority of the terrestrial habitats present (regularly mown amenity grassland, hard-standing) are of negligible potential value for Great Crested Newt, although animals would be able to disperse across such features should they be present. However, the rough grassland resource at *Target Note 7* provides potential terrestrial habitat of high value for this species (for foraging, hibernation).
- 3.2.20 During the Extended Phase 1 Habitat Survey a small area of shallow water was recorded adjacent to the survey site boundary at *Target Note 9a*. This feature is heavily shaded and the water appeared no more than a few centimetres deep and of poor quality; it is not considered to be a potential breeding waterbody. An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping⁴ indicates that there are no other additional waterbodies within approximately 500 m of the survey site. A detailed pond scoping exercise has not been undertaken and as such the potential presence of other waterbodies (for example garden ponds) has not been determined.

⁴ <http://maps.google.co.uk/>

Reptiles

- 3.2.21 The habitats that dominate the survey site (regularly mown amenity grassland and hard-standing) offer negligible potential value to reptiles. The area of rough grassland at *Target Note 7* (in conjunction with the adjacent stand outside the survey site at *Target Note 8*) offers comparatively more value, however this resource appears to be relatively isolated (being surrounded on all sides by regularly mown amenity grassland).

Birds

- 3.2.22 Potential nesting opportunities within the survey site are mostly limited to the semi-mature/ mature trees and buildings. The rough grassland resource at *Target Note 7* is potentially suitable for use by a small range of ground nesting birds, however its small size and isolation (from similar habitats) suggests this is unlikely to be the case.

4 CONCLUSIONS AND ECOLOGICAL ISSUES

4.1 Introduction

4.1.1 It should be noted that no detailed information regarding any proposed development is currently available. As such potential impacts associated with any proposal as well as any reasonable avoidance/ mitigation measures would need detailed consideration further to any proposal being established. The conclusions and suggestions provided here must therefore be considered fairly generic.

4.1.2 An assessment of ecological issues 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.

4.2 Further Survey and Mitigation

Statutory and Non-statutory Designated Sites

4.2.1 Any proposed development at the survey site would not result in any direct impacts on any statutory or non-statutory designated sites. The closest statutory designated site to the survey site is Sontley Marsh SSSI, located approximately 2.1 km from the survey site boundary at its closest point. No (indirect) impacts on the SSSI are considered likely to be associated with any development at the survey site (principally due to its distance from the survey site). There are no non-statutory designated sites (Wildlife Sites) within 1 km of the survey site.

Habitat and Flora

4.2.2 There are considered to be no further survey requirements with regards habitat/ flora. When considered both individually, and as a combined ecological resource, the vegetation communities that comprise the site (individual broad-leaved trees, rough (neutral) and amenity grassland and introduced shrub plantings) are unlikely to be of any more than site value⁵. All of the vegetation resource is eminently re-creatable.

4.2.3 No plant species of note (e.g. either included within the *Wildlife & Countryside Act 1981* (as amended) or identified as locally 'scarce' or 'rare' in VC50 – Denbighshire, as per Green 2006) were recorded from the survey site.

4.2.4 Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, 2009) seeks development to achieve net biodiversity gain. As such, consideration (where possible) should be given to enhancing the ecological value of the survey site in association with any proposed development. Potential enhancements (with regards habitats and flora) could include the following: provision of additional areas of unmanaged rough grassland/ wild

⁵ Site value – areas of habitat that are considered to appreciably enrich the habitat resource within the context of the survey site (after IEEM 2006).

flower grassland; enhancement of the amenity grassland resource (where appropriate) through plug planting (for example of low growing flowering forbs); provision of a pond/ wetland feature; and or planting of native shrubs/ hedges/ trees. Such enhancement could usefully focus on extending the existing area of rough grassland at *Target Note 7*. Any planting should utilise ideally locally native species but as a minimum British origin native stock.

Fauna

Badger

- 4.2.5 No setts or signs of Badger were recorded within the survey site. The ecological background data search provided one record for Badger (sett) within an adjacent 1 km grid square to which the survey site is located. There are considered to be negligible opportunities for sett construction both within the survey site and in immediately adjacent land. As such, no particular mitigation/compensation measures are considered to be necessary for this species.

Bats

- 4.2.6 One tree has been identified as having moderate bat roost potential (*Target Note 4*), and a further two as having no more than limited bat roost potential (*Target Note 3*). The two school buildings/ complexes at *Target Notes 1* and *13* have been identified as having no more than limited bat roost potential (specifically with regards features noted at *Target Notes 1a* and *13a*). Nine bat records, of four species/ species groups, were provided by the ecological background data search; *Chiroptera* bat, Brown Long-eared Bat (*Plecotus auritus*), Common Pipistrelle (*Pipistrellus pipistrellus*) and Pipistrelle (*Pipistrellus* sp.). Only a record for Brown Long-eared Bat was provided for the 1 km grid square in which the survey site is located.
- 4.2.7 Should any of the three identified trees (with bat roost potential) be proposed to be directly impacted (e.g. subject to crown reduction works or felled) by any proposed development they would require a detailed daytime inspection by a suitably experienced and licensed bat surveyor and or tree-climber in order to determine whether they are used by roosting bats. Any cavity/split or other feature should be investigated either visually or with the aid of an endoscope. Evidence of recent use by bats would be recorded where present. The inspection should be carried out from surveyor experience and following methodologies adapted from published guidance (Bat Conservation Trust 2007). If bats or evidence of a roost were present, decisions on mitigation/ compensation measures could be taken at that time in relation to any development design. Should the day-time inspection conclude that further detailed (emergence) surveys are required these can only be conducted between the months of May and September.
- 4.2.8 Any trees which have been identified as providing bat roost potential but which are not to be directly impacted by any proposed development are unlikely to require further survey. However, the construction footprint of any scheme should ideally be located further than 10 m from each tree. In addition, prior to construction, site personnel should be made aware of their location, which will be fenced off and appropriately signed for the duration of works. This will reduce or avoid any potential disturbance. Where possible, the use of heavy machinery should be limited adjacent to the buffer zone, especially in the main bat breeding season (June to July).

- 4.2.9 Details of any proposed works to the buildings at *Target Notes 1 and 13* associated with any development should be considered further to assess whether detailed surveys are required. Should such surveys be required, they would follow a similar protocol to that outlined above for trees, *i.e.* detailed daytime inspection (with internal, including roof void access, as required) followed by emergence surveys if considered necessary. If bats or evidence of a roost were present, decisions on mitigation/ compensation measures could be taken at that time in relation to any development design.
- 4.2.10 The potential impact of lighting (both during construction and operation) on bats that may use the survey site should also be considered with regards any proposed development. Lighting at any proposed development site should follow guidance provided by The Bat Conservation Trust and Institution of Lighting Engineers (2008). Should any development include the installation of security/ external lighting on any building (or elsewhere in the site) it should utilise low pressure sodium lamps or similar, be fitted with baffles if necessary and point straight down into the site or to where it is needed to avoid light spillage. The brightness of these lamps should be as low as legally possible and they should be placed as low as possible on the new buildings. Existing features such as the area of rough grassland at *Target Note 7* (and the adjacent habitats at *Target Notes 8 and 9* outside the survey site), the mature tree line at *Target Note 6* (outside the survey site), and any created/ enhanced habitats should be kept as dark as possible with no lighting located nearby.
- 4.2.11 In addition to any compensation that may be required as part of any proposed development, enhancements for bats could be considered in line 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 to be installed on existing mature trees or externally on existing buildings.

Great Crested Newt

- 4.2.12 There is no aquatic habitat (suitable for breeding Great Crested Newts) within the survey site. The terrestrial habitat throughout the vast majority of the survey site is of negligible potential value for Great Crested Newts, although the rough grassland resource at *Target Note 7* provides habitat of potentially high value. The potential presence of Great Crested Newts in terrestrial habitat is governed more by the proximity of a suitable breeding pond than by the quality of the terrestrial habitat. There is only one known waterbody within 500 m of the survey site, a shallow area of water at *Target Note 9a* (not considered suitable for (breeding) Great Crested Newts). The ecological background data search provided one record for Great Crested Newts from the 1 km survey area – from SJ 354 508 ('Hullah Farm Pond', dated 1999), a location approximately 640 m to the northeast of the survey site. This location is separated from the survey site by residential housing and at least one well-used B-road.
- 4.2.13 Considering the above information the likelihood that Great Crested Newts are present/ disperse across the survey site is considered to be negligible. As such, no particular mitigation/ compensation measures are considered to be necessary for this species.

Reptiles

- 4.2.14 The habitats that dominate the survey site are considered to be of negligible potential value for reptiles. Although the area of rough grassland at *Target Note 7* offers comparatively

more value, this resource is isolated. No reptile records were provided for the 1 km search area by the ecological background data search. As such, no particular mitigation/compensation measures are considered to be necessary for this species group. However it is recommended that the area of rough grassland should be retained if possible if any development be proposed.

Birds

- 4.2.15 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 for any development that includes any work that affects nesting habitat (e.g. removal of trees, shrubs, other vegetation and buildings) to be scheduled for outside the nesting period. If it is not possible to undertake vegetation clearance/ building demolition outside the nesting season all such areas should be checked by a suitably qualified ecologist prior to commencement of works. If a nest is found a buffer zone of no less than 5 m should be retained and fenced off around the nest until any chicks have fledged. At present no further survey is envisaged, however should any vegetation clearance or other preparatory work be scheduled for the nesting period (March to August inclusive) further survey may be required.
- 4.2.16 Loss of any potential nesting sites associated with any development should be compensated for, for example by the provision of bird-boxes (appropriate to the potential bird resource) and/ or other nesting habitat e.g. shrubs. In addition to any such compensation, similar measures could be provided as enhancements for birds in line with Technical Advice Note 5. Such measures should target particular species of conservation concern such as the House Sparrow (*Passer domesticus*). Any new building could incorporate features that could be utilised by this species or alternatively Sparrow-terrace nest-boxes⁶ could be erected.

⁶ E.g. <http://www.jacobijayne.co.uk/nest-boxes-by-species/house-sparrow/>

5 TARGET NOTES

Target Note 1. One of the two 'Hafod y Wern Community Primary School' buildings/ complex within the survey site; no internal access was sought. The buildings appear to mainly comprise one-storey; they are mostly constructed of brick walls with felted flat (or slightly pitched) roofs. Frequently many of the building sides comprise windows. Overall the buildings appear in good condition, although they weren't assessed in detail. At *Target Note 1a* a small potential gap was noted to be associated with the junction of a flat and pitched roof. Such a feature may provide suitable opportunities for individual or small numbers of roosting bats and also may allow access (for bats) into internal spaces (if present). This building is considered to provide no more than limited bat roost potential.

Target Note 2. A complex of soft-play areas, raised beds (with bark), a small area of amenity grassland with associated small planted beds, and hard-standing – not recorded in detail or accurately mapped on *Figure 1*.

Target Note 3. Two mature *Populus* cf. *nigra* ssp. 'Italica' (Lombardy-poplar) trees. They both have a diameter at breast height (dbh) of approximately 1 m and approximate heights of 20 m. They appear to be in good condition with no particular significant features (for roosting bats) noted. However flaking bark was evident – this feature might provide suitable opportunities for individual or small numbers of roosting bats. The size of the trees also precludes a comprehensive visual assessment. These trees are considered to provide no more than limited bat roost potential.

Target Note 4. A mature *Tilia xeuropaea* (Lime) tree. It has a dbh of approximately 1.2 m and an approximate height of 20 m. It appears to be in mostly good condition, although the size of the tree precludes a comprehensive visual assessment. Two rot holes were observed, both at the end of branch stumps adjacent to the main trunk – of approximately 0.05 m and 0.1 m diameters. It is unclear how deep these rot holes are and/ or if they are associated with internal cavities. This tree has moderate bat roost potential.

Target Note 5. Amenity grassland (throughout the survey site). The sward height was mostly below 0.05 m in height; it appears regularly mown. The sward is dominated by *Lolium perenne* (Perennial Rye-grass) with occasional *Holcus lanatus* (Yorkshire-fog), *Dactylis glomerata* (Yorkshire-fog) and *Poa annua* (Annual Meadow-grass). Common grassland forbs/ herbs are scattered throughout, at various levels of abundance. These included *Cerastium fontanum* (Common Mouse-ear), *Senecio jacobaea* (Common Ragwort), *Veronica persica* (Common Field-speedwell), *Bellis perennis* (Daisy), *Trifolium repens* (White Clover), *Ranunculus repens* (Creeping Buttercup), *Taraxacum* sect. *Ruderalia* (Common Dandelion), *Plantago lanceolata* (Ribwort Plantain), *Achillea millefolium* (Yarrow), *Stellaria media* (Common Chickweed) and *Hypochaeris radicata* (Cat's-ear).

Target Note 6. [Immediately adjacent to the survey site boundary]. A row of mature *Populus* cf. *nigra* ssp. 'Italica' (Lombardy-poplar) trees, and occasional *Salix* cf. *fragilis* (Crack Willow) trees adjacent to the school boundary fence. These trees were not assessed in detail, but are unlikely to provide more than limited bat roost potential. The mapping provided on *Figure 1* is indicative only.

Target Note 7. Rough (neutral) grassland. It appears to be largely unmanaged. The sward is variously dominated by either *Holcus lanatus* (Yorkshire-fog) or *Arrhenatherum elatius* (False Oat-grass) with locally abundant *Festuca rubra* (Red Fescue). Other grasses present include *Agrostis capillaris* (Common Bent), *Dactylis glomerata* (Cock's-foot), *Lolium perenne* (Perennial Rye-grass), *Schedonorus arundinaceus* (Tall Fescue), *Phleum pratense* (Timothy) and *Elytrigia repens* (Common Couch). *Carex* cf. *hirta* (Hairy Sedge) is locally frequent and *Juncus effusus* (Soft-rush) is also occasional. Common grassland forbs and tall herbs (some characteristic of wet grassland) are scattered throughout, such as locally abundant *Epilobium hirsutum* (Great Willowherb), occasional *Filipendula ulmaria* (Meadowsweet), *Ranunculus repens* (Creeping Buttercup), *Taraxacum* sect. *Ruderalia* (Common Dandelion), *Plantago lanceolata* (Ribwort Plantain), *Senecio jacobaea* (Common Ragwort), *Rumex obtusifolius* (Broad-leaved Dock), and rarely *Equisetum* cf. *arvense* (Field Horsetail) and *Potentilla reptans* (Creeping Cinquefoil). A very small depression is located at *Target Note 7a* (too small to map on *Figure 1*); it was approximately 1 m by 2.5 m in size and held standing water to

0.15 m deep. This feature was full of leaf litter and dominated by *Glyceria fluitans* (Floating Sweet-grass) – no open water was present. It is likely to dry out in summer months.

Target Note 8. [Immediately adjacent to the survey site boundary]. Rough grassland and tall-herb vegetation with associated *Salix* sp. (Willow) scrub and young trees (viewed from the survey site boundary and not assessed in detail). A mature *Populus cf. nigra* ssp. 'Italica' (Lombardy-poplar) tree is located at **Target Note 8a**. This tree was not assessed in detail, but is unlikely to provide more than limited bat roost potential.

Target Note 9. [Immediately adjacent to the survey site boundary]. A small stand of wet scrub woodland (viewed from the survey site boundary and not assessed in detail). It comprises mature *Salix cf. fragilis* (Crack Willow) and *Alnus cf. incana* (Grey Alder) trees. These trees were not assessed in detail, but are unlikely to provide more than limited bat roost potential. At **Target Note 9a**, a small area of shallow water was present – the water appeared no more than a few centimetres deep and of poor quality. It is heavily shaded by the surrounding scrub woodland although *Glyceria fluitans* (Floating Sweet-grass) is abundant. This feature is likely to dry out in summer months.

Target Note 10. Two semi-mature *Fraxinus excelsior* (Ash) trees. They both have a dbh of approximately 0.4 m and an approximate height of 12 m. They appear to be in good condition and are not considered to provide bat roost potential.

Target Note 11. Three semi-mature *Populus cf. nigra* ssp. 'Italica' (Lombardy-poplar) trees. They have a dbh's of 0.6 m and approximate heights of 16 m. They are younger than the trees described at **Target Note 3** and do not appear to support flaking bark. As such they are not considered to provide bat roost potential.

Target Note 12. Two small stands of introduced shrub plantings – species present were not recorded in detail although they are low-growing, young plants over wood chippings.

Target Note 13. One of the two 'Hafod y Wern Community Primary School' buildings/ complex within the survey site; no internal access was sought. The buildings appear to mainly comprise one-storey; they are mostly constructed of brick walls with felted flat (or slightly pitched) roofs. Frequently many of the building sides comprise windows. Overall the buildings appear in good condition, although they weren't assessed in detail. At **Target Note 13a** potential gaps were noted where part of a corrugated roof was separating from the building structure beneath. Such a feature may provide suitable opportunities for individual or small numbers of roosting bats and also may allow access (for bats) into internal spaces (if present). This building is considered to provide no more than limited bat roost potential.

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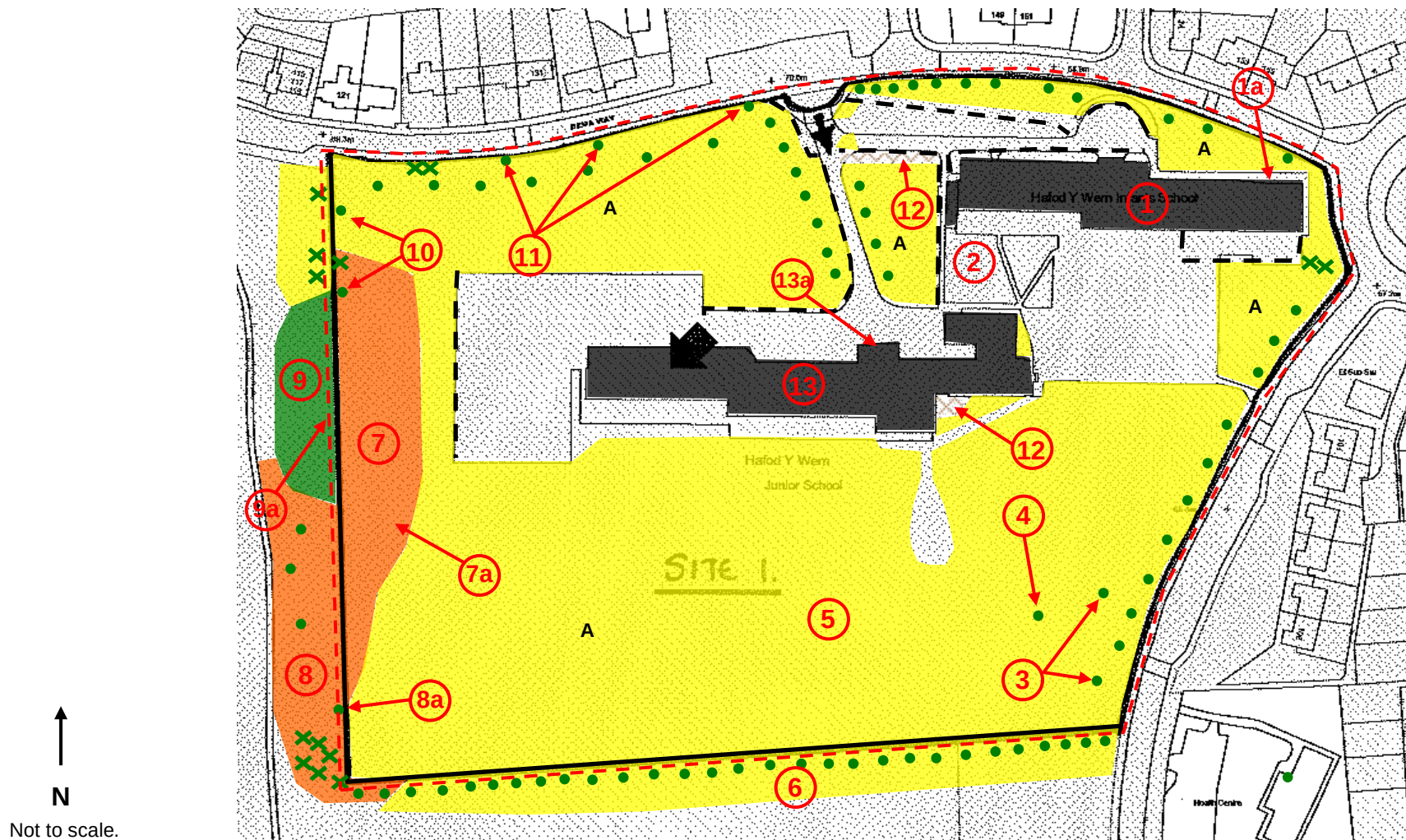
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7 DATA

Table 2 – Vascular plant species recorded within the survey site during the Extended Phase 1 Habitat Survey

Plant species
<i>Acer pseudoplatanus</i> (Sycamore)
<i>Acer</i> sp (Maple)
<i>Alnus glutinosa</i> (Alder)
<i>Betula</i> sp. (Birch)
<i>Fraxinus excelsior</i> (Ash)
<i>Malus</i> cf. <i>domestica</i> (Apple)
<i>Populus</i> cf. <i>nigra</i> ssp. 'Italica' (Lombardy-poplar)
<i>Prunus laurocerasus</i> (Cherry Laurel)
<i>Prunus</i> sp. (ornamental Cherry)
<i>Prunus</i> sp. (ornamental Plum)
<i>Quercus robur</i> (Pedunculate Oak)
<i>Tilia xeuropaea</i> (Lime)
<i>Achillea millefolium</i> (Yarrow)
<i>Agrostis capillaris</i> (Common Bent)
<i>Alliaria petiolata</i> (Garlic Mustard)
<i>Arrhenatherum elatius</i> (False Oat-grass)
<i>Bellis perennis</i> (Daisy)
<i>Cardamine pratensis</i> (Cuckooflower)
<i>Carex</i> cf. <i>hirta</i> (Hairy Sedge)
<i>Cerastium fontanum</i> (Common Mouse-ear)
<i>Cirsium arvense</i> (Creeping thistle)
<i>Cirsium vulgare</i> (Spear Thistle)
<i>Dactylis glomerata</i> (Cock's-foot)
<i>Elytrigia repens</i> (Common Couch)
<i>Epilobium hirsutum</i> (Great Willowherb)
<i>Equisetum arvense</i> (Field Horsetail)
<i>Festuca rubra</i> (Red Fescue)
<i>Filipendula ulmaria</i> (Meadowsweet)
<i>Galium aparine</i> (Cleavers)
<i>Glyceria fluitans</i> (Floating Sweet-grass)
<i>Holcus lanatus</i> (Yorkshire-fog)
<i>Hypochaeris radicata</i> (Cat's-ear)
<i>Juncus effusus</i> (Soft-rush)

Plant species
<i>Lolium perenne</i> (Perennial rye-grass)
<i>Phleum pratense</i> (Timothy)
<i>Plantago lanceolata</i> (Ribwort Plantain)
<i>Poa annua</i> (Annual Meadow-grass)
<i>Potentilla reptans</i> (Creeping Cinquefoil)
<i>Prunella vulgaris</i> (Selfheal)
<i>Ranunculus repens</i> (Creeping Buttercup)
<i>Rumex obtusifolius</i> (Broad-leaved Dock)
<i>Schedonorus arundinaceus</i> (Tall Fescue)
<i>Senecio jacobaea</i> (Common Ragwort)
<i>Senecio vulgaris</i> (Groundsel)
<i>Sonchus</i> sp. (Sow-thistle)
<i>Stellaria media</i> (Common Chickweed)
<i>Taraxacum</i> sect. <i>Ruderalia</i> (Common Dandelion)
<i>Trifolium repens</i> (White Clover)
<i>Urtica dioica</i> (Common Nettle)
<i>Veronica persica</i> (Common Field-speedwell)



Base mapping provided by a Wrexham County Borough Council plan entitled 'Hafod y Wern CP School, Deva Way, Wrexham' dated 6th Jan 2011.



C152 Hafod y Wern Community Primary School, Deva Way, Wrexham – Extended Phase 1 Habitat Survey

Figure 1 – Extended Phase 1 Habitat Survey

Drawn by: ME
Checked by: TK
Date: 18.03.11

Key

	Broad-leaved scrub woodland		Rough (neutral) grassland		Fence
	Individual broad-leaved (indicative only)		Amenity grassland		Hard standing or bare ground
	Scattered scrub		Introduced shrub		Target Note
			Building		Survey site boundary

Appendix 1 – Data supplied by Cofnod (Public Version)



Please read **Important Issues** and **Notes** before interpreting the following information.

Our Ref.	Client Name	Date Run	Your Ref.
E02045	Marches Ecology	07/02/2011	C152-Hafod y Wern

Site Name	Grid Reference
Hafod y Wern CP School	SJ34835035

Category 1 Species (Species with European and/or UK Legal Protection, Section 42 [NERC] Species or UK BAP Priority Species) within 1000m - 59 records										
Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
Plecotus auritus (Brown Long-eared Bat/Ystlum Hirglust)	SJ3450 (Estimated from Map)	09/09/1999	Anon	1		Site Name Withheld		D1049/001/02 (683992)	Bern, Bonn, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
Pipistrellus (A Terrestrial Mammal)	SJ3449 (Est. (Additional Site Name GR))	22/07/2004	Matthew Ellis	1 Adult Male	Bat Rescue	Site Name Withheld	Comments Withheld	D1306/001/01 (2281447)	Bonn, EPS, WCA5	1
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ35405088	1999	Anon			Hullah Farm Pond		D1125/001/03 (1857257)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Chiroptera (Bat/Ystlum)	SJ3449 (Estimated from Map)	04/07/1988	Anon			Site Name Withheld		D1049/001/02 (683156)	WCA5	3
Pipistrellus pipistrellus (Common Pipistrelle/Ystlum Lleiaf)	SJ3449 (Estimated from Map)	12/07/1999	Anon	1		Site Name Withheld		D1049/001/02 (683634)	Bern, Bonn, EPS, HDir, S42, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
Plecotus auritus (Brown Long-eared Bat/Ystlum Hirglust)	SJ3451 (Estimated from Map)	1996	Anon	1		Site Name Withheld		D1049/001/02 (683997)	Bern, Bonn, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
Chiroptera (Bat/Ystlum)	SJ3449 (Estimated from Map)	09/08/1988	Anon			Site Name Withheld		D1049/001/02 (683201)	WCA5	3
Chiroptera (Bat/Ystlum)	SJ3349 (Estimated from Map)	12/07/1982	Anon			Site Name Withheld		D1049/001/02 (683217)	WCA5	3
Chiroptera (Bat/Ystlum)	SJ3449 (Estimated from Map)	14/08/1986	Anon			Site Name Withheld		D1049/001/02 (683228)	WCA5	3
Chiroptera (Bat/Ystlum)	SJ3449 (Estimated from Map)	30/12/1999	Anon			Site Name Withheld		D1049/001/02 (683441)	WCA5	3
Meles meles (Eurasian Badger/Mochyn Daeare)	SJ3550	01/03/2001	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: A33.0. Please contact CBG for more details.	D0059/001/01 (802897)	BA, LBAP[CON, DEN, FLI, WRE]	3
Bufo bufo (Common Toad/Llyffant Dafadennog)	SJ3451	1988	Anon			WREXHAM MARFORD WYNNSTAY LANE		D1076/001/01 (451776)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY]	3
Carduelis cabaret (Lesser Redpoll)	SJ3451	31/01/2009	Norman Hallas	3		Wrexham, NE		D1297/002/01 (2460624)	S42, UKBAP, WBR[RSPB], LBAP[CON, DEN]	
Falco tinnunculus (Common Kestrel/Cudyll Coch)	SJ3451	28/06/2009	Norman Hallas	1		Wrexham, NE		D1297/002/01 (2453865)	Bern, Bonn, CITES, S42, WBR[RSPB], LBAP[ANG, CON, DEN, FLI, GWY]	
Fringilla montifringilla (Brambling/Pinc y Mynydd)	SJ3451	28/11/2008	Norman Hallas	1		Wrexham, NE	M Activity.	D1297/002/01 (2451322)	WCA1, LBAP[CON]	
Passer domesticus (House Sparrow/Aderyn y To)	SJ3451	20 records, between 02/12/2008 and 09/05/2009	Norman Hallas; Colin Jones	: 1 to 9		Wrexham, NE	FL Activity; B Activity.	D1297/002/01	S42, UKBAP, WBAm[RSPB], LBAP[CON, FLI, GWY]	
Rana temporaria (Common Frog/Llyffant Melyn)	SJ3451	1988	Anon			WREXHAM MARFORD WYNNSTAY LANE		D1076/001/01 (450434)	HDir, WCA5, LBAP[ANG, CON, FLI]	3
Turdus pilaris (Fieldfare/Socan Eira)	SJ3451	5 records, between 18/09/2008 and 10/02/2009	Norman Hallas	10, 1, 3, 1		Wrexham, NE	M Activity.	D1297/002/01	BDir, WBAm[RSPB], WCA1, LBAP[CON]	
Larus ridibundus (Black-headed Gull/Gwylan Benddu)	SJ3350	05/01/2009	Peter Lawton	4		Wrexham, centre		D1297/002/01 (2450633)	BDir, S42, WBR[RSPB], LBAP[GWY]	
Passer domesticus (House Sparrow/Aderyn y To)	SJ3350	05/01/2009	Peter Lawton	4		Wrexham, centre		D1297/002/01 (2460399)	S42, UKBAP, WBAm[RSPB], LBAP[CON, FLI, GWY]	
Anguis fragilis (Slow-worm/Neidr Ddefaid)	SJ3349	1883 - 1903	Anon			Wrexham		D1076/001/01 (450889)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
Emberiza schoeniclus (Reed Bunting/Bras y Cyrs)	SJ3349	2 records, on 17/06/2009 and 22/11/2009	Norman Hallas	8, 2		Wrexham, centre, S	H Activity.	D1297/002/01	Bern, S42, UKBAP, WBAm[RSPB], LBAP[CON, DEN, FLI, GWY]	
Falco tinnunculus (Common Kestrel/Cudyll Coch)	SJ3349	2 records, on 17/06/2009 and 22/11/2009	Norman Hallas	1, 1		Wrexham, centre, S		D1297/002/01	Bern, Bonn, CITES, S42, WBR[RSPB], LBAP[ANG, CON, DEN, FLI, GWY]	
Larus ridibundus (Black-headed Gull/Gwylan Benddu)	SJ3349	22/11/2009	Norman Hallas	40		Wrexham, centre, S		D1297/002/01 (2450679)	BDir, S42, WBR[RSPB], LBAP[GWY]	
Meles meles (Eurasian Badger/Mochyn Daeare)	SJ3349	09/04/2002	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: B47.0. Please contact CBG for more details.	D0059/001/01 (804441)	BA, LBAP[CON, DEN, FLI, WRE]	3
Zootoca vivipara (Common Lizard/Madfall)	SJ3349	1883 - 1903	Anon			Wrexham		D1076/001/01 (450691)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3

Category 2 Species (Global Red List, British Red Data Book, Nationally Rare & Scarce, Welsh Red and Amber Birds & Welsh Vascular Plant Red Data List, where these are not identified in Category 1) within 1000m - 78 records										
Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Aegithalos caudatus</i> (Long-tailed Tit/Titw Cynffon-Hir)	SJ3451	8 records, between 11/06/2008 and 25/06/2009	Norman Hallas; Colin Jones	8, 2, 13, 1, 2, 10, 10		Wrexham, NE		D1297/002/01	WBAm[RSPB]	
<i>Apus apus</i> (Common Swift/Gwennol Ddu)	SJ3451	4 records, between 06/06/2007 and 02/07/2009	Colin Jones; Norman Hallas	4, 2, 15, 30		Wrexham, NE	M Activity.	D1297/002/01	WBAm[RSPB]	
<i>Calidris alpina</i> (Dunlin/Pibydd y Mawn)	SJ3451	4 records, between 26/02/2007 and 02/12/2008	Colin Jones	2, 2, 1, 1		Wrexham, NE		D1297/002/01	Bern, Bonn, WBR[RSPB], LBAP[CON, GWY]	
<i>Cygnus olor</i> (Mute Swan/Alarch Dof)	SJ3451	28/11/2008	Norman Hallas	1		Wrexham, NE	F Activity.	D1297/002/01 (2461555)	BDir, Bonn, WBAm[RSPB], LBAP[CON]	
<i>Delichon urbicum</i> (House Martin/Gwennol y Bondo)	SJ3451	16/06/2009	Norman Hallas	2		Wrexham, NE		D1297/002/01 (2460108)	Bern, WBAm[RSPB], LBAP[CON]	
<i>Dendrocopos minor</i> (Lesser Spotted Woodpecker/Cnocell Fraith Fwyaf)	SJ3451 (Est. (Additional Site Name GR))	Mar 1996	Anon			Wrexham; Acton, Clarke Gardens		D0285/138/01 (2228208)	Bern, WBR[RSPB], LBAP[CON, DEN, FLI, GWY]	1
<i>Hirundo rustica</i> (Barn Swallow/Gwennol)	SJ3451	06/06/2007	Colin Jones	4		Wrexham, NE		D1297/002/01 (2449864)	Bern, WBAm[RSPB], LBAP[ANG, CON, GWY]	
<i>Larus argentatus</i> (Herring Gull/Gwylan y Penwaig)	SJ3451	09/05/2008	Norman Hallas	6		Wrexham, NE		D1297/002/01 (2459859)	BDir, WBR[RSPB], LBAP[CON, GWY]	
<i>Larus canus</i> (Mew Gull/Gwylan y Gweunydd)	SJ3451	01/03/2008	Colin Jones	6		Wrexham, NE		D1297/002/01 (2461339)	BDir, WBR[RSPB]	
<i>Periparus ater</i> (Coal Tit/Titw Penddu)	SJ3451	11 records, between 11/04/2007 and 04/06/2009	Colin Jones; Norman Hallas	2, 2, 2, 3, 3, 1, 2, 1, 2, 2, 1		Wrexham, NE	FL Activity; D Activity; B Activity; P Activity.	D1297/002/01	Bern, WBAm[RSPB], LBAP[CON]	
<i>Phylloscopus trochilus</i> (Willow Warbler/Telor yr Helyg)	SJ3451	10/09/2009	Norman Hallas	1		Wrexham, NE	M Activity.	D1297/002/01 (2463087)	WBR[RSPB], LBAP[CON]	
<i>Regulus regulus</i> (Goldcrest/Dryw Eurben)	SJ3451	2 records, on 01/01/2008 and 01/03/2009	Norman Hallas	1, 1		Wrexham, NE		D1297/002/01	Bern, WBAm[RSPB], LBAP[CON]	
<i>Sturnus vulgaris</i> (Common Starling/Drudwen)	SJ3451	13 records, between 26/02/2007 and 10/11/2009	Colin Jones; Norman Hallas	8, 8, 9, 10, 200, 5, 2, 6, 10, 40, 2, 200		Wrexham, NE	N Activity.	D1297/002/01	BDir, WBR[RSPB], LBAP[CON, FLI, GWY]	
<i>Turdus philomelos</i> (Song Thrush/Bronfraith)	SJ3451	8 records, between 13/06/2009 and 25/06/2009	Norman Hallas	1, 1, 2, 2, 1, 1, 1, 2		Wrexham, NE	S Activity; P Activity.	D1297/002/01	BDir, WBAm[RSPB], LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	
<i>Aegithalos caudatus</i> (Long-tailed Tit/Titw Cynffon-Hir)	SJ3350	03/01/2007	Anthony Britner			Wrexham, centre		D1297/002/01 (2460806)	WBAm[RSPB]	
<i>Anas platyrhynchos</i> (Mallard/Hwyaden Wylt)	SJ3350	03/01/2007	Anthony Britner			Wrexham, centre		D1297/002/01 (2460994)	BDir, Bonn, WBAm[RSPB], LBAP[CON, GWY]	
<i>Cygnus olor</i> (Mute Swan/Alarch Dof)	SJ3350	03/01/2007	Anthony Britner			Wrexham, centre		D1297/002/01 (2461500)	BDir, Bonn, WBAm[RSPB], LBAP[CON]	
<i>Hirundo rustica</i> (Barn Swallow/Gwennol)	SJ3350	2 records, both on 11/05/2007	Peter Lawton	2, 2		Wrexham, centre		D1297/002/01	Bern, WBAm[RSPB], LBAP[ANG, CON, GWY]	
<i>Larus argentatus</i> (Herring Gull/Gwylan y Penwaig)	SJ3350	05/01/2009	Peter Lawton	2		Wrexham, centre		D1297/002/01 (2459917)	BDir, WBR[RSPB], LBAP[CON, GWY]	
<i>Larus canus</i> (Mew Gull/Gwylan y Gweunydd)	SJ3350	2 records, both on 18/02/2007	Peter Lawton	1, 1		Wrexham, centre		D1297/002/01	BDir, WBR[RSPB]	
<i>Aegithalos caudatus</i> (Long-tailed Tit/Titw Cynffon-Hir)	SJ3349	3 records, between 17/06/2009 and 20/09/2009	Norman Hallas	3, 15, 7		Wrexham, centre, S	FL Activity.	D1297/002/01	WBAm[RSPB]	
<i>Anas platyrhynchos</i> (Mallard/Hwyaden Wylt)	SJ3349	2 records, on 14/02/2008 and 17/06/2009	Steven Davies; Norman Hallas	5		Wrexham, centre, S		D1297/002/01	BDir, Bonn, WBAm[RSPB], LBAP[CON, GWY]	
<i>Aythya fuligula</i> (Tufted Duck/Hwyaden Gopog)	SJ3349	14/02/2008	Steven Davies			Wrexham, centre, S		D1297/002/01 (2462852)	BDir, Bonn, WBAm[RSPB], LBAP[CON]	
<i>Cygnus olor</i> (Mute Swan/Alarch Dof)	SJ3349	3 records, between 14/02/2008 and 17/06/2009	Norman Hallas; Steven Davies	2, 3		Wrexham, centre, S	FL Activity; P Activity.	D1297/002/01	BDir, Bonn, WBAm[RSPB], LBAP[CON]	
<i>Delichon urbicum</i> (House Martin/Gwennol y Bondo)	SJ3349	17/06/2009	Norman Hallas	8		Wrexham, centre, S		D1297/002/01 (2460109)	Bern, WBAm[RSPB], LBAP[CON]	
<i>Hirundo rustica</i> (Barn Swallow/Gwennol)	SJ3349	17/06/2009	Norman Hallas	4		Wrexham, centre, S		D1297/002/01 (2449974)	Bern, WBAm[RSPB], LBAP[ANG, CON, GWY]	
<i>Phylloscopus trochilus</i> (Willow Warbler/Telor yr Helyg)	SJ3349	17/06/2009	Norman Hallas	1		Wrexham, centre, S		D1297/002/01 (2463076)	WBR[RSPB], LBAP[CON]	
<i>Turdus philomelos</i> (Song Thrush/Bronfraith)	SJ3349	17/06/2009	Norman Hallas	1		Wrexham, centre, S		D1297/002/01 (2462667)	BDir, WBAm[RSPB], LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	

Category 3 Species (LBAP Species not identified under Categories 1 & 2, Locally Important species as specified by local experts) within 1000m - 114 records										
Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Accipiter nisus</i> (Eurasian Sparrowhawk/Gwalch Glas)	SJ3451	3 records, between 20/10/2007 and 12/07/2008	Colin Jones; Norman Hallas	1, 1, 1		Wrexham, NE		D1297/002/01	Bonn, CITES, LBAP[CON]	
<i>Buteo buteo</i> (Common Buzzard/Bwncath)	SJ3451	9 records, between 16/01/2008 and 11/09/2009	Norman Hallas	1, 1, 12, 1, 6, 1, 3, 1, 2		Wrexham, NE	M Activity; F Activity.	D1297/002/01	Bonn, CITES, LBAP[CON]	
<i>Carduelis carduelis</i> (European Goldfinch/Nico)	SJ3451	10 records, between 11/06/2008 and 11/09/2009	Norman Hallas	4, 10, 2, 2, 1, 1, 2, 4, 1, 1		Wrexham, NE	FL Activity; P Activity; A Activity.	D1297/002/01	Bern, LBAP[ANG, CON]	
<i>Carduelis chloris</i> (European Greenfinch/Llinos Werdd)	SJ3451	8 records, between 17/01/2008 and 22/08/2009	Norman Hallas; Colin Jones	15, 1, 2, 3, 20, 2, 2, 1		Wrexham, NE	FL Activity.	D1297/002/01	Bern, LBAP[CON]	
<i>Carduelis spinus</i> (Eurasian Siskin/Pila Gwyrdd)	SJ3451	2 records, on 14/03/2009 and 17/03/2009	Norman Hallas	2, 1		Wrexham, NE		D1297/002/01	Bern, LBAP[CON]	
<i>Certhia familiaris</i> (Eurasian Treecreeper/Dringwr Bach)	SJ3451	3 records, between 12/12/2008 and 10/02/2009	Norman Hallas	1, 1, 1		Wrexham, NE		D1297/002/01	Bern, LBAP[CON]	
<i>Corvus corax</i> (Common Raven/Cigfran)	SJ3451	09/05/2008	Norman Hallas	1		Wrexham, NE		D1297/002/01 (2454315)	LBAP[CON]	
<i>Cyanistes caeruleus</i> (Blue Tit/Titw Tomos Las)	SJ3451	17 records, between 06/06/2007 and 11/07/2009	Norman Hallas; Colin Jones	1, 2, 2, 2, 1, 4, 2, 1, 1, 1, 2, 2, 3, 3, 2, 2, 2		Wrexham, NE	FL Activity; P Activity; B Activity.	D1297/002/01	Bern, LBAP[CON]	
<i>Dendrocopos major</i> (Great Spotted Woodpecker/Cnocell Fraith Leiaf)	SJ3451 (Est. (Additional Site Name GR))	Mar 1996	Anon			Wrexham; Acton, Clarke Gardens		D0285/138/01 (2228209)	Bern, LBAP[CON]	1
<i>Dendrocopos major</i> (Great Spotted Woodpecker/Cnocell Fraith Leiaf)	SJ3451	5 records, between 31/01/2009 and 10/11/2009	Norman Hallas	2, 1, 2, 1, 1		Wrexham, NE	P Activity; S Activity.	D1297/002/01	Bern, LBAP[CON]	
<i>Mergus merganser</i> (Goosander/Hwyaden Ddanheddog)	SJ3451	08/12/2009	Norman Hallas	1		Wrexham, NE	F Activity.	D1297/002/01 (2458308)	BDir, Bonn, LBAP[CON]	
<i>Motacilla alba</i> subsp. <i>yarrellii</i> (Pied Wagtail/Siglen Fraith)	SJ3451	3 records, between 16/06/2007 and 08/01/2009	Colin Jones; Norman Hallas	2, 1, 3		Wrexham, NE		D1297/002/01	Bern, LBAP[CON]	
<i>Parus major</i> (Great Tit/Titw Mawr)	SJ3451	01/06/2008	Norman Hallas	2		Wrexham, NE	FL Activity.	D1297/002/01 (2458826)	Bern, LBAP[CON]	
<i>Phylloscopus collybita</i> (Common Chiffchaff/Siff-Siaff)	SJ3451	3 records, between 09/05/2008 and 16/07/2008	Norman Hallas	2, 1, 1		Wrexham, NE	S Activity; M Activity.	D1297/002/01	LBAP[CON]	
<i>Prunella modularis</i> (Hedge Accentor/Llwyd y Gwrych)	SJ3451	15 records, between 06/06/2007 and 23/07/2009	Colin Jones; Norman Hallas	2, 1, 2, 3, 1, 2, 2, 4, 2, 2, 3, 1, 3, 4, 3		Wrexham, NE	B Activity; FL Activity; P Activity; T Activity.	D1297/002/01	Bern, LBAP[CON]	
<i>Sitta europaea</i> (Wood Nuthatch/Delor y Cnau)	SJ3451	11/07/2009	Norman Hallas	1		Wrexham, NE		D1297/002/01 (2463458)	Bern, LBAP[CON]	
<i>Sylvia atricapilla</i> (Blackcap/Telor Penddu)	SJ3451	9 records, between 01/01/2008 and 22/11/2009	Norman Hallas	3, 1, 1, 2, 4, 1, 1, 2, 1		Wrexham, NE	M Activity.	D1297/002/01	LBAP[CON]	
<i>Certhia familiaris</i> (Eurasian Treecreeper/Dringwr Bach)	SJ3350	03/01/2007	Anthony Britner			Wrexham, centre		D1297/002/01 (2456886)	Bern, LBAP[CON]	
<i>Cyanistes caeruleus</i> (Blue Tit/Titw Tomos Las)	SJ3350	3 records, between 03/01/2007 and 07/08/2007	Anthony Britner; Ian Newberry	2, 2		Wrexham, centre		D1297/002/01	Bern, LBAP[CON]	
<i>Motacilla alba</i> subsp. <i>yarrellii</i> (Pied Wagtail/Siglen Fraith)	SJ3350	2 records, on 03/01/2007 and 05/01/2009	Peter Lawton; Anthony Britner	1		Wrexham, centre		D1297/002/01	Bern, LBAP[CON]	
<i>Motacilla cinerea</i> (Grey Wagtail/Siglen Lwyd)	SJ3350	05/01/2009	Peter Lawton	1		Wrexham, centre		D1297/002/01 (2459294)	Bern, LBAP[CON]	
<i>Parus major</i> (Great Tit/Titw Mawr)	SJ3350	03/01/2007	Anthony Britner			Wrexham, centre		D1297/002/01 (2458683)	Bern, LBAP[CON]	
<i>Prunella modularis</i> (Hedge Accentor/Llwyd y Gwrych)	SJ3350	03/01/2007	Anthony Britner			Wrexham, centre		D1297/002/01 (2459369)	Bern, LBAP[CON]	
<i>Accipiter nisus</i> (Eurasian Sparrowhawk/Gwalch Glas)	SJ3349	22/11/2009	Norman Hallas	1		Wrexham, centre, S		D1297/002/01 (2456783)	Bonn, CITES, LBAP[CON]	
<i>Acrocephalus schoenobaenus</i> (Sedge Warbler/Telor yr Hesg)	SJ3349	17/06/2009	Norman Hallas	3		Wrexham, centre, S	S Activity.	D1297/002/01 (2462449)	LBAP[CON]	
<i>Buteo buteo</i> (Common Buzzard/Bwncath)	SJ3349	2 records, on 27/08/2009 and 22/11/2009	Norman Hallas	4, 7		Wrexham, centre, S	H Activity.	D1297/002/01	Bonn, CITES, LBAP[CON]	
<i>Certhia familiaris</i> (Eurasian Treecreeper/Dringwr Bach)	SJ3349	14/02/2008	Steven Davies	1		Wrexham, centre, S		D1297/002/01 (2456907)	Bern, LBAP[CON]	
<i>Columba oenas</i> (Stock Pigeon/Colomen Wyllt)	SJ3349	14/02/2008	Steven Davies	3		Wrexham, centre, S		D1297/002/01 (2462711)	BDir, LBAP[GWY]	
<i>Cyanistes caeruleus</i> (Blue Tit/Titw Tomos Las)	SJ3349	2 records, on 14/02/2008 and 17/06/2009	Steven Davies; Norman Hallas	1		Wrexham, centre, S		D1297/002/01	Bern, LBAP[CON]	

Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Dendrocopos major</i> (Great Spotted Woodpecker/Cnocell Fraith Leiaf)	SJ3349	14/02/2008	Steven Davies	4		Wrexham, centre, S		D1297/002/01 (2458548)	Bern, LBAP[CON]	
<i>Motacilla cinerea</i> (Grey Wagtail/Siglen Lwyd)	SJ3349	17/06/2009	Norman Hallas	1		Wrexham, centre, S		D1297/002/01 (2459311)	Bern, LBAP[CON]	
<i>Parus major</i> (Great Tit/Titw Mawr)	SJ3349	2 records, on 14/02/2008 and 17/06/2009	Steven Davies; Norman Hallas	1		Wrexham, centre, S		D1297/002/01	Bern, LBAP[CON]	
<i>Phylloscopus collybita</i> (Common Chiffchaff/Siff-Siaff)	SJ3349	17/06/2009	Norman Hallas	3		Wrexham, centre, S		D1297/002/01 (2453479)	LBAP[CON]	

Statutory Sites intersecting 1000m buffer	None
Wildlife Sites within 1000m (C=Candidate)	None
NWWT Reserves within 1000m	None
RSPB Reserves within 1000m	None
RIGS within 1000m	None
Habitat type at application grid reference	Amenity Grassland
Habitat type(s) within 1000m	Amenity Grassland, Arable, Buildings, Dense Scrub, Ephemeral/Short Perennial, Gardens, Improved Grassland, Not Accessed Land, Planted Broad-leaved Woodland, Semi-improved Neutral Grassland, Semi-natural Broad-leaved Woodland, Standing Water
Ancient Woodland within 1000m	None

Important Issues

1. Usage of the above information is governed by Cofnod's **Terms and Conditions of Data Release** (available from Cofnod on request).
2. Records shown in bold typeface are sensitive species records. In this public version of the original report, the resolution of sensitive species grid references have been reduced and site names and comments have been removed.
3. Past records of presence of a habitat or species do not guarantee continued occurrence; absence of records does not imply absence of a species, merely that no records are held at Cofnod; Cofnod cannot guarantee the accuracy of supplied data; copyright of records remains with the original recorder.

Notes

This report should be used in conjunction with any relevant maps, where these are supplied.

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 an **asterisk**. 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 plant species and species categories used in Cofnod's reporting system can be found at <http://www.cofnod.org.uk/Enquiries.aspx> under the 'Species Categories' tab.

Records with 4 figure grid references are displayed as 1km squares on any relevant maps. They are listed separately in reports and highlighted in grey *italic* script.

Please note that while we hold Wales Raptor Study Group data for North East Wales we are only permitted to release it to a limited number of trusted partners. We can provide contact details if you would like to contact the Raptor Study Group directly to request species information.

Sites - Designated Sites and non-designated Wildlife Sites within 50m of the grid reference are highlighted in red. Wildlife Sites which remain unconfirmed by the relevant Local Authority are given 'Candidate' status and are displayed with the (c) suffix. The following reasons for candidate status apply: 1. Anglesey and Flintshire Wildlife Sites were identified by survey but have not been formally confirmed. 2. Conwy and Gwynedd Wildlife Sites were identified by survey and air photos and remain candidate until evaluated using selection criteria.

Dataset ID - All species records within the reports include Dataset ID codes, which can be used to find the relevant Metadata, using the **Data We Hold** page on the Cofnod website (www.cofnod.org.uk/DataWeHold.aspx). The number below the Dataset ID is the individual record ID. Please quote this if you need more information on a specific record.

'V' column - Record Verification Level. The following abbreviations apply: **1**: Unassessed, **2**: Unconfirmed, **3**: Considered Correct by Cofnod, **4**: Considered Correct by Expert. Dataset Categories and Record Verification Levels are explained in more detail within Cofnod's policy on Data Quality, available from our website.

Maps - This report should be used in conjunction with any relevant maps, where these are supplied. Where Statutory protected sites (e.g. SSSI, SAC, SPA) are displayed on Cofnod maps, more details can be obtained from Countryside Council for Wales. (Visit their website at <http://www.ccw.gov.uk/interactive-maps/official-maps-search.aspx>) Where a Phase 1 Habitat map has been supplied, this illustrates habitats mapped by CCW as part of their Habitat Survey of Wales 1979 to 1997. A separate legend is also supplied.

Lists
BA - Protection of Badgers Act, **BDir** - EU Birds Directive, **Bern** - The Bern Convention on the Conservation of European Wildlife and Natural Habitats, **Bonn** - The Bonn Convention on the Conservation of Migratory Species of Wild Animals, **CCWP** - CCW Priority Species List, **CITES** - Convention on International Trade in Endangered Species, **EPS** - European Protected Species, **HDir** - EU Habitats Directive, **LBAP** - Local Biodiversity Action Plan, **RD1** - Red Data Book listing based on IUCN guidelines, **RD2** - Red Data Book listing not based on IUCN guidelines (Nationally Rare and Scarce), **S42** - Natural Environment and Rural Communities Act 2006 (Section 42), **UKBAP** - UK Biodiversity Action Plan Priority Species, **WBAm[RSPB]** - Birds of Conservation Concern 2002-07 - Welsh Amber listed birds (not based on IUCN criteria), **WBR[RSPB]** - Birds of Conservation Concern 2002-07 - Welsh Red listed birds (not based on IUCN criteria), **WCA1** - Wildlife & Countryside Act 1981 Schedule 1, **WCA5** - Wildlife & Countryside Act 1981 Schedule 5, **WCA8** - Wildlife & Countryside Act 1981 Schedule 8, **WVP** - IUCN Threat Listing of Welsh Vascular Plants

Abbreviations
ANG - Isle of Anglesey, **CON** - Conwy, **DEN** - Denbighshire, **FLI** - Flintshire, **GWY** - Gwynedd, **SNP** - Snowdonia National Park, **WRE** - Wrexham, **LBAP** - Local Biodiversity Action Plan, **NWWT** - North Wales Wildlife Trust, **RSPB** - Royal Society for the Protection of Birds, **RIGS** - Regionally Important Geodiversity Sites, **WS** - Wildlife Site

Contact Us
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