



Ecological Assessment

**Lloyds Animal Feeds, Wrexham
Industrial Estate**

Ref: JWE/1048

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THIS REPORT REPRESENTS AN INITIAL ECOLOGICAL ASSESSMENT OF THE SITE. FURTHER SURVEYS, AS DESCRIBED IN THE CONCLUSIONS SECTION, MAY NEED TO BE IMPLEMENTED PRIOR TO THE SUBMISSION OF A PLANNING APPLICATION.

ECOLOGICAL ISSUES ARE A MATERIAL CONSIDERATION IN DETERMINING PLANNING APPLICATIONS AND ALL RELEVANT SURVEYS MUST BE COMPLETED PRIOR TO APPLYING FOR PLANNING PERMISSION.

PLEASE NOTE THAT WHILST EVERY EFFORT HAS BEEN MADE TO ENSURE THAT THE CONTENT OF THIS REPORT IS ACCURATE THE SURVEY REPRESENTS ONLY A SNAPSHOT IN TIME AND THE ECOLOGICAL ISSUES ON SITE MAY CHANGE. THE ADDITIONAL SURVEY WORKS RECOMMENDED IN THIS REPORT ARE WHAT IS THOUGHT TO BE REQUIRED IN THE OPINION OF THE SURVEYOR, THE LOCAL PLANNING AUTHORITY OR THE COUNTYSIDE COUNCIL FOR WALES MAY IN SOME CASES REQUEST ADDITIONAL INFORMATION NOT OUTLINED IN THIS REPORT.



1.0 INTRODUCTION

- 1.1 J W Ecological Ltd. were commissioned in January 2012 to undertake a baseline ecological assessment of an area of land to the east of the Lloyds Animal Feeds building, Bridge Road North, Wrexham Industrial Estate, Wrexham (SJ 38379 49666). The survey area is shown on drawing D/JWE/1048/001 (Appendix 1).
- 1.2 The aims of this ecological assessment were to:
- Assess and describe the Valuable Ecological Components (VECs) of the proposed development site and all land within 250 metres (referred to as “the wider survey area”).
 - Assess the likely ecological impacts of the development.
 - Identify further survey and mitigation requirements
 - Identify ecological features of the site that should be protected
 - Provide guidance as to ecological enhancement of the site
- 1.3 To meet the aims of the ecological assessment the following actions were undertaken:
- Desktop study of all land within 500 metres of the development site
 - Extended phase one habitat survey of the development site and adjacent land
- 1.4 The sites ecological value was assessed in context with current UK planning and legislative policy, including:
- Protected sites (statutory and non-statutory)
 - Statutorily protected species
 - UK and local Biodiversity Action Plan (BAP) species
 - Species and habitats of local concern
 - Local wildlife strategies
- 1.5 Prior to any survey work a health and safety risk assessment of the site was undertaken. Risk assessments are undertaken on a site by site basis in order to identify potential risks with the aim to reduce these as far as is practicable.

2.0 SITE LOCATION AND DESCRIPTION

- 2.1 The site is located on the eastern side of the Lloyds Animal Feed building.
- 2.2 The survey area comprises an existing concrete pad bordered by areas of derelict land (the site of former buildings). The adjacent land includes areas of semi-improved grassland, scrub, tall herbs and plantation woodland. Scattered self-seeded trees and small rubble piles are also present.
- 2.3 The proposals for the site will involve a new gasifier unit and associated structures. Approximately 50% of the new construction will be located on the existing concrete pad. The remainder will be installed on new hard standing totalling approximately 470m² located immediately to the north, south and west of the existing concrete pad.
- 2.4 The site is bordered by additional areas of derelict land to the north and south, Dunster Road to the east and by the existing Lloyds Feeds buildings to the west.



3.0 DESKTOP STUDY

- 3.1 Ecological data and records of protected species were requested/gathered from the following sources (Table 1):

Table 1: Desktop Study Sources

Consultee/Source of Information	Information Supplied
NBN Gateway	Protected species records within 1 kilometre of the proposed development site.
Countryside Council for Wales	CCW online protected sites register.
Cofnod	Protected species and protected sites within 1 kilometre of the survey area.
UK Biodiversity Action Plan	Identification of national priority species and habitats known to occur in the region.
Local Biodiversity Action Plan	Identification of local priority species and habitats known to occur in the area.

Protected Sites

- 3.2 No statutorily designated nature conservation sites are located within 1 kilometre of the survey area.
- 3.3 The Wrexham Industrial Estate Wildlife Site is located approximately 180 metres south of the survey area.

Protected Species

- 3.4 Cofnod hold numerous records of Great Crested Newts in the ponds within and around the Wrexham Industrial Estate. The closest of these records is for a pond located on the northern side of Bridge Road North approximately 180 metres west of the survey area.

Bat species including Whiskered bat and Pipistrelle have been recorded within 1 kilometre of the survey area.

Slow Worm and Adder have been recorded associated with the Redwither Brook corridor approximately 600 metres south-west of the survey area.

The UK and Local Biodiversity Action Plan (BAP) species Grizzled Skipper and Dingy Skipper have both been recorded at a number of locations within the Wrexham Industrial Estate.

- 3.5 Full details of the Cofnod search are provided in Appendix 4.



3.6 Based on information gathered from the sources listed above and desk based assessment of the site from OS maps and aerial photographs the following protected species were taken into account during the site assessment:

- Bats (all species)
- Great crested newt (*Triturus cristatus*)
- Badger (*Meles meles*)
- Water Vole (*Arvicola terrestris*)
- Otter (*Lutra lutra*)
- Reptiles (all species)

UK Biodiversity Action Plan (UKBAP) Priority Species

3.7 The UKBAP priority species which may potentially use the survey area, based on the results of the desktop study are:

- Mammals – Bats*, Badgers*, Hedgehog;
- Birds – Song Thrush, Sky Lark etc.
- Amphibians – Great Crested Newts*, Common Toad.
- Invertebrates – Dingy Skipper, Grizzled Skipper.

** These species and/or their habitats are also statutorily protected*

Local Biodiversity Action Plan (LBAP)

3.8 The Wrexham Biodiversity Action Plan (BAP) lists key local species and habitats considered to be rare or declining in the area. Some of these species and habitats may also be of national concern.

3.9 Although local BAP documents have no legal status the Local Planning Authority (LPA) and the Countryside Council for Wales (CCW) will expect the listed species and habitats to be taken into account in the overall layout and landscape strategy for the development.

3.10 The species of local concern which may potentially utilise the survey area based on the results of the desktop study are:

- Mammals – Badger*, Otter*, Lesser Horseshoe bat*, Hedgehog;
- Amphibians – Great Crested Newts*;
- Birds – Barn Owl*;
- Reptiles – All species*;
- Invertebrates – Dingy Skipper, Grizzled Skipper.

** These species and/or their habitats are also statutorily protected*

3.11 Derelict and industrial land is listed as a habitat in the Wrexham Biodiversity Action Plan.



4.0 PLANNING CONTEXT

Planning Policy Wales (Edition 3, July 2010)

- 4.1 This document contains current land use planning policy for Wales. It provides the policy framework for the effective preparation of local planning authorities' development plans. This is supplemented by 21 topic based Technical Advice Notes (TANs). Procedural guidance is given in Welsh Office / National Assembly for Wales / Welsh Assembly Government circulars
- 4.2 Technical Advice Note 5 provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. This guidance note should be read in conjunction with *Planning Policy Wales (2002)*, in particular with Chapter 5 *Conserving and Improving the Natural Heritage and Coast* which sets out the Assembly Government's objectives for the natural heritage and the land use planning policies which support these.
- 4.3 This TAN brings together advice on sources of legislation relevant to various nature conservation topics which may be encountered by local planning authorities. Chapter 2 sets out the key principles of planning for nature conservation. Chapter 3 provides advice about the preparation and review of development plans, including the relevant statutory requirements. Chapter 4 addresses nature conservation in development control procedures. Chapter 5 deals with the conservation of internationally and nationally designated sites and habitats and also covers local sites. Chapter 6 deals with the conservation of protected and priority species.

5.0 LEGISLATIVE CONTEXT

- 5.1 This is a brief summary of the ecological legislative context in Wales. This is general advice only and does not relate specifically to the site being assessed.

Ecological Assessments

- 5.2 Ecological assessments have now become an important part of the planning process. This initial assessment is used as a means of identifying any specific interests of the site in question which are in turn used to assess suitability for protected species and to make recommendations for further survey work and mitigation.

Statutory Designated Sites

- 5.3 Sites with Statutory designations receive varying degrees of legal protection under UK law and European Directives. A number of statutory designations are used for sites of high conservation value in the UK dependent on the importance of the site at a local, regional, national and international level. These designations are:
 - Special Area of Conservation (SACs)
SACs are sites of European importance for nature conservation. These receive legal protection under the EC Habitats Directive (1992) which was incorporated into UK legislation through the Conservation (Natural Habitats, &c) Regulations 1994. In the UK all SACs are also designated as SSSIs.



- Special Protection Areas (SPAs)
SPAs are sites of European importance for birdlife as designated under the Birds Directive. As with SACs all SPAs in the UK will also be designated as SSSIs.
- Ramsar Sites
These sites are wetlands of international importance designated under the Ramsar Convention 1971. In most cases these sites are also designated as SPAs or Sites of Special Scientific Interest (SSSI) and receive legal protection in the UK through these designations.
- Sites of Special Scientific Interest (SSSI)
SSSIs are UK sites of national importance for nature conservation. These sites may be designated as a result of the habitats present or for the presence of rare species or species assemblages. SSSIs receive some legal protection through the Wildlife and Countryside Act 1981. This protection was recently extended through the Countryside and Rights of Way (CROW) Act 2000.
- National Nature Reserves (NNR)
NNRs are nationally important nature reserves designated by CCW under the Wildlife and Countryside Act 1981. These sites will either be managed by CCW or an approved body and are often designated as SSSIs.
- Local Nature Reserves (LNR)
Local Nature Reserve is a statutory designation made by local authorities under the Section 21 of the National Parks and Access to Countryside Act 1949. These sites may or may not be SSSIs.

Non-Statutory Designated Sites

- 5.4 Non-statutory sites are afforded no statutory legal protection but are in most cases recognised by local planning authorities and statutory agencies as being of local conservation value. The protection of these sites is usually afforded through Local Plan Policies (county, district and Unitary Development Plans) and these sites will in most cases be taken into account as a material consideration by the local authority when deciding planning applications. These sites are designated by the local authority (usually in consultation with the local Wildlife Trust and other agencies).

Protected Species and their Habitats

- 5.5 In the majority of cases relevant to planning applications protected species are those listed in Schedules 1, 5 and 8 of the Wildlife and Countryside Act (as amended), the Protection of Badgers Act 1992 and the Habitats & Species Regulations 2010. The extent of legal protection varies between species, as do the implications for developments where these species are to be affected.



5.6 Great Crested Newts

Great Crested Newts (*Triturus cristatus*) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended), being listed in Schedule 5 of the act. Under the legislation it is an offence to:

- Intentionally kill, take or injure a great crested newt;
- Damage, destroy or obstruct a place a great crested newt uses for breeding, resting, shelter or protection or to disturb a great crested newt in such a place.
- Possess or control a great crested newt alive or dead, or any part of them, or anything derived from them.
- Sell, offer for sale, advertise for sale or offer to buy a great crested newt, or a part of them or anything derived from them.
- Deliberately disturb or deliberately take or destroy the eggs of a great crested newt.

Offences under Section 9 carry a maximum penalty of a fine up to £5000, imprisonment for up to six months, or both, for each animal in respect of which an offence is committed.

Licenses can be issued in order to allow activities that would constitute an offence under the legislation. Licenses can be issued for specific purposes including scientific study, photography, conservation management and development.

It is important to identify the presence of great crested newts as early as possible in a development so that the legal obligations regarding this species can be observed. If surveys identify the presence of great crested newts on site a mitigation scheme must be developed in consultation with the local CCW team. This mitigation scheme must minimise direct threats to newts and compensate for any habitat loss. A licence issued by the Welsh Assembly is required before the mitigation scheme can be legally implemented. Mitigation licence applications require full Method Statements and a Reasoned Statement of Application. The method statement contains details of the proposed mitigation works whilst the Reasoned Statement must provide justification as to how the proposed development meets the requirements of the legislation.

5.7 Bats

All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended). Under the legislation it is an offence to:

- intentionally kill, injure or handle a bat;
- to possess a bat (whether live or dead)
- disturb a roosting bat;
- sell or offer a bat for sale without a licence;
- damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

The potential fine for each offence is £5,000. If more than one bat is involved, the fine is £5,000 per bat. An offender can also be imprisoned for up to six months.

Where bats are found to occur on a development site, and there is considered to be a reasonable possibility that a roost may be damaged or destroyed or that bats using a roost will be disturbed, a licence must be obtained from Welsh Assembly.



5.8 Badgers

Badgers (*Meles meles*) and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- to interfere with a sett by damaging or destroying it
- to obstruct access to, or entrance of, a badger sett
- to disturb a badger whilst it is occupying a sett

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each illegal sett interference, badger injury or death.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

5.9 Reptiles

All species of British reptile are protected against intentional killing, injury or sale under the Wildlife and Countryside Act 1981 (as amended). The Sand Lizard and the Smooth Snake are afforded a higher degree of protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 making it an offence to:

- Intentionally kill, take or injure these species of reptile;
- Damage, destroy or obstruct a place a these species use for breeding, resting, shelter or protection or to disturb these species in such a place;
- Possess or control these species alive or dead, or any part of them, or anything derived from them;
- Sell, offer for sale, advertise for sale or offer to these species, or a part of them or anything derived from them;
- Deliberately disturb or deliberately take or destroy the eggs of these species.

The distribution of Smooth Snakes and Sand Lizards is limited to heathland habitats in Surrey, Dorset, Hampshire and Sussex. The Sand Lizard is also known to occur on sand dune habitats in Merseyside and has recently been introduced to some areas of North Wales.

Licenses can be issued in order to allow activities that would constitute an offence under the legislation. Licenses can be issued for specific purposes including scientific study, photography, conservation management and development.

In England and Wales a development license must be obtained from Natural England or the Welsh A before undertaking any works that will affect Sand Lizards or Smooth Snakes or their habitat. A license is not required to carry out surveys or mitigation for other reptile species.



5.10 Otters

The Eurasian Otter is protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended), being listed in Schedule 5 of the act. Under the legislation it is an offence to:

- Deliberately, capture, injure or kill an Otter;
- Damage, destroy or obstruct their breeding or resting places;
- Disturb otters in their breeding or resting places.

Offences under Section 9 carry a maximum penalty of a fine up to £5000, imprisonment for up to six months, or both, for each animal in respect of which an offence is committed.

There is, however, provision within the legislation to kill, take, disturb or possess otters or to use prohibited methods to kill or take under a licence in certain defined circumstances, if the issue cannot be resolved by any alternative means. Licenses can be granted for a variety of purposes, including development.

5.11 Water Vole

Water Voles and their habitats are afforded protection under Section 9 of the Wildlife & Countryside Act 1981 (as amended). Under the legislation it is an offence to:

- Intentionally kill, injure or take (capture) a water vole;
- Possess or control a live or dead water vole, or any part of a water vole or anything derived from a water vole;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place which a water vole uses for shelter or protection
- Intentionally or recklessly disturb a water vole while it is occupying a structure or place which it uses for shelter or protection;
- Sell, offer or expose for sale, or have in one's possession or transport for the purpose of sale, any live or dead water voles, or any part of a water vole or anything derived from a water vole;
- Publish any advertisement, or cause any advertisement to be published, which is likely to be understood as conveying that a person buys or sells, or intends to buy or sell, any of the above things.

Offences under Section 9 carry a maximum penalty of a fine up to £5000, imprisonment for up to six months, or both, for each animal in respect of which an offence is committed.

There is no provision under the Wildlife and Countryside Act 1981 for licences to be issued for the purpose of development



5.12 Birds

Section 1 of the Wildlife and Countryside act 1981 makes it an offence to intentionally kill, injure, handle or remove any wild bird (with the exception of some pest species), to take or damage a nest whilst it is in use or being built and to take or destroy eggs.

Species listed in Schedule 1 of the Act (see Table 1), including the Little Ringed Plover, Barn Owl and Kingfisher, are afforded an even higher level of protection. In addition to the offence of taking, damaging or destroying nests or eggs it is also an offence to disturb Schedule 1 species whilst they are building or sitting on nests.

Whilst it is not an offence to disturb non-Schedule 1 species whilst they are building or sitting on a nest an offence may occur if the bird is permanently driven away from its nesting site by prolonged disturbance which leads to the failure of eggs or the death of young.

Surveys for the presence of breeding birds are required if any nesting habitat is to be removed during the breeding season (March to August inclusive).

Invasive Plant Species

- 5.13 Under Section 14 (2) of the Wildlife and Countryside Act (1981) it is illegal to spread the invasive non-native plants Japanese Knotweed (*Fallopia japonica*), Himalayan Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*). At present no requirement exists to eradicate these plants from sites where they are already established
- 5.14 Environment Agency guidance also exists for the aquatic weeds Australian swap stonecrop (*Crassula helmsii*), Floating pennywort (*Hydrocotyle ranunculoides*) and Parrot's feather (*Myriophyllum aquaticum*). Although no legal obligation exists it is considered good practice to avoid spreading these invasive plants when working in infested areas.



6.0 HABITAT SURVEY

Extended Phase One Methods

- 6.1 An extended phase one habitat survey of the site was undertaken by Joseph Whittick BSc (Hons.) on the 31st January 2012. Joseph Whittick has over seven years experience as an ecological consultant and is a full member of the Institute of Ecology and Environmental Management (MIEEM).
- 6.2 The survey was undertaken prior to the start of any construction or site preparation works.
- 6.3 The extended phase one habitat survey is a standard method of survey widely used as the basis of ecological assessments (JNCC, 1993). The phase one survey covers the footprint of the proposed development and descriptions of the immediate surrounding area (up to 100 metres). A habitat map is prepared to show the locations and extent of habitats. Detailed descriptions of important plant communities, other valuable ecological components (e.g. protected species potential) and invasive plant species are provided as target notes.
- 6.4 The phase one habitat survey is not intended to provide a comprehensive list of species. Plant species lists have been compiled with the aim of characterising habitats in order to assess their importance for nature conservation.
- 6.5 Incidental observations of birds and mammals were also made during the phase one habitat survey.

Results

- 6.6 The habitat survey is illustrated on Drawing D/JWE/1048/002 (Appendix 1). Target Notes are presented in Appendix 2.
- 6.7 The following habitats were recorded within the survey area and adjacent land:
 - Bare ground
 - Semi-improved grassland
 - Dense/continuous scrub
 - Scattered scrub
 - Tall ruderal herbs
 - Broad-leaved plantation woodland
 - Scattered broad-leaved trees
 - Spoil



6.8 Habitats within the proposed development site and wider survey area:

- Bare ground
The proposed construction area contains an existing area of concrete hard standing (see photographs 1 and 2, Appendix 3). This area is currently used for storage and a number of containers are present.
- Semi-improved grassland
Areas of rough semi-improved grassland are located adjacent to the existing area of hard standing (see photograph 3, Appendix 3). The grassland is on shallow gravelly soil or overlaying old concrete foundations. Species include Cock's-foot (*Dactylis glomerata*), Broad-leaved dock (*Rumex obtusifolius*), Creeping thistle (*Cirsium arvense*), Dandelion (*Taraxacum officinale*) and Ragwort (*Senecio jacobea*). Extensive moss is also present.
- Dense/continuous scrub
An extensive area of Bramble (*Rubus fruticosus agg.*) scrub is located to the north-east of the survey area (see photograph 4, Appendix 3).
- Scattered scrub
Scattered Bramble (*Rubus fruticosus agg.*) scrub is located throughout the survey area.
- Tall ruderal herbs
An area of tall herbs dominated by Broad-leaved dock (*Rumex obtusifolius*), Creeping thistle (*Cirsium arvense*) and Ragwort (*Senecio jacobea*) is located to the west of the survey area (see photograph 5, Appendix 3).
- Broad-leaved plantation woodland
A band of broad-leaved plantation woodland is located to the south-east of the survey area (see photograph 6, Appendix 3)
- Scattered broad-leaved trees
Scattered self-seeded trees, predominantly Silver Birch (*Betula pendula*) and Willow (*Salix spp.*), are located in the grassland areas on site (see photograph 7, Appendix 3).
- Spoil
Small rubble piles and broken concrete are located around the edge of the existing hard standing on site (see photograph 8, Appendix 3)



6.9 Extended Phase One Habitat Survey Overview

- Great crested newts – No ponds or other suitable amphibian breeding habitat are located within the site under survey. The closest pond to the site is located approximately 180 metres west of the survey area on the opposite side of Bridge Road North. This pond has records of great crested newts.

The terrestrial habitats within the survey area have suitability for great crested newts. The areas of habitat that will be lost to the development comprise rough grass, tall herbs and scrub with suitability as foraging habitat for amphibians. Small areas of rubble are also located around the periphery of the existing concrete hard standing and these areas have suitability as refuge and hibernation sites for great crested newts.

- Bats – No buildings are located within the survey area and no trees within or adjacent to the site have features that could support roosting bats.
- Badgers – No badger setts or other evidence of badger activity (latrines footprints etc.) were identified on site.
- Reptiles – The scrub and rough grassland habitats on site offer suitable habitat for common reptile species.
- Water Voles – No habitat with suitability for Water Voles is located on or immediately adjacent to the proposed development area.
- Otters – No habitat with suitability for Otters is located on or immediately adjacent to the proposed development area.
- Birds – Birds are likely to nest in the trees and scrub on and adjacent to the site.
- Invasive Species – No invasive plant species were identified on or adjacent to the survey area.
- Dingy and Grizzled Skipper – The land that will be impacted by the proposals is not thought to include high quality food plants for these species, eg. Birdsfoot trefoil.

6.10 Other Observations

No other issues were identified on site during the survey.



7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Protected Sites

No statutorily designated nature conservation sites are located within 1 kilometre of the survey area.

The Wrexham Industrial Estate Wildlife Site is located approximately 180 metres south of the survey area. No impacts on this area are predicted given the relatively small scale of the proposals.

7.2 Habitats

No statutorily protected habitats are present on site and all plant species identified within the survey area are considered to be common at local and regional levels.

Derelict and industrial land is listed as a habitat in the Wrexham Biodiversity Action Plan and any plans for the site should therefore aim to retain any existing biodiversity interest. Areas of scrub and semi-improved grassland located on site offer suitable foraging and refuge areas for amphibians and common reptile species. Loss of these habitats should be minimised as far as possible and care should be taken during the construction phase to avoid damage to habitats adjacent to the main construction area, for example by protecting these areas using temporary fencing.

7.3 Great Crested Newts

A pond located 180 metres west of the site has records of great crested newts. The terrestrial habitats within the survey area also have suitability for great crested newts. Given the proximity of the known great crested newt pond and the suitability of the terrestrial habitats within the site for this species there is considered to be a risk that great crested newts could be killed or injured as a result of the proposed construction works.

In order to mitigate for these potential impacts it is thought to be necessary to erect a temporary amphibian fence around the proposed construction area and to undertake a trapping scheme within the fenceline to ensure that no great crested newts are present when development works begin. These works would need to be undertaken under an appropriate Habitats Regulations license issued by the Welsh Assembly (license applications take approximately 8 weeks to be produced and then processed so should be applied for well in advance of the proposed start on site). Trapping works can only be undertaken between March and October when newts are active. The trapping duration should be a minimum of 30 days in suitable weather conditions.

In order to compensate for the loss of terrestrial habitat and refuge sites as a result of the proposed works it is proposed to enhance 320m² of land to the south of the site for great crested newts. These works will include the seeding of a new area of rough grassland and the creation of a minimum of three refuge mounds (log and stone piles) to be used as refuge site by amphibians. The proposed site layout and trapping areas are shown on drawing 494-01-12/02B (Appendix 1).

In order to maintain the enhanced grassland areas these will be mowed annually in late summer. This will form part of a management plan for the site.



7.4 Bats

No buildings are located on site and no trees within or adjacent to the survey area have features that could be used by roosting bats. No impacts on bats are predicted as a result of the proposals.

7.5 Badgers

No badger setts or other evidence of badger activity were identified on site or within 30 metres of the site boundary. No issues are thought to exist for the proposals with regard to this species.

7.6 Reptiles

The scrub and rough grassland habitats on site have suitability as foraging and refuge sites for common reptile species. Slow Worm and Adder have also been recorded within 1 kilometre of the survey area. The measures employed in order to exclude amphibians from the site (see 7.3) should also be sufficient to exclude reptiles. Artificial reptile refuges should be used in addition to pitfall traps during the trapping of the site.

7.7 Water Voles

No potential water vole habitat was identified on or immediately adjacent to the proposed development site. No issues are thought to exist with regard to this species.

7.8 Otters

No potential otter habitat was identified on or immediately adjacent to the proposed development site. No issues are thought to exist with regard to this species.

7.9 Birds

Birds are likely to nest in the trees and scrub on and adjacent to the site. Where possible works to potential nesting habitat should be undertaken outside of the nesting season (the nesting season runs from March to August inclusive). If works are to take place during the nesting season the site should be checked by an experienced surveyor immediately prior to the start of works. If breeding birds are found during the survey the nest should not be disturbed and works should be delayed until nesting is complete and young birds have fledged.

7.10 Invasive Species

No invasive plant species were identified on site. No invasive species issues are thought to exist for the development.

THESE SURVEY RESULTS ARE VALID FOR UP TO 1 YEAR AFTER WHICH RE-SURVEYS ARE RECOMMENDED



8.0 REFERENCES

Wrexham Biodiversity Action Plan (BAP)

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APPENDIX 1

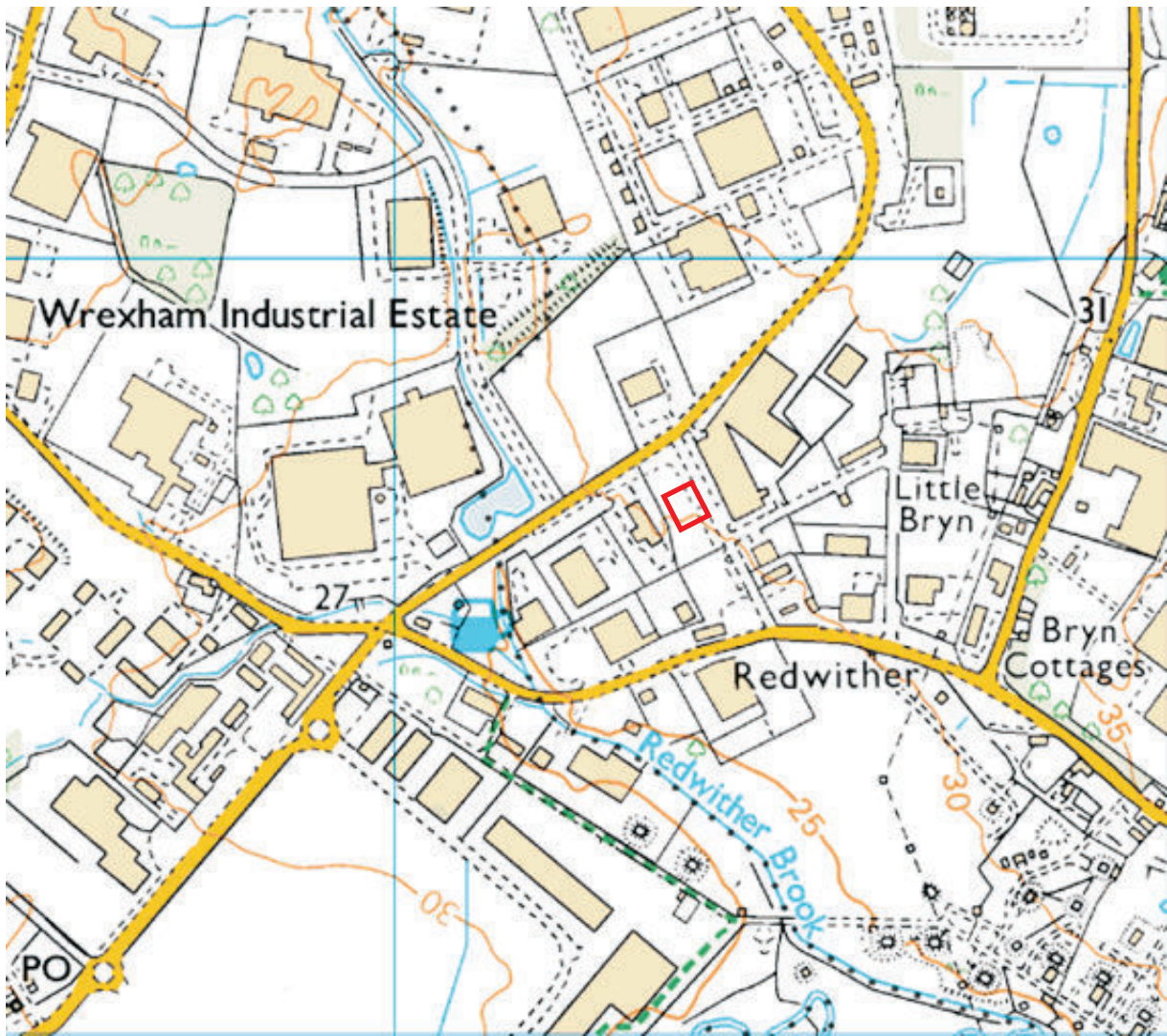
Drawings:

Site Location Plan - D/JWE/1048/001

Extended Phase One Habitat Plan - D/JWE/1048/002

Proposed Site Layout – 494-01-12/02B





 = Site Location



J W ECOLOGICAL LTD

TITLE: Site Location Plan

SITE: Lloyds Animal Feeds

NGR: SJ 38379 49666

DRAWING NUMBER: D/JWE/1048/001





J W ECOLOGICAL LTD

Site:

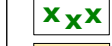
Lloyds Animal Feeds

Title:

Phase One Habitat Map

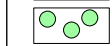
KEY:

Dense/continuous scrub

Scattered scrub

Semi-improved grassland

Broad-leaved plantation woodland

Scattered broad-leaved trees

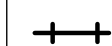
Scattered coniferous trees

Tall ruderal herbs

Spoil

Bare ground

Buildings

Development footprint

Fence

Target Notes (See Appendix 2)

GRID REFERENCE:

SJ 38379 49666

SCALE:

1:1000

DRAWN BY:

JW

CHECKED BY:

JM

DATE:

17/02/12

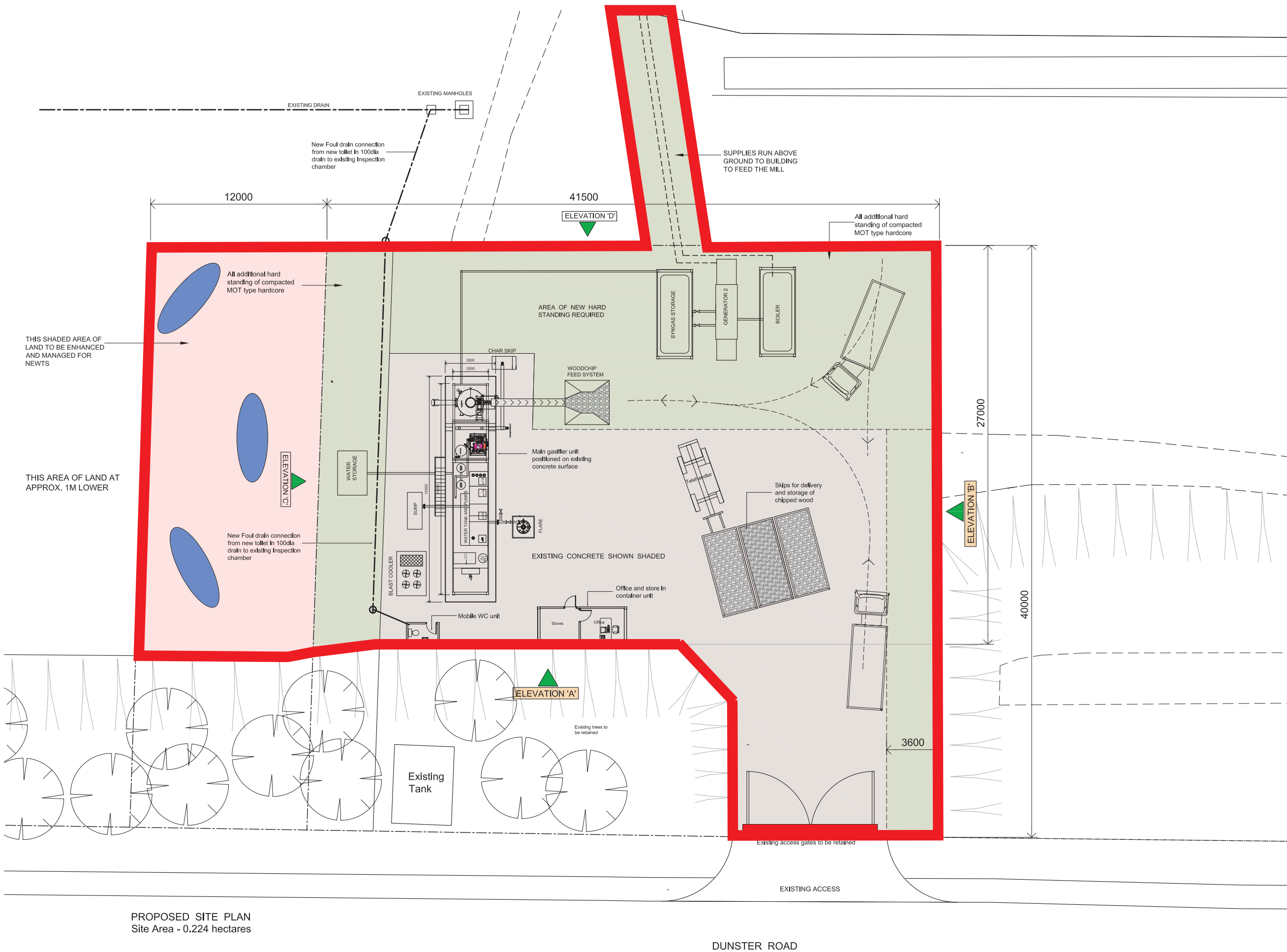
DRAWING NUMBER:

D/JWE/1048/002

ISSUE:

A

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CONDITION THAT IT IS NOT COPIED EITHER IN WHOLE OR IN PART
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drawing no. 494 - 01 - 12 / 02A

GENERAL NOTES:
Any discrepancy found between this and any schedule or specification must be referred back to the consultant before work is executed.
All dimensions to be checked on site.
This drawing must not be copied in whole or in part without the prior written permission of John Parry Jones

revisions		
no	description	date
'A'	Equipment repositioned	15/02/12
'B'	Area of land shown for Newt management	7/03/12

project
Lloyds Animal Feeds site
Bridge Road North
Wrexham Industrial Estate
Wrexham

client:
Refgas Ltd

title:
Proposed Site / Layout Plan

date:
scale: 1:100 @ A1
drawn:

ipj john parry jones
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drawing no. 494 - 01 - 12 / 02B

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APPENDIX 2

Target Notes



The target notes listed below relate to drawing number D/JWE/1048/002 (Appendix 1):

Target Note 1 (T1)

Existing area of concrete hard standing. This area is currently used for storage and a number of containers are present.

Target Note 2 (T2)

Areas of rough semi-improved grassland. The grassland is on shallow gravelly soil or overlaying old concrete foundations. Species include Cock's-foot (*Dactylis glomerata*), Broad-leaved dock (*Rumex obtusifolius*), Creeping thistle (*Cirsium arvense*), Dandelion (*Taraxacum officinale*) and Ragwort (*Senecio jacobea*). Extensive moss is also present. Scattered Bramble (*Rubus fruticosus* agg.) scrub and scattered self-seeded trees, predominantly Silver Birch (*Betula pendula*) and Willow (*Salix* spp.), are present in these areas.

Target Note 3 (T3)

Extensive area of Bramble (*Rubus fruticosus* agg.) scrub located to the north-east of the survey area.

Target Note 4 (T4)

Area of tall herbs dominated by Broad-leaved dock (*Rumex obtusifolius*), Creeping thistle (*Cirsium arvense*) and Ragwort (*Senecio jacobea*) located to the west of the survey area.

Target Note 5 (T5)

Band of broad-leaved plantation woodland located to the south-east of the survey area.

Target Note 6 (T6)

Small rubble piles and broken concrete located around the edge of the existing hard standing on site.



APPENDIX 3

Photographs





Photograph 1 – Existing hard standing



Photograph 2 – Existing hard standing



Photograph 3 – Semi-improved grassland



Photograph 4 – Dense scrub to north-east of site





Photograph 5 – Tall herbs to west of site



Photograph 6 – Broad-leaved plantation woodland to south-east of survey area



Photograph 7 – Rubble adjacent to hard standing area



APPENDIX 4

Desktop Study Response





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

Our Ref.	Client Name	Date Run	Your Ref.
E02610	J W Ecological Ltd	30/01/2012	1037

Site Name	Grid Reference
Bridge Road North	SJ3837949666

Category 1 Species (Species with European and/or UK Legal Protection, Section 42 [NERC] Species or UK BAP Priority Species) within 1000m - 223 records										
Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
Myotis mystacinus <i>(Whiskered Bat/Ystlum Barfog)</i>	SJ3849 <i>(Estimated from Map)</i>	28/09/1999	Anon	1		Site Name Withheld		D1049/001/02 (683472)	Bern, Bonn, EPS, HDir, WCA5, LBAP[DEN, FLI, GWY]	3
Ecliptopera silaceata <i>(Small Phoenix/Ffenics Bach)</i>	SJ385495	2 records, both in 1972	Name Withheld; Mold NCC files, Z.D. Zamojski	Present	Field Observation	Wrexham Industrial Estate		D1063/001/01 D0217/001/01	S42, UKBAP, LBAP[GWY]	3
Ecliptopera silaceata <i>(Small Phoenix/Ffenics Bach)</i>	SJ385495	1972 - 1973	Zamojski, Z.D.	present		Wrexham Industrial Estate		D1050/003/01 <i>(3471240)</i>	S42, UKBAP, LBAP[GWY]	
Hemistola chrysoprasaria <i>(Small Emerald/Emrallt Barf yr Hen Wr)</i>	SJ385495	1972 - 1973	Zamojski, Z.D.	present		Wrexham Industrial Estate		D1050/003/01 <i>(3472188)</i>	S42, UKBAP, LBAP[GWY]	
Hemistola chrysoprasaria <i>(Small Emerald/Emrallt Barf yr Hen Wr)</i>	SJ385495	2 records, both in 1972	Name Withheld; Mold NCC files, Z.D. Zamojski	Present	Field Observation	Wrexham Industrial Estate		D1063/001/01 D0217/001/01	S42, UKBAP, LBAP[GWY]	3
Watsonalla binaria <i>(Oak Hook-tip/Bachadain y Deri)</i>	SJ385495	2 records, both in 1972	Name Withheld; Mold NCC files, Z.D. Zamojski	Present	Field Observation	Wrexham Industrial Estate		D1063/001/01 D0217/001/01	S42, UKBAP, LBAP[GWY]	3
Watsonalla binaria <i>(Oak Hook-tip/Bachadain y Deri)</i>	SJ385495	1972 - 1973	Zamojski, Z.D.	present		Wrexham Industrial Estate		D1050/003/01 <i>(3471150)</i>	S42, UKBAP, LBAP[GWY]	
Triturus cristatus <i>(Great Crested Newt/Madfall Ddwr Gribog)</i>	SJ381496 <i>(Estimated from Map)</i>	15/04/1998	Dylan Lloyd	1		Wrexham Industrial Estate - Field Corner Pond		D1125/001/03 <i>(1857566)</i>	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Coenonympha pamphilus <i>(Small Heath/Gweirlöyn Bach y Waun)</i>	SJ385493 <i>(Centroid)</i>	4 records, between 01/06/1998 and 18/05/2010	Bryan Formstone; John V. Smith; Peter Heywood	2, 2, 2 Adult, 7 Adult	Field record / observation; Daytime observation	Wrexham Industrial Estate	JVS's Map Ref SJ 384493 : also recorded PBF - not accepted yet.	D0127/001/02 D1373/001/02	S42, UKBAP, LBAP[GWY]	3
Coenonympha pamphilus <i>(Small Heath/Gweirlöyn Bach y Waun)</i>	SJ385493	2 records, both on 12/05/2007	Brian & Sue Roberts			Wrexham Industrial Estate		D1399/001/01	S42, UKBAP, LBAP[GWY]	1
Erynnis tages <i>(Dingy Skipper/Gwibiwr Llwyd)</i>	SJ385493	10 records, between 29/05/2001 and 17/05/2010	John V. Smith; Peter Heywood; John Smith	: 2, Adult: 1 to 7	Field record / observation; Daytime observation	Wrexham Industrial Estate	JVS's Map Ref SJ 384493 : also recorded PBF - not accepted yet. Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[CON, FLI, GWY]	3
Pyrgus malvae <i>(Grizzled Skipper/Gwibiwr Brith)</i>	SJ385493	10 records, between May 1993 and 03/05/2009	John Smith; Peter Heywood; Bryan Formstone; J.B. Formstone	: 2, Adult: 1 to 8	Daytime observation; Field record / observation	Wrexham Industrial Estate	Substrate:Unknown	D1373/001/02 D0127/001/02	S42, UKBAP, LBAP[DEN, FLI]	3
Pipistrellus <i>(Pipistrellus Bat sp.)</i>	SJ3849 <i>(Estimated from Map)</i>	08/07/2003	Anon	2		Site Name Withheld		D1049/001/02 (683546)	Bonn, EPS, WCA5	3
Triturus cristatus <i>(Great Crested Newt/Madfall Ddwr Gribog)</i>	SJ385500	14 records, between 18/05/2007 and 22/05/2007	Tom Knight			OTH:SA:140:2006		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus <i>(Great Crested Newt/Madfall Ddwr Gribog)</i>	SJ379498 <i>(Estimated from Map)</i>	22/04/1998	Dylan Lloyd	7		Wrexham Industrial Estate - Typha pond		D1125/001/03 <i>(1857672)</i>	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus <i>(Great Crested Newt/Madfall Ddwr Gribog)</i>	SJ388496	3 records, all on 04/04/2005	Ben Milner			OTH:SA:32:2005		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus <i>(Great Crested Newt/Madfall Ddwr Gribog)</i>	SJ381492 <i>(Estimated from Map)</i>	15/04/1998	Dylan Lloyd	1		Wrexham Industrial Estate - Drainage Ditch		D1125/001/03 <i>(1857565)</i>	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Chiasmia clathrata <i>(Latticed Heath/Seffyr Delltog)</i>	SJ386492	22/06/2007	John Smith	2 Adult	Daytime observation	Wrexham Ind. estate	Substrate:Grassland: neutral.	D1285/001/01 <i>(3067955)</i>	S42, UKBAP, LBAP[GWY]	3
Coenonympha pamphilus <i>(Small Heath/Gweirlöyn Bach y Waun)</i>	SJ386492	1991 - 1998	Formstone, Mr J.B.			The Oaks		D1050/003/01 <i>(3471832)</i>	S42, UKBAP, LBAP[GWY]	
Ecliptopera silaceata <i>(Small Phoenix/Ffenics Bach)</i>	SJ386492	1972	Z.D.Zamojski	1 Adult		Wrexham Ind Estate (Oaks Site)	Substrate:Scrub: scattered.	D1285/001/01 <i>(3053868)</i>	S42, UKBAP, LBAP[GWY]	3
Hemistola chrysoprasaria <i>(Small Emerald/Emrallt Barf yr Hen Wr)</i>	SJ386492	1973	Z.D.Zamojski	1 Adult	MV Light Trap	Wrexham Ind. estate	Substrate:Grassland: neutral.	D1285/001/01 <i>(3069654)</i>	S42, UKBAP, LBAP[GWY]	3
Lasiommata megera <i>(Wall/Gweirlöyn y Cloddiau)</i>	SJ386492	1991 - 1998	Formstone, Mr J.B.			The Oaks		D1050/003/01 <i>(3471340)</i>	S42, UKBAP, LBAP[GWY]	

Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
Pyrgus malvae (Grizzled Skipper/Gwibiwr Brith)	SJ386492	2 records, on 13/05/1993 and 01/06/1998	Formstone, Mr J.B.	8 adult, 2 adult		The Oaks		D1050/003/01	S42, UKBAP, LBAP[DEN, FLI]	
Watsonalla binaria (Oak Hook-tip/Bachadain y Deri)	SJ386492	1972	Z.D.Zamojski	1 Adult	MV Light	Wrexham Ind. estate	Substrate:Grassland: neutral.	D1285/001/01 (3063078)	S42, UKBAP, LBAP[GWY]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ388499	5 records, between 11/04/2007 and 18/05/2007	Tom Knight			OTH:SA:140:2006		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Ecliptopera silaceata (Small Phoenix/Ffenics Bach)	SJ386501	2 records, both on 07/05/2009	J B Formstone	1 Adult, 1 Adult	Daytime observation	Wrexham Recycling Centre	Substrate:Built-up areas: industrial	D1285/001/01	S42, UKBAP, LBAP[GWY]	3
Erynnis tages (Dingy Skipper/Gwibiwr Llwyd)	SJ387492	21/05/2006	John V. Smith	1 Adult	Daytime observation	Wxm Ind Estate, Oak Road	Substrate:Unknown.	D1373/001/02 (3087393)	S42, UKBAP, LBAP[CON, FLI, GWY]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ378498 (Estimated from Map)	22/04/1998	Dylan Lloyd	6		Wrexham Industrial Estate - Woodland Corridor Pond		D1125/001/03 (1857673)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Coenonympha pamphilus (Small Heath/Gweirlöyn Bach y Waun)	SJ388493	19/05/2004	Rob W Whitehead	4	Field record / observation	Wrexham Ind Estate - S of Bryn Lane	Substrate:Unknown.	D1373/001/02 (3101073)	S42, UKBAP, LBAP[GWY]	3
Erynnis tages (Dingy Skipper/Gwibiwr Llwyd)	SJ388493	19/05/2004	Rob W Whitehead	4	Field record / observation	Wrexham Ind Estate - S of Bryn Lane	Substrate:Unknown.	D1373/001/02 (3087119)	S42, UKBAP, LBAP[CON, FLI, GWY]	3
Pyrgus malvae (Grizzled Skipper/Gwibiwr Brith)	SJ388493	19/05/2004	Rob W Whitehead	3	Field record / observation	Wrexham Ind Estate - S of Bryn Lane	Substrate:Unknown.	D1373/001/02 (3087916)	S42, UKBAP, LBAP[DEN, FLI]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ379500 (Estimated (Centroid of Site Name))	May 2004	Raymond Gemmell	+ Adult; + Juvenile; + Egg		Wrexham Industrial Estate	Bottle trap, torch survey and egg search.	D1310/001/01 (2701533)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ38934990	17/06/1992	Anon - Herpetofauna Consultants International			Adult Training Centre	Report identifies this as a probable record, supplied by local person.	D1125/001/03 (1857617)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Locustella naevia (Common Grasshopper Warbler/Troellwr Bach)	SJ387501 (Selected from Interactive Map)	26/04/2011	Graham Berry	1 Adult	Auditory record	Bryn Lane Recycling Centre		D1117/001/01 (2937907)	S42, UKBAP, WBR[RSPB], LBAP[CON, DEN, FLI, GWY]	4
Myotis mystacinus (Whiskered Bat/Ystlum Barfog)	SJ3749 (Estimated from Map)	30/04/1998	Anon	1		Site Name Withheld		D1049/001/02 (683474)	Bern, Bonn, EPS, HDir, WCA5, LBAP[DEN, FLI, GWY]	3
Coenonympha pamphilus (Small Heath/Gweirlöyn Bach y Waun)	SJ380502	2 records, on 22/05/2004 and 25/05/2004	Rob W Whitehead	2, 2	Field record / observation	Wrexham Ind Estate - Norish FP Ltd	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[GWY]	3
Erynnis tages (Dingy Skipper/Gwibiwr Llwyd)	SJ380502	2 records, on 22/05/2004 and 25/05/2004	Rob W Whitehead	4, 4	Field record / observation	Wrexham Ind Estate - Norish FP Ltd	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[CON, FLI, GWY]	3
Pyrgus malvae (Grizzled Skipper/Gwibiwr Brith)	SJ380502	2 records, on 22/05/2004 and 25/05/2004	Rob W Whitehead	1, 2	Field record / observation	Wrexham Ind Estate - Norish FP Ltd	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[DEN, FLI]	3
Scotopteryx chenopodiata (Shaded Broad-bar/Rhesen Lydan Dywyll)	SJ379491	07/08/2009	Graham, A.N. & J.E.	10	Daytime observation	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3053555)	S42, UKBAP, LBAP[GWY]	3
Tyria jacobaeae (Cinnabar/Teigr y Benfelen)	SJ379491	07/08/2009	Graham, A.N. & J.E.	10 Larval	Daytime observation	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3048891)	S42, UKBAP, LBAP[GWY]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ388501 (Selected from Interactive Map)	11/05/2009 - 19/06/2009	Rhian Hughes	14 Maximum Count	Live sighting	Bryn Lane Recycling Centre	Tourch light survey.	D1117/001/01 (2099500)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ388501	2 records, on 11/04/2007 and 21/11/2007	Tom Knight; Stella Shackel			OTH:SA:140:2006; OTH:SA:341:2006		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ3886150171	Before 01/04/2007	Derek Whitcher	10 GCN (2005)		Wrexham Industrial Estate		D1125/001/03 (1857953)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Anguis fragilis (Slow-worm/Neidr Ddefaid)	SJ380490	Before 2009	Anon.			Redwither Brook		D0035/002/01 (2502262)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
Erynnis tages (Dingy Skipper/Gwibiwr Llwyd)	SJ388491	30/04/2007	Emma Broad	1		Off Oak Road Wrexham industrial Estate		D1117/001/01 (2098631)	S42, UKBAP, LBAP[CON, FLI, GWY]	4
Lissotriton vulgaris (Smooth Newt/Madfall Ddwr Gyffredin)	SJ39064980	11/06/1992	Anon - Herpetofauna Consultants International					D1122/002/01 (1271277)	WCA5, LBAP[CON, DEN, FLI]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ39064980	11/06/1992	Anon - Herpetofauna Consultants International	P		Adult Training Centre		D1125/001/03 (1857490)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3

Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
Vipera berus (Adder/Gwiber)	SJ380490	Before 2009	Anon.			Redwither Brook		D0035/002/01 (2502299)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ39034939	11/06/1992	Anon - Herpetofauna Consultants International			BICC Cables	Report identifies this as a probable record, supplied by local person.	D1125/001/03 (1857495)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ39024932	11/06/1992	Anon - Herpetofauna Consultants International			BICC Cables	Report identifies this as a probable record, supplied by local person.	D1125/001/03 (1857494)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Pyrgus malvae (Grizzled Skipper/Gwibiwr Brith)	SJ38875020 (Selected from Interactive Map)	07/05/2009	Graham Berry	1 Adult Male	Live Sighting	Bryn Lane Recycling Centre	Observed with Bryan Formstone, Lep. recorder.	D1117/001/01 (2850949)	S42, UKBAP, LBAP[DEN, FLI]	4
Chiasmia clathrata (Latticed Heath/Seffyr Delltog)	SJ378491	19/06/2010	Justin Williams	1 Adult	Daytime observation	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3067975)	S42, UKBAP, LBAP[GWY]	3
Chiasmia clathrata subsp. clathrata (Latticed Heath)	SJ378491	06/07/2009	Graham, A.N. & J.E.	4	Daytime observation	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3084374)	S42, UKBAP, LBAP[GWY]	3
Scotopteryx chenopodiata (Shaded Broad-bar/Rhesen Lydan Dywyll)	SJ378491	06/07/2009	Graham, A.N. & J.E.	10	Daytime observation	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3053412)	S42, UKBAP, LBAP[GWY]	3
Tyria jacobaeae (Cinnabar/Teigr y Benfelen)	SJ378491	19/06/2010	Justin Williams	1 Adult	Netted	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3048896)	S42, UKBAP, LBAP[GWY]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ390493	3 records, all on 01/05/2004	Raymond Paul Gemmell			OTH:SA:83:2004		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ389501	9 records, between 19/04/2007 and 26/04/2007	Tom Knight			OTH:SA:140:2006		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ381489 (Estimated from Map)	29/04/1998	Dylan Lloyd	16		Wrexham Industrial Estate - Core Site Pond		D1125/001/03 (1857746)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Tyria jacobaeae (Cinnabar/Teigr y Benfelen)	SJ381489	12/06/2010	Justin Williams	1 Adult	Daytime observation	Wrexham Industrial Estate	Substrate:Unknown.	D1285/001/01 (3048895)	S42, UKBAP, LBAP[GWY]	3
Lissotriton vulgaris (Smooth Newt/Madfall Ddwr Gyffredin)	SJ39094934	11/06/1992	Anon - Herpetofauna Consultants International					D1122/002/01 (1271278)	WCA5, LBAP[CON, DEN, FLI]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ39094934	11/06/1992	Anon - Herpetofauna Consultants International	P		BICC Cables		D1125/001/03 (1857492)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ3816348910	1994	ME			Spectrum Industrial Estate		D1125/001/03 (1857224)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Lissotriton vulgaris (Smooth Newt/Madfall Ddwr Gyffredin)	SJ391493 (Supplied by Original Recorder (Checked))	06/03/1999	Jacinta Challinor	+		Wrexham Industrial Estate	Torch survey of 2+ ponds.	D0269/029/01 (2697868)	WCA5, LBAP[CON, DEN, FLI]	1
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ391493 (Supplied by Original Recorder (Checked))	06/03/1999	Jacinta Challinor	2 Male; 2 Female		Wrexham Industrial Estate	Torch survey of 2+ ponds.	D0269/029/01 (2701908)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ3898850245	Before 01/04/2007	Derek Whitcher	Max Count 1 2005		Wrexham Industrial Estate		D1125/001/03 (1857955)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (Great Crested Newt/Madfall Ddwr Gribog)	SJ3911650079	Before 01/04/2007	Derek Whitcher	I GCN 05 (Terr Record)		Wrexham Industrial Estate		D1125/001/03 (1857962)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Chiasmia clathrata (Latticed Heath/Seffyr Delltog)	SJ381488	02/06/2004	Rob W Whitehead	2 Adult	Daytime observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown.	D1285/001/01 (3067921)	S42, UKBAP, LBAP[GWY]	3
Coenonympha pamphilus (Small Heath/Gweirlöyn Bach y Waun)	SJ381488	5 records, between 10/05/2005 and 07/08/2005	Rob W Whitehead; Ian Waller	1 Adult, 12, 1 Adult, 8, 1 Adult	Daytime observation; Field record / observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[GWY]	3
Erynnis tages (Dingy Skipper/Gwibiwr Llwyd)	SJ381488	6 records, between 13/05/2005 and 21/05/2006	John V. Smith; Rob W Whitehead; Ian Waller; Bryan Formstone	7 Adult, 15, 4 Adult, 19, 19 Adult, 1 Adult	Daytime observation; Field record / observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[CON, FLI, GWY]	3
Lasiommata megera (Wall/Gweirlöyn y Cloddiau)	SJ381488	2 records, on 02/06/2004 and 13/05/2005	Rob W Whitehead; Bryan Formstone	1, 1 Adult	Field record / observation; Daytime observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[GWY]	3
Pyrgus malvae (Grizzled Skipper/Gwibiwr Brith)	SJ381488	5 records, between 02/06/2004 and 10/05/2005	Rob W Whitehead; Ian Waller; John V. Smith	3, 6, 4 Adult, 6 Adult, 12 Adult	Field record / observation; Daytime observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown	D1373/001/02	S42, UKBAP, LBAP[DEN, FLI]	3

Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
Scotopteryx chenopodiata (<i>Shaded Broad-bar/Rhesen Lydan Dywyll</i>)	SJ381488	07/08/2005	Rob W Whitehead	10 Adult	Daytime observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown.	D1285/001/01 (3053346)	S42, UKBAP, LBAP[GWY]	3
Tyria jacobaeae (<i>Cinnabar/Teigr y Benfelen</i>)	SJ381488	2 records, on 25/05/2004 and 02/06/2004	Rob W Whitehead	2 Adult, 2 Adult	Daytime observation	Spectrum Ind Estate - nr Calypso	Substrate:Unknown	D1285/001/01	S42, UKBAP, LBAP[GWY]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3903250230	Before 01/04/2007	Derek Whitcher	Max Count 2 GCN (05)		Wrexham Industrial Estate		D1125/001/03 (1857954)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ389503	6 records, between 27/04/2005 and 04/06/2005	Janet Wilkinson			OTH:SA:117:2005		D1317/001/01	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ37774898 (<i>Estimated from Map</i>)	1994	Anon	P		Firestone Factory		D1125/001/03 (1857219)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3910250227	Before 01/04/2007	Derek Whitcher	Max Count 1 GCN (Terrestrial)		Wrexham Industrial Estate		D1125/001/03 (1857956)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3925249954	Before 01/04/2007	Derek Whitcher	1 GCN (05)		Wrexham Industrial Estate	Terrestrial record.	D1125/001/03 (1857969)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Chiasmia clathrata (<i>Latticed Heath/Seffyr Delltog</i>)	SJ376502	25/05/2004	Rob W Whitehead	1 Adult	Daytime observation	Wrexham Ind Estate - Ash Road South	Substrate:Unknown.	D1285/001/01 (3067924)	S42, UKBAP, LBAP[GWY]	3
Coenonympha pamphilus (<i>Small Heath/Gweirlöyn Bach y Waun</i>)	SJ376502	25/05/2004	Rob W Whitehead	2	Field record / observation	Wrexham Ind Estate - Ash Road South	Substrate:Unknown.	D1373/001/02 (3101078)	S42, UKBAP, LBAP[GWY]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ381487 (<i>Estimated from Map</i>)	16/05/1998	Dylan Lloyd	1		Wrexham Industrial Estate - Water Treatment Pond		D1125/001/03 (1857594)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3932649952	Before 01/04/2007	Derek Whitcher	9 GCN (05)		Wrexham Industrial Estate	Terrestrial record.	D1125/001/03 (1857970)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3920050242	Before 01/04/2007	Derek Whitcher	6 GCN (05)		Wrexham Industrial Estate		D1125/001/03 (1857957)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3919250294	Before 01/04/2007	Anon			Wrexham Industrial Estate		D1125/001/03 (1857958)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ39404992	17/06/1992	Anon - Herpetofauna Consultants International	P		Williams Distribution		D1125/001/03 (1857616)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ38484858	09/06/1992	Anon - Herpetofauna Consultants International	P		Pickhill Bridge Farm		D1125/001/03 (1857453)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ39484970	17/06/1992	Anon - Herpetofauna Consultants International	P		near Wrexham Industrial Estate		D1125/001/03 (1857608)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ39264898 (<i>Estimated from Map</i>)	1992	Anon	P		Diamond Farm		D1125/001/03 (1857158)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ39345027	24/06/1992	Anon - Herpetofauna Consultants International	P		Cheetham Owens Fibreglass		D1125/001/03 (1857688)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ38764858	09/06/1992	Anon - Herpetofauna Consultants International	P		Pickhill Bridge Farm		D1125/001/03 (1857455)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ39584958	17/06/1992	Anon - Herpetofauna Consultants International	P		Cae Farm		D1125/001/03 (1857612)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ38594847	09/06/1992	Anon - Herpetofauna Consultants International	P		Pickhill Bridge Farm		D1125/001/03 (1857454)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
Myotis mystacinus (<i>Whiskered Bat/Ystlum Barfog</i>)	SJ3750 (<i>Estimated from Map</i>)	30/09/1999	Anon	1		Site Name Withheld		D1049/001/02 (683473)	Bern, Bonn, EPS, HDir, WCA5, LBAP[DEN, FLI, GWY]	3
Triturus cristatus (<i>Great Crested Newt/Madfall Ddwr Gribog</i>)	SJ3947350326	Before 01/04/2007	Derek Whitcher	3 GCN (05)		Wrexham Industrial Estate		D1125/001/03 (1857959)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3

Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39525025	24/06/1992	Anon - Herpetofauna Consultants International			Wrexham Industrial Estate	Report identifies this as a probable record, supplied by local person.	D1125/001/03 (1857693)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ38735091	18/06/1993	Anon - Herpetofauna Consultants International	P		near Wrexham Industrial Estate		D1125/001/03 (1857643)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ3957950187	Before 01/04/2007	Derek Whitcher	13 GCN (05)		Wrexham Industrial Estate		D1125/001/03 (1857961)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39385050	24/06/1992	Anon - Herpetofauna Consultants International	P		Wrexham Industrial Estate		D1125/001/03 (1857687)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39375052	24/06/1992	Anon - Herpetofauna Consultants International	P		Cheetham Owens Fibreglass		D1125/001/03 (1857689)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39604918	17/06/1992	Anon - Herpetofauna Consultants International	P		BICC Cables		D1125/001/03 (1857611)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39165074	17/06/1992	Anon - Herpetofauna Consultants International	P		Cheetham Owens Fibreglass		D1125/001/03 (1857614)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39614912	17/06/1992	Anon - Herpetofauna Consultants International	P		BICC Cables		D1125/001/03 (1857610)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39534896	03/06/1992	Anon - Herpetofauna Consultants International	P		Diamond Farm		D1125/001/03 (1857319)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ3972949880	Before 01/04/2007	Derek Whitcher	8 GCN (05)		School Farm		D1125/001/03 (1857968)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ3957450364	Before 01/04/2007	Derek Whitcher	6 GCN (05)		Wrexham Industrial Estate		D1125/001/03 (1857960)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ36984954	08/07/1992	Anon - Herpetofauna Consultants International			Pear Tree Cottage	Report identifies this as a probable record, supplied by local person.	D1125/001/03 (1857447)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39624898	03/06/1992	Anon - Herpetofauna Consultants International	P		Diamond Farm		D1125/001/03 (1857320)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ373506 (Estimated from Map)	14/04/2000	Anon	2		near Erilas Hall		D1125/001/03 (1857546)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39584888	03/06/1992	Anon - Herpetofauna Consultants International			Higher Oak		D1125/001/03 (1857326)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ38854829	09/06/1992	Anon - Herpetofauna Consultants International	P		Pickhill Bridge Farm		D1125/001/03 (1857457)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39004835	09/06/1992	Anon - Herpetofauna Consultants International	P		Pickhill Bridge Farm		D1125/001/03 (1857458)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Triturus cristatus</i> (Great Crested Newt/Madfall Ddwr Gribog)	SJ39844943	17/06/1992	Anon - Herpetofauna Consultants International	P		Cae Farm		D1125/001/03 (1857613)	Bern, EPS, HDir, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3
<i>Anguis fragilis</i> (Slow-worm/Neidr Ddefaid)	SJ3849	1999	Young Assoc.			Wrexham Industrial Estate	Habitat: Scrub, grassl'd.	D0035/002/01 (2502260)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Anguis fragilis</i> (Slow-worm/Neidr Ddefaid)	SJ3849	1999	Anon			Wrexham Industrial Estate		D1076/001/01 (450915)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Erynnis tages</i> (Dingy Skipper/Gwibiwr Llwyd)	SJ3849	2 records, on 12/05/2000 and 15/05/2000	Anon.			The Oaks		D1050/003/01	S42, UKBAP, LBAP[CON, FLI, GWY]	
<i>Falco tinnunculus</i> (Common Kestrel/Cudyll Coch)	SJ3849	2 records, on 16/04/2008 and 17/03/2009	Norman Hallas	1, 1		Wrexham, Industrial Estate, W		D1297/002/01	Bern, Bonn, CITES, S42, WBR[RSPB], LBAP[ANG, CON, DEN, FLI, GWY]	

Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Meles meles</i> (Eurasian Badger/Mochyn Daear)	SJ3849	3 records, between 02/01/2003 and 13/11/2007	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: B20.0. Please contact CBG for more details.; CBG Ref: B56.0; CBG Ref: B89.0.	D0059/001/01	BA, LBAP[CON, DEN, FLI, WRE]	3
<i>Pyrgus malvae</i> (Grizzled Skipper/Gwibiwr Brith)	SJ3849	2 records, on 12/05/2000 and 15/05/2000	Anon.	3 adult, 11 adult		The Oaks		D1050/003/01	S42, UKBAP, LBAP[DEN, FLI]	
<i>Vipera berus</i> (Adder/Gwiber)	SJ3849	1999	Anon			Wrexham Industrial Estate		D1076/001/01 (451117)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3
<i>Vipera berus</i> (Adder/Gwiber)	SJ3849	1999	Young Assoc.			Wrexham Industrial Estate	Habitat: Scrub, grassl'd.	D0035/002/01 (2502297)	S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4
<i>Falco tinnunculus</i> (Common Kestrel/Cudyll Coch)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate	H Activity.	D1297/002/01 (3408426)	Bern, Bonn, CITES, S42, WBR[RSPB], LBAP[ANG, CON, DEN, FLI, GWY]	
<i>Muscicapa striata</i> (Spotted Flycatcher/Gwybedog Mannog)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate	S Activity.	D1297/002/01 (3417287)	Bern, Bonn, S42, UKBAP, WBR[RSPB], LBAP[CON, DEN, FLI, GWY]	
<i>Meles meles</i> (Eurasian Badger/Mochyn Daear)	SJ3749	19/08/2003	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: B51.0. Please contact CBG for more details.	D0059/001/01 (804446)	BA, LBAP[CON, DEN, FLI, WRE]	3
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar/Rhesen Lydan Dywyll)	SJ3749	2 records, on 07/09/2009 and 09/07/2010	Graham, A.N. & J.E.; Justin Williams	2 Adult	Netted	Wrexham Industrial Estate	Substrate:Unknown	D1285/001/01	S42, UKBAP, LBAP[GWY]	3
<i>Falco tinnunculus</i> (Common Kestrel/Cudyll Coch)	SJ3949	16/04/2008	Norman Hallas	2		Wrexham, Industrial Estate, E		D1297/002/01 (3408417)	Bern, Bonn, CITES, S42, WBR[RSPB], LBAP[ANG, CON, DEN, FLI, GWY]	
<i>Erynnis tages</i> (Dingy Skipper/Gwibiwr Llwyd)	SJ3848	2 records, in 1995 and 12/05/2005	Ian Waller; Bryan Formstone	2 Adult, 2	Daytime observation; Field record / observation	SJ3848	Wrexham Ind Estate. Substrate:Unknown	D1373/001/02 D0127/001/02	S42, UKBAP, LBAP[CON, FLI, GWY]	3
<i>Lasiommata megera</i> (Wall/Gweirlöyn y Cloddiau)	SJ3848 (Centroid)	1995	Bryan Formstone	2	Field record / observation	SJ3848		D0127/001/02 (521780)	S42, UKBAP, LBAP[GWY]	3
<i>Meles meles</i> (Eurasian Badger/Mochyn Daear)	SJ3848	02/01/2003	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: B21.0. Please contact CBG for more details.	D0059/001/01 (804406)	BA, LBAP[CON, DEN, FLI, WRE]	3
<i>Pyrgus malvae</i> (Grizzled Skipper/Gwibiwr Brith)	SJ3848	12/05/2005	Ian Waller	1 Adult	Daytime observation	SJ3848	Wrexham Ind Estate. Substrate:Unknown.	D1373/001/02 (3087938)	S42, UKBAP, LBAP[DEN, FLI]	3
<i>Coenonympha pamphilus</i> (Small Heath/Gweirlöyn Bach y Waun)	SJ3748	25/08/2010	A.N. & J.E. Graham	5 Adult	Daytime observation	Wrexham Industrial Estate	Substrate:Brownfield, calcareous newly-seeded herb-rich grassland and old.	D1373/001/02 (3101284)	S42, UKBAP, LBAP[GWY]	3
<i>Erynnis tages</i> (Dingy Skipper/Gwibiwr Llwyd)	SJ3748	12/05/2005	Ian Waller	5 Adult	Daytime observation	SJ3748	Wrexham Ind Estate. Substrate:Unknown.	D1373/001/02 (3087383)	S42, UKBAP, LBAP[CON, FLI, GWY]	3
<i>Meles meles</i> (Eurasian Badger/Mochyn Daear)	SJ3748	02/01/2003	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: B46.0. Please contact CBG for more details.	D0059/001/01 (804440)	BA, LBAP[CON, DEN, FLI, WRE]	3
<i>Pyrgus malvae</i> (Grizzled Skipper/Gwibiwr Brith)	SJ3748	12/05/2005	Ian Waller	3 Adult	Daytime observation	SJ3748	Wrexham Ind Estate. Substrate:Unknown.	D1373/001/02 (3087940)	S42, UKBAP, LBAP[DEN, FLI]	3
<i>Meles meles</i> (Eurasian Badger/Mochyn Daear)	SJ3948	08/03/2007	Clwyd Badger Group (CBG)		Badger Sett		CBG Ref: B19.0. Please contact CBG for more details.	D0059/001/01 (804404)	BA, LBAP[CON, DEN, FLI, WRE]	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 - 7 records										
Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
<i>Crepis biennis</i> (Rough Hawk's-beard/Gwalchlys Garw)	SJ387494	1998	Anon			Redwither		D0216/001/02 (1104136)	WVP, LBAP[CON]	1
<i>Eumerus ornatus</i> (An Insect - True Fly (Diptera))	SJ386492	19/06/1992	J. B. Formstone	1 Adult		Wrexham Ind. estate	Netted. Substrate:Grassland: neutral.	D1397/001/01 (3375213)	RD2	1
<i>Acanthiophilus helianthi</i> (An Insect - True Fly (Diptera))	SJ3849	04/07/2000	Mike Howe		Field Observation	The Oaks		D0217/001/01 (1057403)	RD2	3
<i>Diplapion stolidum</i> (An Insect - Beetle (Coleoptera))	SJ3849	04/07/2000	Adrian Fowles	1 Adult	Field Observation	The Oaks		D0217/001/01 (1017798)	RD2	3
<i>Oxyna nebulosa</i> (An Insect - True Fly (Diptera))	SJ3849	04/07/2000	Mike Howe	2 Female; 2 male	Field Observation	The Oaks		D0217/001/01 (1057364)	RD1	3
<i>Pseudorchestes pratensis</i> (An Insect - Beetle (Coleoptera))	SJ3849	04/07/2000	Adrian Fowles	1 Adult	Field Observation	The Oaks		D0217/001/01 (1017789)	RD2	3
<i>Hirundo rustica</i> (Barn Swallow/Gwennol)	SJ3850	15/06/2008	Norman Hallas	2		Wrexham, Industrial Estate	H Activity.	D1297/002/01 (3404518)	Bern, WBAm[RSPB], LBAP[ANG, CON, GWY]	

Category 3 Species (LBAP Species not identified under Categories 1 & 2, Locally Important species as specified by local experts) within 1000m - 22 records										
Taxon Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V
Lactuca serriola (Prickly Lettuce/Letusen Bigog)	SJ386495	1984	Anon			Industrial Estate		D0216/001/02 (1104192)	LBAP[CON]	1
Libellula depressa (Broad-bodied Chaser/Picellwr Praff)	SJ388501 (Selected from Interactive Map)	07/05/2009	Graham Berry	1 Adult Female	Live sighting	Bryn Lane Recycling Centre	Over ponds created as part of mitigation for recycling centre development.	D1117/001/01 (2099905)	LBAP[SNP]	4
Brachytron pratense (Hairy Dragonfly/Gwas Neidr Flewog)	SJ381488	30/04/2007	Graham, A.N. & J.E.	2		Wrexham Industrial Estate	netted for close examination.	D0135/001/02 (2196430)	LBAP[GWY, SNP]	1
Coenagrion puella (Azure Damselfly/Mursen Las Asur)	SJ381488	25/05/2004	Rob W. Whitehead	5 Adult		Spectrum Ind Estate - nr Calypso		D0067/001/01 (637185)	LBAP[SNP]	3
Libellula depressa (Broad-bodied Chaser/Picellwr Praff)	SJ381488	25/05/2004	Rob W. Whitehead	1 Adult		Spectrum Ind Estate - nr Calypso	m.	D0067/001/01 (637186)	LBAP[SNP]	3
Pyrrhosoma nymphula (Large Red Damselfly/Mursen Fawr Goch)	SJ381488	25/05/2004	Rob W. Whitehead	20 Adult		Spectrum Ind Estate - nr Calypso		D0067/001/01 (637184)	LBAP[SNP]	3
Pyrrhosoma nymphula (Large Red Damselfly/Mursen Fawr Goch)	SJ381488	30/04/2007	Graham, A.N. & J.E.	2 to 9		Wrexham Industrial Estate		D0135/001/02 (2196501)	LBAP[SNP]	1
Bombus (Melanobombus) lapidarius (An Insect - Hymenopteran)	SJ3849	04/07/2000	Mike Howe		Field Observation	The Oaks		D0217/001/01 (1057404)	LBAP[FLI]	3
Bombus (Thoracombus) pascuorum (An Insect - Hymenopteran)	SJ3849	04/07/2000	Mike Howe		Field Observation	The Oaks		D0217/001/01 (1057385)	LBAP[FLI]	3
Buteo buteo (Common Buzzard/Bwncath)	SJ3849	17/03/2009	Norman Hallas	2		Wrexham, Industrial Estate, W		D1297/002/01 (3407863)	Bonn, CITES, LBAP[CON]	
Buteo buteo (Common Buzzard/Bwncath)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate	H Activity.	D1297/002/01 (3407802)	Bonn, CITES, LBAP[CON]	
Carduelis chloris (European Greenfinch/Llinos Werdd)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate		D1297/002/01 (3412048)	Bern, LBAP[CON]	
Parus major (Great Tit/Titw Mawr)	SJ3850	15/06/2008	Norman Hallas			Wrexham, Industrial Estate		D1297/002/01 (3413432)	Bern, LBAP[CON]	
Phylloscopus collybita (Common Chiffchaff/Siff-Siaff)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate	S Activity.	D1297/002/01 (3408029)	LBAP[CON]	
Prunella modularis (Hedge Accentor/Llwyd y Gwrych)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate		D1297/002/01 (3414146)	Bern, LBAP[CON]	
Sylvia atricapilla (Blackcap/Telor Penddu)	SJ3850	15/06/2008	Norman Hallas	1		Wrexham, Industrial Estate		D1297/002/01 (3405387)	LBAP[CON]	
Buteo buteo (Common Buzzard/Bwncath)	SJ3949	16/04/2008	Norman Hallas	2		Wrexham, Industrial Estate, E	P Activity.	D1297/002/01 (3407780)	Bonn, CITES, LBAP[CON]	
Carduelis chloris (European Greenfinch/Llinos Werdd)	SJ3949	16/04/2008	Norman Hallas	1		Wrexham, Industrial Estate, E	S Activity.	D1297/002/01 (3412037)	Bern, LBAP[CON]	
Cyanistes caeruleus (Blue Tit/Titw Tomos Las)	SJ3949	16/04/2008	Norman Hallas	2		Wrexham, Industrial Estate, E		D1297/002/01 (3405686)	Bern, LBAP[CON]	
Parus major (Great Tit/Titw Mawr)	SJ3949	16/04/2008	Norman Hallas	1		Wrexham, Industrial Estate, E		D1297/002/01 (3413417)	Bern, LBAP[CON]	
Phylloscopus collybita (Common Chiffchaff/Siff-Siaff)	SJ3949	16/04/2008	Norman Hallas	4		Wrexham, Industrial Estate, E	S Activity.	D1297/002/01 (3408016)	LBAP[CON]	
Ranunculus trichophyllus (Thread-leaved Water-crowfoot/Crafanc-y-Frân Feinddail)	SJ3950	1979	Anon					D0216/001/02 (1104264)	LBAP[GWY], LI[VC52]	1

Statutory Sites intersecting 1000m buffer	None
Wildlife Sites within 1000m (C=Candidate)	Wrexham Industrial Estate (197m)
NWWT Reserves within 1000m	None
RSPB Reserves within 1000m	None
RIGS within 1000m	None
Habitat type at application grid reference	Buildings
Habitat type(s) within 1000m	Amenity Grassland, Arable, Bare Ground, Buildings, Dense Scrub, Ephemeral/Short Perennial, Gardens, Improved Grassland, Not Accessed Land, Planted Broad-leaved Woodland, Running Water, Semi-improved Neutral Grassland, Semi-natural Broad-leaved Woodland, Standing Water, Tall Ruderal Herb
Ancient Woodland within 1000m	Ancient and Semi Natural Woodland

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, **LI** - Locally Important Species, identified by the County Recorder as being of particular importance in the specified Vice-County (see below for a list of Vice-Counties) N.B: Only available for certain species groups and certain areas, **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

Vice-Counties

48 - Meirionethshire, **49** - Caernarfonshire, **50** - Denbighshire, **51** - Flintshire, **52** - Anglesey

Contact Us

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