



ETIVE ECOLOGY Ltd

**Proposed Solar Scheme
Pickhill Bridge Farm, Wrexham
Preliminary Ecological Appraisal**

Produced for:



February 2015

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Report Version	Written by	Date	Reviewed by	Date
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1 INTRODUCTION

1.1 The Scheme

1.1.1 Etive Ecology Ltd was commissioned by Caulmert Ltd in December 2014 to undertake an ecological appraisal of a parcel of land belonging to Pickhill Bridge Farm near Cross Lanes, Wrexham. The site is centred on National Grid Reference SJ 387 486.

1.1.2 The site is currently used for pastoral farming, with grazing sheep present at the time of survey. The site is proposed for the installation of solar panels, covering a total area of approximately 6.8ha. The anticipated energy generating capacity of the solar array is up to 4MWp.

1.2 Scope of this Report

1.2.1 The site assessment is based on the *Guidelines for Preliminary Ecological Appraisal* (Institute of Ecology and Environmental Management, 2012).

1.2.2 The aim of the assessment is to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development site. To achieve this, the following steps were taken:

- The desk study area and field survey area (including the 'zone of influence' of the scheme) have been identified
- A desk study has been undertaken, including obtaining local biological records which are presented in **Appendix C**
- Baseline information on the site and surrounding area has been recorded through an 'extended Phase 1 survey', including a Phase 1 habitat survey (JNCC 2010) and consideration of notable and/or protected habitats and species
- The ecological features present within the survey area have been evaluated, where possible (IEEM, 2006)
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act [WCA]) have been identified
- Potential constraints to the proposed development have been identified
- Recommendations for further survey have been made
- Mitigation recommendations have been provided based on current information.

1.2.3 The Phase 1 Habitat Map of the survey area is included together with associated target notes in **Appendix A**. Photographs taken during the survey are presented in **Appendix B**.

2 METHODOLOGY

2.1 Desk Study

2.1.1 A desk study was undertaken to identify any nature conservation sites and/or any relevant protected or notable species records within 1km of the site.

2.1.2 The following sources of information were utilized:

- CCW Protected Sites Map (<http://www.ccg.gov.uk/interactive-maps/protected-sites-map.aspx>)
- Wrexham County Borough Council website (<http://www.wrexham.gov.uk/>)
- National Biodiversity Network (NBN) Gateway website (<http://data.nbn.org.uk/>)
- Natural Resources Wales website (<http://naturalresourceswales.gov.uk/>)

2.1.3 A data search enquiry was made to the North Wales Environmental Information Service (COFNOD), for records of all Protected and Priority Species, other species of Conservation Concern and Locally Important species within 1km of the site. Locally designated sites, ancient woodland inventories and Wales Biodiversity Partnership Priority Habitats were also included within the search enquiry.

2.2 Extended Phase 1 Habitat Survey

2.2.1 The site visit was made on 7th January 2015.

2.2.2 The survey comprised an extended Phase 1 Habitat Survey. This survey method follows the habitat assessment and classification procedure outlined by the Handbook for Phase 1 Habitat Survey (JNCC, 2010), whereby all habitats are identified, described and mapped using a standard classification.

2.2.3 The extended component of the survey is developed from the methodology described in Guidelines for Baseline Ecological Assessment (IEA, 1995). All habitats and features within the survey area are assessed for their potential to support legally protected or notable species (nationally or locally).

2.2.4 These species include:

- **Amphibians:** ponds within 250m of the site were considered for their suitability to support a range of amphibians, including great crested newts (GCN).
- **Reptiles:** the site was assessed for suitable habitats including rough grassland, allotments, brownfield sites and habitat edges in general which would provide cover, basking and foraging habitat for reptile species.
- **Otters:** watercourses within 100m of the site were checked for signs of otter and assessed for their suitability to support the species.
- **Water voles:** watercourses on site were checked for signs of water vole presence and assessed for their potential to support the species.
- **Bats:** all trees and structures on site were thoroughly inspected for signs of use by bats or for their suitability to support roosting bats at any point during the year. Trees and structures were then categorised for their potential to support roosting bats as per the *Bat Survey – Good Practice Guidelines* (Hundt, L., 2012).

- **Birds:** the site was assessed for suitable habitats for nesting birds, including habitats suitable for ground-nesting species.
- **Badgers:** all habitats within 30m of the site were surveyed where possible to identify the presence of any setts or signs of badger activity.
- **Invasive plant species:** this assessment does not constitute a full Schedule 9 species survey. The potential for any Schedule 9 species was assessed and any species that were encountered were mapped and noted.

2.3 Assessment of Ecological Value

2.3.1 The value and sensitivity of ecological features was determined based on the guidance given in *Guidelines on Ecological Impact Assessment* (IEEM, 2006). Individual ecological receptors (habitats and species that could be affected by the development) were assigned levels of importance for nature conservation in one of the following categories:

- International
- UK
- National
- County
- District;
- Local, or
- within the immediate zone of influence or site only.

2.3.2 For a given receptor, determination of value includes consideration of the size, secondary or supporting value/function, conservation status and quality of the species or feature.

2.4 Limitations

2.4.1 The Phase 1 Habitat survey was undertaken outside of the recommended survey season. However, such is the nature of the site and its current land-use that no significant or rare species of flora are likely to be present.

2.4.2 All semi-natural habitat directly connected to the site was accessible at the time of survey. There are therefore considered to be no significant limitations to the undertaking or accuracy of the Phase 1 Habitat survey.

3 RESULTS

3.1 Desk Study

Designated Sites

3.1.1 There are no statutory sites for nature conservation located within 1km of the site.

3.1.2 There are two non-statutory sites for nature conservation located within 1km of the site:

Wrexham Industrial Estate Local Wildlife Site (LWS); located 100m to the northeast of the site. A former industrial site which forms one of a network of sites across the Wrexham Industrial Estate (WIE) supporting species such as water vole, otter, bats, breeding birds, GCN and locally important invertebrate assemblages.

Peter's Dingle LWS; located 400m to the south of the site. The designation covers a wooded riparian corridor extending ~750m in length and including stands of ancient woodland.

3.1.3 There are four blocks of Ancient semi-natural Woodland located within 1km of the site, all of which are at least 400m to the south of the site and lie alongside the water-course corridor.

Species Records

3.1.4 A full copy of the records provided by COFNOD is found in **Appendix C**. A summary of the key records is given below:

- Amphibians; multiple records of GCN from ponds throughout the search radius (1992 - 2012), common frog (1992), smooth newt (2012)
- Bats; pipistrelle bat (2005), whiskered bat (1999).
- Birds; cuckoo (2013), skylark (2005), grey partridge (2005), barn owl (2005), lapwing (2005), linnet (2011), grasshopper warbler (2011), song thrush (2003), house sparrow (2004)
- Mammals; otter (2003), badger (2007)
- Reptiles; slow worm (pre-2009), adder (pre-2009)
- Invertebrates; various S42 species of invertebrate

3.1.5 GCN have previously been recorded within the site boundary in 1992 (Pond 1) and in ponds surrounding the site also in 1992 (Ponds 3, 6 and 7). It is also recognised that the Wrexham area is regarded as one of the strongholds for GCN within Wales, due primarily to the high density of ponds. The former Countryside Council for Wales identified the northeast of Wales as one of the most important regions for GCN in the UK.

NERC Act, Section 42 List

3.1.6 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'Biodiversity duty'.

3.1.7 The Section 42 list has been produced identifying those habitats and species of Principal Importance in Wales. The following relevant habitats and species are found on this list:

Table 3.1.1 Relevant Section 42 Habitats/Species

Habitats	Species
Hedgerows	Brown hare
Arable field margins	Otter
Ponds	Numerous bats
	Breeding & wintering birds
	Numerous invertebrates
	Great crested newt

Wrexham Local Biodiversity Action Plan (LBAP)

- 3.1.8 Action plans have been produced for the following habitats and species under the Wrexham LBAP; ponds, lowland farmland, barn owl, bats, brown hare, farmland birds and great crested newts.

3.2 Phase 1 Habitat Survey

- 3.2.1 The walkover survey was undertaken by Russell Grey (BSc, CEnv, MCIEEM). The survey was undertaken on a rainy and overcast day but there were no constraints to the survey of the site itself, with access permitted to all land within the survey area. Access beyond the site boundary was limited but the majority of adjacent land was visible.
- 3.2.2 The site is located approximately 5km east of Wrexham and approximately 200m south of the edge of Wrexham Industrial Estate (WIE). The site comprises a single large field of pasture land on the south side of the Afon Clywedog (Target Note 1) and access is via a farm track off the B5130 at Talwrn (Target Note 2). The site is surrounded by grazing pasture on all sides, with the river corridor to the north (Target Note 3), a single pond within the site boundary (Target Note 4) and numerous other ponds scattered within 250m of the site.

Habitats

- 3.2.3 A total of 12 habitats were identified within, or immediately adjacent to, the site boundary. These habitats are mapped in **Figure 1 (Appendix A)**, detailed in the associated Target Notes and summarised below;

Broadleaved semi-natural woodland

There is no semi natural woodland within the site boundary but there are two blocks within 250m of the site.

The first is a stand of beech and sycamore woodland located beside the access track north of Parkey Lodge. The woodland floor is open to grazing by livestock on the adjacent improved pasture and as a result the under-storey comprises just short grass (Target Note 6).

The second is the river corridor of the Afon Clywedog to the north of the site. The riparian corridor is dominated by scattered broadleaved trees and broadleaved woodland consisting of alder, willows and sycamore (Target Note 3).

Dense / continuous scrub

Dense bramble scrub is found adjacent to Pond 2 (Target Note 7) and adjacent to the gated site access off the farm track leading from Parkey Lodge (Target Note 8).

Scattered scrub

Scattered bramble and dog rose scrub is found alongside the western field boundary (Target Note 9) and beside Pond 2 (Target Note 7).

Scattered broadleaved trees

There are a number of scattered broadleaved trees found across the site, all located within the field boundaries. These are all mature or semi-mature specimens, as described below:

- Two mature oaks to ~12m height, located 10m from the access track across the field adjacent to the site (Target Note 5).
- Two semi-mature oaks ~10m in height, located either side of the existing access into the site from the west (Target Note 10).
- Cluster of three mature oaks, ~12-15m in height, located at the northwest field corner around an existing field access (Target Note 11).
- Mature oak tree to ~12m height located within a species-poor hedgerow towards the south-eastern corner of the site (Target Note 12).
- Mature oak tree to ~15m and with ivy cover to a height of ~8m on the main trunk, located within the southern boundary hedgerow (Target Note 13).
- Semi-mature oak to ~10m height and with sparse ivy cover to 5m, located within the western boundary hedgerow (Target Note 14).
- Mature oak to ~15m height, located within the western boundary hedgerow (Target Note 15).
- Mature oak to ~15m height located within a hedgerow boundary near to the southwest corner of the site (Target Note 16).

Improved grassland

The site is dominated by improved grassland pasture, grazed by sheep at the time of survey. The main field on site comprises rank grassland species such as perennial rye grass, meadow grasses and occasional crested dogstail, and occasional creeping thistle and broadleaved dock (Target Note 1).

The site is surrounded by further improved grassland fields (Target Note 17), with those to the north being noticeably wetter as a result of the nearby Afon Clywedog.

Tall ruderal

The farm track between Parkey Lodge and the site access is lined by rank tall ruderal vegetation including common nettle, hogweed and occasional willowherb (Target Note 2).

There is an area of rank vegetation located within the middle of the improved pasture to the south of the site, dominated by creeping thistle and various umbellifers (Target Note 17).

Open water

There is one pond within the site boundary and a further seven ponds located within 500m of the site. All ponds are described below and mapped on Plate 3.3.1 in Section 3.3:

Pond 1; located on site and used as a water supply for grazing livestock. The pond is broadly circular, with a diameter of ~10m. The margins are poached but include bulrush, soft rush, floating sweet-grass and meadow buttercup. There is a single goat willow tree on the southern edge (Target Note 4).

Pond 2; located 20m south of the site, this is a broadly rectangular pond with mature trees providing shade down the west bank and dense scrub along the east bank. There is very little marginal vegetation and deep sediment and leaf litter within the pond (Target Note 7).

Pond 3; located 200m to the south of the site and adjacent to a hedgerow corridor. The pond is shaded by hedgerow trees along the west bank and has scattered scrub and rush dominated margins along the east bank. A large number of waterfowl were disturbed from the pond during the inspection.

Pond 4; located 200m to the southwest of the site and adjacent to a hedgerow corridor. The pond is shaded by hedgerow trees but has extensive marginal vegetation.

Pond 5; located 350m to the south of the site. The pond is on the edge of an arable field and connected to the adjacent hedgerow. Dense broadleaved scrub surrounds the pond, providing full shade, a high volume of leaf litter and reducing water level.

Pond 6; located 350m to the southwest of the site. The pond is broadly rectangular and is surrounded by scrub and tall ruderal vegetation. Marginal vegetation includes soft rush willowherbs, with occasional willows along the banks.

Pond 7; located within the grounds of Parkey Lodge and approximately 400m to the southwest of the site. The pond could not be accessed at the time of survey but appears to be a large ornamental water-body in the rear garden of the farm property.

Pond 8; located 300m to the northwest of the site and within the riparian zone of the Afon Clywedog. The pond could not be accessed at the time of survey due to the extensive and in places deep standing water surrounding the pond but it is located within dense scrub and scattered trees with areas of inundated vegetation.

Running water

The Afon Clywedog flows west to east approximately 50m to the north of the site (Target Note 3). The riparian corridor is comprised of broadleaved trees and woodland. The water-course is considered to be a main river and flows into the River Dee to the east. It is of moderate to good water quality and as such it is likely to be an important local wildlife corridor.

Arable

The northern portion of the site was under the remnants of a crop at the time of survey, thought to be corn (Target Note 18). Aerial imagery shows this area was previously improved

grassland but has been recently converted to provide crop, perhaps as cover for locally reared pheasants.

Species poor hedge (intact)

The field boundaries around the site are predominantly species-poor hedgerows comprised of hazel and blackthorn with frequent bramble and ivy beech. Ditches run beneath the hedgerows along the north-western (Target Note 9) and south-eastern boundaries (Target Note 20).

Species poor hedge and trees

A small section of the western boundary has been classed as hedge with trees to reflect a cluster of young oaks and established blackthorn and hazel.

Fence

A stock-proof fence surrounds the arable land in the northern portion of the site (Target Note 18).

3.3 Protected Species

- 3.3.1 The following text describes the suitability of the site to support various legally protected species, including any direct observations made during the site survey.

Amphibians

- 3.3.2 There is a single pond within the application site boundary and a total of seven ponds located within 500m, as described above. The locations of these ponds are shown on Plate 3.3.1 below.
- 3.3.3 Two of these ponds were not accessible at the time of survey but all have been assessed using the Habitat Suitability Index¹ (HSI) to determine their potential to support great crested newts (GCN). Conservative values have been used where actual values are unknown. The findings of the HSI assessment are presented in Table 3.3.1 below.

Table 3.3.1 HSI Assessment Summary

Pond	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	HSI
1	1	0.2	0.9	0.67	1	0.67	1	0.85	0.33	0.4	0.62
2	1	0.4	0.9	0.67	1	0.67	1	0.85	0.67	0.3	0.70
3	1	0.4	0.9	0.67	1	0.33	1	0.85	0.67	0.4	0.67
4	1	0.2	0.9	0.67	1	0.67	1	0.85	0.67	0.6	0.70
5	1	0.2	0.5	0.33	0.2	1	1	0.85	0.67	0.3	0.51
6	1	0.2	0.9	0.67	1	0.67	1	0.85	0.67	0.4	0.67
7	1	0.4	0.9	0.67	1	0.67	0.67	0.85	0.67	0.7	0.73
8	1	0.05	0.5	1	0.6	0.67	0.67	0.85	1	0.6	0.57

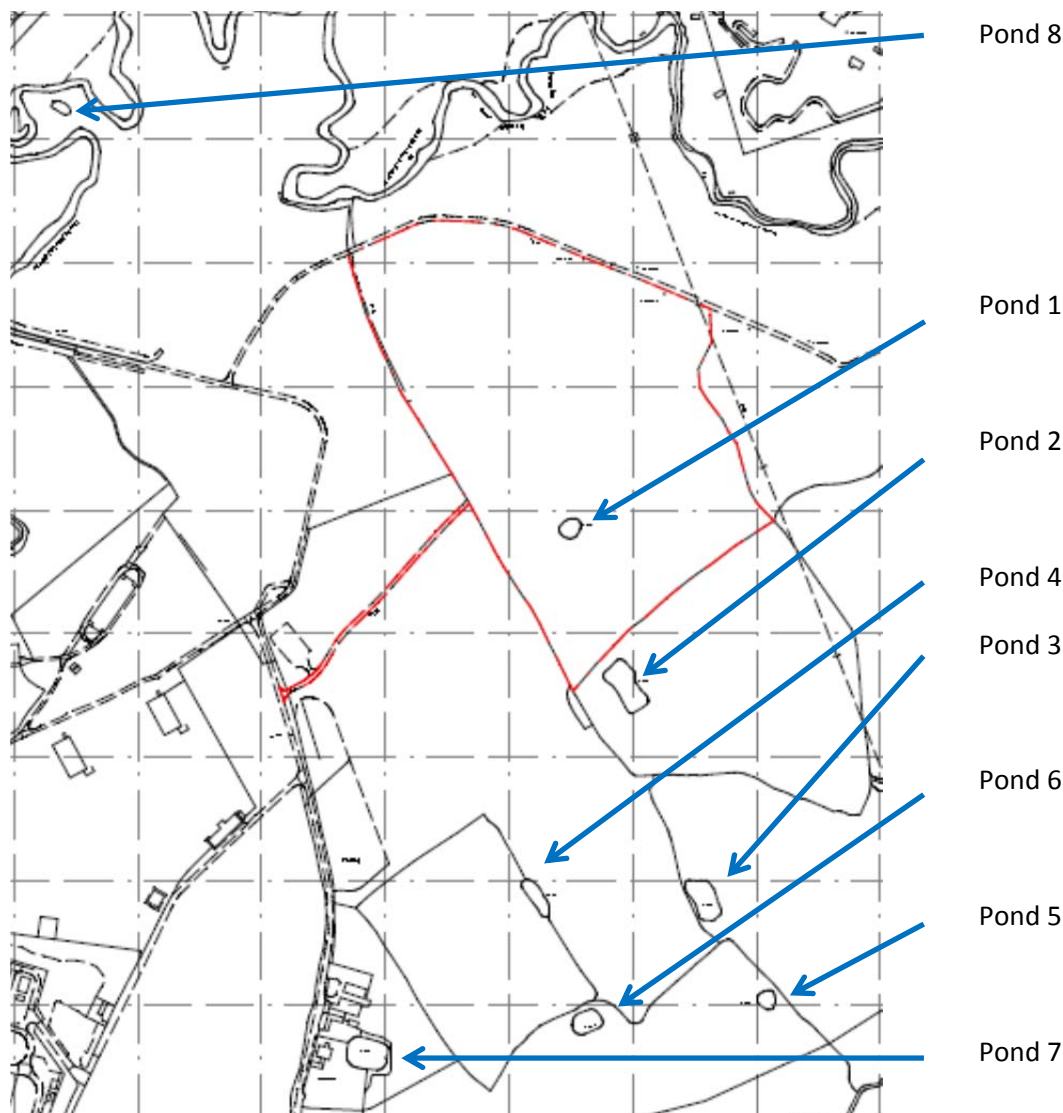
- 3.3.4 A qualitative guide has been developed to assist the interpretation of this Index, where a score of <0.5 is poor, 0.5-0.59 is below average, 0.6-0.69 is average, 0.7-0.79 is good and

¹ The Habitat Suitability Index - a ten score system used to rapidly assess the suitability of ponds for GCN based on ten environmental parameters that can be scored objectively. The criteria include pond size, water quality, pond shading and the area of suitable adjacent terrestrial habitat (Oldham et al, 2000).

>0.8 is excellent. Therefore Ponds 2, 4 and 7 are considered to offer good quality habitat for breeding GCN, Ponds 1, 3 and 6 offer average quality habitat and Ponds 5 and 8 offer below average quality habitat.

- 3.3.5 The terrestrial habitat on site comprises a mix of low value improved grassland (5.6ha) and arable land (1.4ha), and high value hedgerow corridors (1.1km). Land adjacent to the site is comprised of a similar type and ratio of habitats, with occasional pockets of higher value habitats such as scrub, woodland and rank tall ruderal patches scattered across the local landscape. The Afon Clywedog is considered to pose a major barrier to GCN movements, thus disconnecting the site from ponds in and around the WIE.

Plate 3.3.1 Pond Locations



- 3.3.6 There are GCN records from 1992 corresponding to Pond 1 on site and Ponds 3, 6 and 7 within 500m of the site. The most recent record for the species within 1km of the site is from 2012, approximately 600m to the west of the site. It should therefore be assumed that GCN are present on site².

² In agreement with Wrexham CBC Ecology Officer Emma Broad (pers comm. 13th January 2015).

Badgers

- 3.3.7 The site comprises primarily open grassland pasture which is grazed by sheep, and a boundary of species-poor hedgerows. These grasslands may form part of a badger's foraging territory as they can support moderate densities of terrestrial invertebrates. Likewise, hedgerows may be suitable sites for badger setts provided they offer sufficient shelter and good corridor links. The hedgerows on site are intact and continuous but are predominantly narrow and well-managed, thus reducing their suitability for locating setts. No evidence of badger activity – latrines, foraging signs, footprints – was found on site during the walkover survey.
- 3.3.8 Habitats adjacent to the site are of a similar low value, with the land use dominated by grazed pasture. The woodland block to the west of the site is also grazed and offers no suitable cover to protect a sett and the woodland corridor alongside the Afon Clywedog is also likely to be seasonally wet and an unsuitable location for a badger sett. No evidence of any badger activity was noted within 100m of the site, although badgers have been recorded within 1km of the site identified during the desk study.
- 3.3.9 In summary, no badgers setts or any other evidence of badger activity have been found within 100m of the site and the species is considered to be likely absent from the development footprint.

Bats

Bat Roost Potential

- 3.3.10 There are a number of trees identified on or immediately adjacent to the site with Bat Roost Potential (BRP)³. These trees include two semi-mature oaks either side of the existing site access (Target Note 10, Category 2 & 3), a cluster of three mature oak trees in the northwest corner of the site (Target Note 11, Category 2-3), three mature hedgerow oak trees in the southern boundary (Target Notes 12, 13 & 16, Category 1-2) and two hedgerow oaks trees in the western boundary (Target Notes 14 & 15, Category 2-3).

Foraging / Commuting Value

- 3.3.11 The improved grassland pasture which covers the site is of low value to foraging and commuting bats as it comprises a species-poor sward and is likely to support a low density and diversity of winged insect prey for bats. The hedgerow corridors are assessed to be of low to moderate intrinsic value to commuting bats as they are species-poor and mostly less than 1m in width but they are continuous in length and include a frequent mature trees. The pond on site is unlikely to be of any significant value as it is isolated within the centre of the field, is of a small size and lacks marginal and surrounding vegetation.
- 3.3.12 There are records of pipistrelles and whiskered bats within 1km of the site, relating to the wooded riparian corridor to the south and the industrial estate to the north. These records are indicative that the area supports various species of bat. Overall, the value of the site for foraging and commuting bats within the application site is low.

³ **Category 1** = Trees with definite bat potential, supporting suitable features capable of supporting larger roosts and/or features with potential to be used by single bats. **Category 2** = Trees with no obvious potential, although tree is of an age and size that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have some limited potential to support roosting bats (Hundt, L., 2012).

Birds

- 3.3.13 The site offers limited opportunities for nesting birds, primarily associated with the hedgerow network around the boundary of the site. These hedgerows may support species such as dunnock, blackbird or whitethroat. Other farmland bird species such as skylark or reed bunting are considered to be unlikely to be breeding on site, owing to the lack of suitable nesting habitat. The pond is also considered to be unsuitable for breeding waterfowl owing to its small size, lack of sufficient marginal vegetation and disturbance from grazing livestock. Overall the site is considered to be of low value to nesting birds.
- 3.3.14 During the winter period the site may be used by foraging flocks of thrushes, fieldfare and redwing which would utilise both the grassland and the berry-bearing hedgerows.
- 3.3.15 Records for the area surrounding the site include species of conservation concern such as skylark, grey partridge, barn owl and linnet. Bird activity observed during the walkover survey was limited by the poor weather conditions and comprised the following species;
- Blackbird
 - Buzzard
 - Mallard
 - Carrion crow
 - Fieldfare (*Red listed*)
 - Goldfinch
 - Great black-backed gull (*Amber listed*)
 - Pied wagtail
 - Dunnock (*Amber listed*)
 - Wren
 - Starling (*Red listed*)

Otters

- 3.3.16 The Afon Clywedog flows to the north of the site and comes within 25m of the northern site boundary. This is a main water-course and comprises a mature and well established riparian corridor of broadleaved trees, wet woodland and scrub. The channel itself is up to 2m wide in places and has occasional marginal and bank-side aquatic vegetation cover. The river flows to the east and meets the River Dee approximately 3km to the southeast. No evidence of otters was found along the water-course within 100m of the site, but the riparian zone was considered to be potentially suitable for otters to forage and commute along. The application site supports no habitats of any potential value to otters.
- 3.3.17 There are records for otters within 1km of the site and on the Afon Clywedog, identified in the data search. In summary, the channel is considered likely to support otters although no evidence of the species was found within 100m of the site during the walkover survey. The species is considered to be of negligible value to otters and the species is considered to be absent from the development footprint.

Reptiles

- 3.3.18 The open expanse of grazed improved pasture which covers much of the application site is of very low value to all species of reptile as it suffers from regular disturbance from livestock and offers a short sward of a uniform length and poor structure. The field boundaries are of

marginally greater value to reptiles such as grass snake or slow worm, as corridors for movement. However, adjacent land is of a similar habitat composition to that found on site and the overall suitability to support reptiles is low.

- 3.3.19 No reptiles were observed during the site visit, although direct sightings are rare even in good habitat. There are records of slow worm and adder reported 800m to the northwest of the site from 1999. Overall, it is considered that reptiles are potentially present in the local area but are likely absent from the site.

Water Voles

- 3.3.20 There are no water-courses found within the application site. The pond on site is considered to be unsuitable for water voles due to its isolation from any suitable water vole habitat and the impacts of grazing livestock on the pond margins. The Afon Clywedog is also considered to be unsuitable as it lacks the marginal and bankside vegetation necessary to support water voles.
- 3.3.21 There are no records of water vole within 1km of the site. There is no suitable water vole habitat on site and no evidence of water voles was found on site or in the adjacent water-course during the survey. Therefore the species is considered to be absent from the site and likely absent from surrounding land.

Dormice

- 3.3.22 The hedgerow network on and around the site has very low potential to be used by dormice. The hedgerows are regularly managed and trimmed making them narrow and species poor. There is also a lack of suitable nearby woodland habitat which would be necessary to support a sustainable local population of the species.
- 3.3.23 There are no records of dormice within 1km of the site. No evidence of dormice was found during the survey, although evidence of feeding remains is more likely to be found within core habitat, which is not present on or near to the site. However, the low value habitat means that the species is considered to be absent from the site.

3.4 Notable Species

- 3.4.1 No additional notable species of fauna have been found on site during the survey effort other than those described above. However, the habitats present on and immediately adjacent to the site are suitable to support brown hare, a priority species listed on the Section 42 list of the NERC Act.
- 3.4.2 No nationally rare or locally important species of flora were identified during the site visit. None are anticipated as being likely to be present owing to the historic land use and management of the site.

3.5 Invasive Species

- 3.5.1 No non-native invasive species (NNIS) of flora or fauna listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), were found to be present on site during the survey.

3.6 Key Ecological Receptors

3.6.1 The findings of the extended Phase 1 Habitat Survey indicate that the key ecological receptors for the site are;

- Habitats – the intact lengths of hedgerow (including hedgerow trees) and Pond 1 located on the site are considered to be habitats of *Local value*.
- Amphibians – the site is potentially of *District value* to GCN as it includes a pond with potential to support breeding GCN. The hedgerows surrounding the site are also likely to support GCN during their terrestrial phase.
- Bats – site is potentially of *District/County value* to roosting bats, with numerous potential roost sites located within mature trees in and adjacent to the site's boundaries. The habitats on site are of *value within the zone of influence only* to foraging bats, depending on whether a roost is located nearby.

3.6.2 The protected species / ecological receptors not bullet-pointed above are considered to be of *less than local value*.

4 DISCUSSION

4.1 Proposed Development

- 4.1.1 The proposed scheme is to install an array of photovoltaic cells across the application site. The proposed layout of the solar scheme is shown in **Figure 2 (Appendix A)**.
- 4.1.2 The solar panels will stand on 2m tall metal rods fixed at each corner and driven into the ground. The installation of the panels is therefore relatively quick and simple and with minimal ground disturbance.
- 4.1.3 Four inverter / transformer buildings will be installed within the field corners of the application site to convert the generated power for transmission off-site. The locations of these building are shown on **Figure 2** and sit within either improved grassland pasture or arable land.
- 4.1.4 Access to the site for construction and installation will be via the existing field access in the western boundary of the site, near Target Note 10. A ~5m section of hedgerow will need to be removed to allow access and egress to the site during the construction phase. This will be reinstated once construction is complete.
- 4.1.5 Aside from the small section of hedgerow removal noted above, the only habitat being subject to direct impacts is the improved grassland and arable field within the site boundary. The whole site will be used by grazing livestock during the operational phase.
- 4.1.6 The solar farm will be surrounded by a security fence offset from the existing site boundaries by 7m. This hedgerow buffer zone provides an opportunity for biodiversity enhancement through the over-sowing of wildflower seed and a reduced grazing regime which encourages flowing plants and the establishment of a valuable habitat corridor.
- 4.1.7 A 12m buffer zone will be placed around Pond 1 to protect it from installation impacts and as an enhancement opportunity. The buffer zone will be marked by stock-proof fencing which will protect the pond margins from the poaching impacts of livestock. An access for grazing livestock to continue to drink from the pond will be provided.

4.2 Likely Impacts

- 4.2.1 The likely impacts of the scheme (as described above and illustrated in **Figure 2**) are given below for each of the ecological receptors identified in **Section 3.6**.

Designated Sites

- 4.2.2 No direct or indirect impacts are anticipated on either of the two non-statutory designated nature conservation sites (LWSs) located within 1km of the site as a result of the proposed scheme. WIE LWS is located on the opposite side of the Afon Clywedog which disconnects many of the associated terrestrial species found on the LWS from the application site. Peter's Dingle LWS is 400m from the application site and is designated primarily for its habitats which will be unaffected. Due to these reasons, as well as the low impact nature of the installation process, there will be no impacts on designated habitats.

Habitats

- 4.2.3 The scheme will result in the loss of a ~5m of species-poor hedgerow at the site entrance, located within the western site boundary, which will be reinstated once construction is complete. All other boundary trees and hedgerows will be retained and protected under the scheme.
- 4.2.4 The scheme will result in the covering of the grassland and arable fields with solar panels but will not result in the loss of these semi-natural habitats as grass will continue to grow beneath the panels as they allow sufficient sunlight to reach the ground surface when operational.
- 4.2.5 There will be a permanent loss of habitat to the footprint of the four inverter/transformer kiosks, located one at each corner of the site. These kiosks cover an area of approximately 6m x 2.5m in size, with two located on improved grassland and two on arable land.
- 4.2.6 The scheme includes a 12m buffer zone around the existing pond on site and a 7m buffer zone around the site perimeter hedgerows, to protect these features from impacts and to allow opportunities for long-term enhancement in the biodiversity value of the site. These buffers create corridors for vegetation to establish and for semi-natural habitats to develop, which will be of benefit to a range of biodiversity interests.

Amphibians

- 4.2.7 The installation of the panels is considered to be a low impact activity which is anticipated to be of negligible risk to harming GCN. The improved grassland and arable land is judged to be of low value to the species and is not considered to be 'core' habitat.
- 4.2.8 The removal of a small section of hedgerow and the installation of four kiosks in the site corners poses a risk of harming GCN and also represents a permanent loss of a small area of habitat (65m²). The scale of these effects is uncertain at this stage and is dependent on the size of the GCN population found in ponds within 500m of the site. If the population is small, then the risk posed to GCN is also likely to be small, whereas a larger population would mean a higher risk of encountering GCN and the loss of habitat would be more significant.
- 4.2.9 The protection of Pond 1 and the hedgerow corridors which is incorporated in the proposed layout of the scheme represents a positive long term impact on the local GCN population. This protection, together with enhancement opportunities, may improve the quality of breeding habitat for GCN, the area of 'core' terrestrial habitat and the area and quality of habitat connectivity around the site.

Bats

- 4.2.10 With the exception of a small amount of hedgerow removal on the site's western boundary, all hedgerows and mature trees are to be protected during installation and retained post-installation, and as such no significant adverse impacts on the use of the site by bats are anticipated.
- 4.2.11 The loss of the grassland and arable fields as a foraging resource for bats is considered to be a very minor adverse effect as the value of this habitat is considered to be low. The less intensive grazing regime on these fields as a result of the solar scheme may even result in an

improved invertebrate assemblage associated with the site, which would increase the diversity and volume of prey items for bats. In addition, the hedgerow and pond buffers which will be applied to the site will allow these features to improve in terms of their biodiversity value.

4.3 Recommendations

- 4.3.1 The following recommendations are made with regards to the proposed details of the scheme and the likely impacts identified above.

Habitats

- 4.3.2 The 12m buffer zone around Pond 1 should be ring fenced using stock-proof fencing, leaving a 3m wide corridor allowing livestock to drink from a small portion of the pond margins. The enclosed habitat surrounding the pond should then be allowed to develop without grazing pressure. Livestock should be allowed to graze within the enclosure in the period August to September only, to control sward height. The pond itself should be allowed to naturally re-establish marginal vegetation around its perimeter. The young willow tree should be removed and the pond may be cleared of excess floating, emergent or submerged vegetation every five years if necessary.
- 4.3.3 The 7m buffer zone between the existing hedgerows and the security fence around the solar panels should be left un-grazed for the majority of each year so that a diverse grassland sward can re-establish itself. Grazing should be allowed in the August to September period to control sward height. The northern portion of the site which is currently ploughed agricultural land, should be over-sown with an arable field edge mix, comprising pollen and nectar-rich species such as red clover, common knapweed, bird's-foot trefoil and musk mallow.
- 4.3.4 It is recommended that a conservation management regime for the network of hedgerows around the border of the application site is put in place. The recommended regime is for the alternate annual cutting of hedgerows across the site, e.g. cut half the hedgerows one year and the remaining hedges the second year. This will improve the production of berries on berry-bearing species, will allow less responsive species such as blackthorn and spindle to establish and will allow for greater hedgerow growth and therefore increased habitat for wildlife. The cut should be undertaken in September each year. The size of the hedgerows on site should be allowed to increase by 1m in both width and height, to increase biodiversity capacity. In addition, alternate 25m lengths of the hedge-base should be left uncut during the two year rotation, to encourage hedge-base fauna.

Amphibians

- 4.3.5 In summary, the only potentially significant impacts on GCN are all associated with the removal of a length of hedgerow and the installation of the four kiosks, as they risk harming individual GCN. It is likely that these activities will require a derogation to be obtained from the Welsh Government, as GCN are protected under the Conservation of Habitats and Species Regulations (2010). In order to fully assess the magnitude of these potential impacts on GCN, a full suite of GCN surveys will be required to be undertaken.
- 4.3.6 It is therefore recommended that up to six survey visits are made to all of the ponds identified within 500m of the site during the period mid-March to mid-June, with at least

half of these surveys undertaken during the 'peak' breeding period of mid-April to mid-May. Three survey techniques should be employed on each survey visit and all survey work should be undertaken by a licensed GCN surveyor. Upon completion of the surveys, a GCN Mitigation Strategy should be prepared and submitted to Wrexham CBC for agreement, before a license application is made to the Welsh Government.

- 4.3.7 It is noted that, if GCN are found to be absent from the ponds surveyed, there will be no requirement for a license to be obtained. In this scenario, it is likely that a set of Reasonable Avoidance Measures (RAMs) will be sufficient in ensuring no GCN are harmed during the works.
- 4.3.8 The measures described in 4.3.2 for the protection and enhancement of Pond 1 should be implemented regardless of whether GCN are found to be present. These measures will contribute towards a positive change in the biodiversity value of the site.

Bats

- 4.3.9 It is recommended, as part of the enhancement works taking place as part of the scheme, that a total of 9 artificial bat boxes are installed on trees in suitable locations within the site boundary. These boxes will provide roosting opportunities which are not found within the existing stock of trees within the site boundaries.

5 CONCLUSION

- 5.1 Etive Ecology Ltd was commissioned by Caulmert Ltd to undertake an ecological assessment of an area of farmland belonging to Pickhill Bridge Farm near Cross Lanes, Wrexham. The site is proposed for the installation of a solar array scheme of up to 4MWp.
- 5.2 The assessment comprised an Extended Phase 1 Habitat survey, a desk study, a summary of likely impacts on the ecological value of the site and recommendations for the mitigation of these impacts and for enhancing the ecological value of the site post-development.
- 5.3 A desktop data search identified no statutory nature conservation sites within 1km of the development footprint but two locally designated Wildlife Sites within the same search area. Protected species records within the 1km search radius included numerous GCN records, a number of breeding bird species, otter, badger, reptiles and an assemblage of numerous Section 42 listed species of invertebrates.
- 5.4 The site is comprised of an area of improved grassland, the northern portion had been converted to an arable crop. There is a continuous species-poor hedgerow enclosing the site and a number of scattered broadleaved trees within or immediately adjacent to these boundaries. There is one pond within the application site and a further seven ponds within 500m of the site. The surrounding land use is dominated by sheep farming.
- 5.5 Although no specific protected species surveys have been undertaken, the site is assessed to have the potential to support GCN, roosting and foraging bats and a limited number of breeding birds. All of these species are likely to be found within or near to the hedgerow network or in the pond within the application site. Overall, the grassland field and arable land are generally deemed to be of low ecological value / potential.
- 5.6 The scheme will broadly entail the installation of solar panels across the grassland and arable land, together with the construction of four inverter / transformer buildings in the corners of the site. Access to the site will require the removal of ~5m of species-poor hedgerow on the site's western boundary, however this will be reinstated once construction is complete. In summary, the ecological impacts are anticipated to be minor, however further survey work is required in relation to GCN.
- 5.7 It is recommended that:
- A full suite of GCN surveys is carried out to confirm the currently presumed presence of GCN and to estimate a population size class so that the need for a derogation license for the scheme can be fully assessed.
 - The Buffer Zones surrounding the pond and protecting the hedgerows are demarcated and observed during installation.
 - Enhancement measures are put in place to improve the field margins and pond.
 - A Conservation Hedgerow Management Regime is implemented post-construction
 - A total of nine bat boxes are installed on hedgerow trees.
- 5.8 In conclusion, provided the recommendations included herein are followed, the scheme can be implemented in such a way that there should be no residual impacts on the ecological value of the site.

6 REFERENCES

Bat Conservation Trust, (2012), *Bat Surveys; Good Practice Guidelines*, 2nd edition. London.

Wrexham Local Biodiversity Action Plan (2002).

English Nature (2001), *Great Crested Newt Mitigation Guidelines*. August 2001.

Institute of Environmental Assessment, (1995), *Guidelines for Baseline Ecological Assessment*. E & FN Spon. London.

Joint Nature Conservation Committee, (2010), *Handbook for Phase 1 Habitat Survey – a technique for environmental audit*.

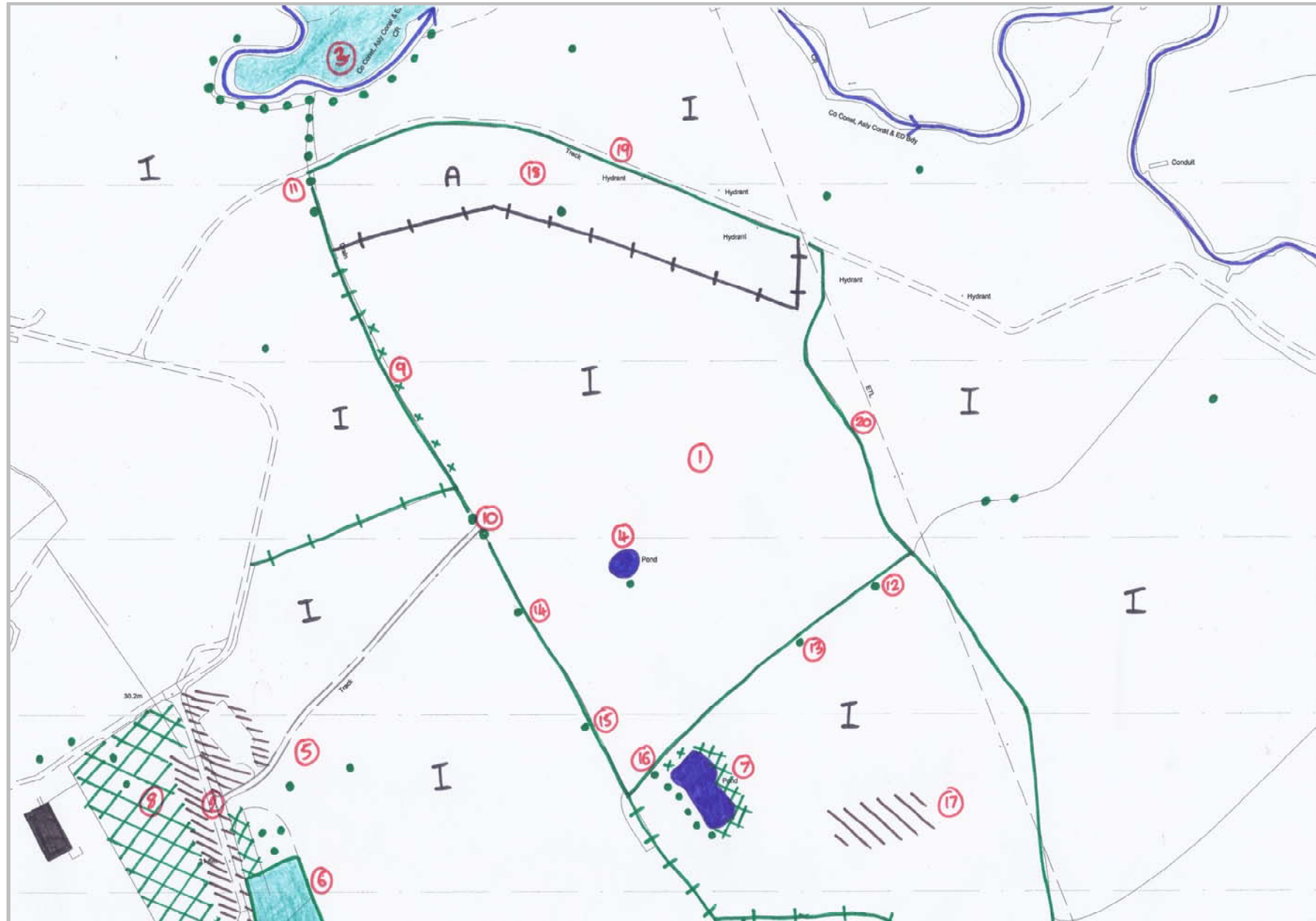
Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000), *Evaluating the suitability of habitat for the Great Crested Newt* (*Triturus cristatus*). *Herpetological Journal* 10 (4), 143-155.

Appendix A - Figure 1

Phase 1 Habitat Plan

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FIGURE 1 PHASE 1 HABITAT MAP



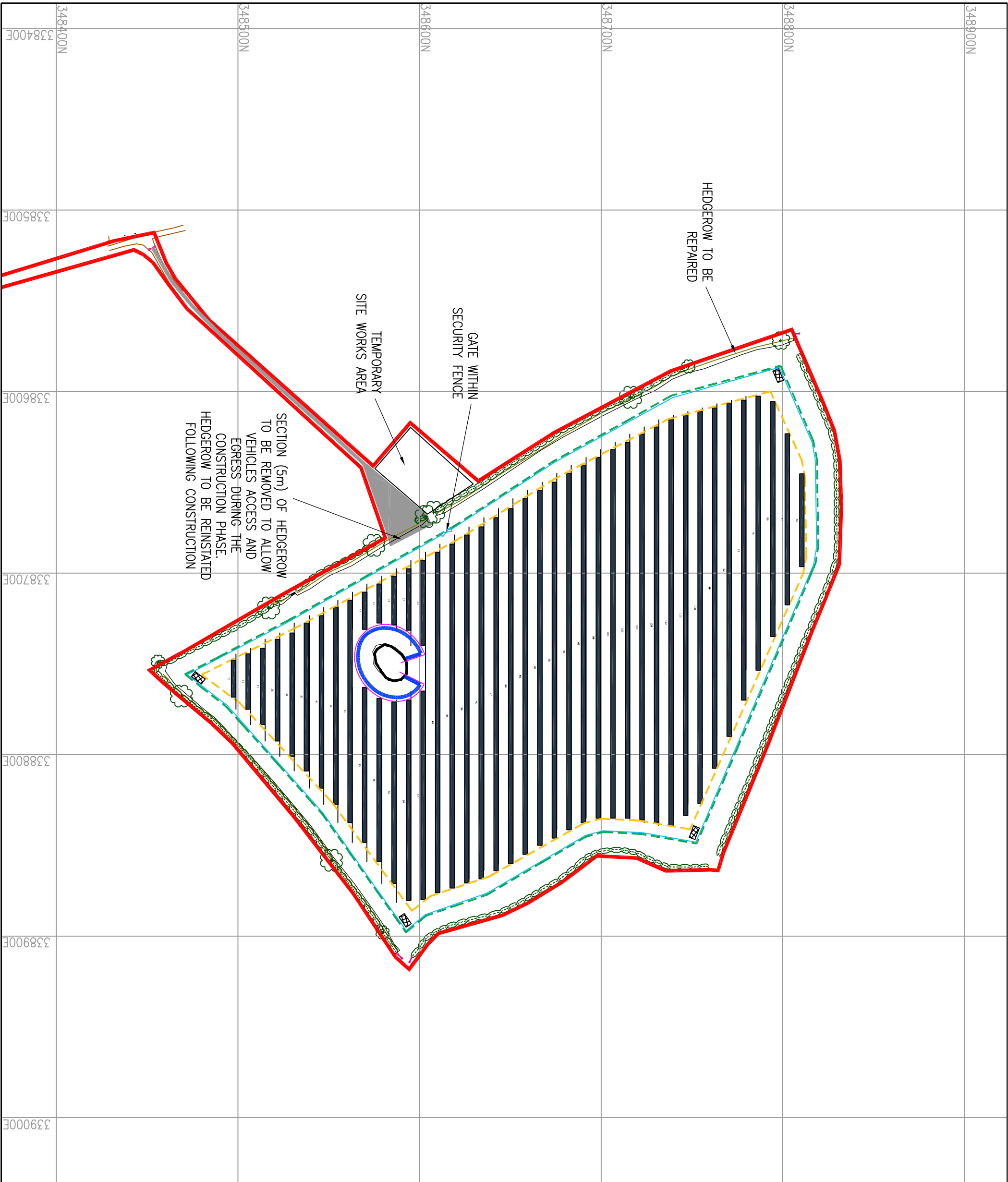
Target Notes

Target Number	Note
1	Main body of the site; improved grassland pasture grazed by sheep at the time of survey and comprising a short and species-poor sward with common grass species and few flowering plants.
2	Access track to the west of the site; a bridleway running from Parkey Lodge to the south, surrounded by woodland, dense scrub and tall ruderal vegetation. There is a gated field access to off this track which was flooded at the time of survey with standing water to 20cm deep.
3	Afon Clywedog riparian corridor; 25m to the north of the site at its closest point and flowing west to east.
4	Pond 1; a small pond with extensive poaching around 90% of the margins from grazing livestock. There is patchy marginal vegetation and a small willow tree present.
5	Access track from the west crossing an adjacent improved grassland enclosure with scattered oak and sycamores.
6	Semi-natural broadleaved woodland lining the bridleway from Parkey Lodge and comprised of beech and sycamore.
7	Pond 2; a medium sized pond 20m to the south of the site and surrounded by tall mature trees on the west and dense scrub on the east. Aquatic vegetation is severely limited and there appears to be deep leaf litter on the pond bottom.
8	Dense bramble scrub to the west of the site access route off the bridleway.
9	Western site boundary comprised of hazel and hawthorn hedgerow with occasional semi-mature oaks. There is also patchy bramble and thistle scrub over a shallow field ditch beside the hedgerow.
10	Field access in the western boundary, with a semi-mature oak tree on either side.
11	Mature oaks trees in the northwest corner of the site.
12	Mature hedgerow oak tree within the blackthorn dominated southern boundary.
13	Mature hedgerow oak tree within the blackthorn dominated southern boundary.
14	Semi-mature hedgerow oak tree within the south-western boundary.
15	Mature oak tree within the south-western boundary.
16	Mature oak tree near to the southwest corner of the site.
17	Large patch of tall ruderal vegetation colonising disturbed ground within the centre of the improved grassland adjacent to the south of the site.
18	Arable land forming the northern strip of the application site. The most recent crop cover appears to have been corn. The cultivated land is separated from the pasture by a stock-proof fence in poor condition.
19	Northern field boundary with a farm track running adjacent to the north of the site.
20	Eastern field boundary; a 3m wide, dense, blackthorn dominated hedgerow with a drainage ditch beneath.

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Appendix A - Figure 2

Proposed Development Layout



LEGEND

- TEMPORARY ACCESS TRACK
- INVERTERS
- PV ARRAY (kWp)
- EXTENT OF 5m BUFFER ZONE FROM SECURITY FENCE
- STOCK PROOF FENCE AROUND POND WITH ACCESS POINT FOR ANIMALS
- SECURITY FENCE
- TEMPORARY SITE WORKS AREA
- PLANNING APPLICATION BOUNDARY
- EXTENT OF 7m BUFFER ZONE FROM HEDGEROW
- EXTENT OF 12m BUFFER ZONE FROM POND

REV	MODIFICATIONS	BY	CH	AP	DATE
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EARTHWORM ENERGY
PLCLTD

PICKHILL BRIDGE FARM PROPOSED SOLAR PANELS

PROPOSED SITE LAYOUT

DRAWN BY AJS	DATE 03.02.2015	
CHECKED BY JC	SCALE @ A3 1:2000	
APPROVED BY HU	ISSUE -	REVISION -

DRAWING NUMBER
2204.PLG.03

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Appendix B - Site Photographs

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Target Note 1



Target Note 3



Target Note 4



Target Note 9



Target Note 11



Target Note 14



Target Note 18



Pond 4



Pond 5



Pond 6

Appendix C – Biological Records

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Our Reference	Client Name	Date Run	Your Reference
E04177	Etive Ecology	22/12/2014	338

Search Location	Grid Reference
Pickhill	SJ38744867

Category 1 Species (Species with European and/or UK Legal Protection, Section 42 [NERC] Species or UK BAP Priority Species) within 1000m - **372** records

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ3748	05/04/2007	Neil Hughes	4		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, S42, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3	☒
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ3749	24/05/2004	Norman Hallas	1+		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, S42, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3	☒
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ379490 (Selected from Interactive Map)	29/06/2012	Emma Broad	2 Adult		Firestones, wrexham industrial estate	At least 1 pair	D1117/001/01	BDir2.2, S42, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	☒
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ3848	2 records, between 10/04/2009 and 24/04/2011	Neil Hughes	2; 1		Site Name Withheld	Comments Withheld	D0062/001/01 D0062/003/01	BDir2.2, S42, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3	☒
<i>Alauda arvensis</i> (Skylark / Ehedydd)	SJ389482 (Estimated Centroid of Site))	2005 approx	BASC Recorder (15534803-2)				Shoot Size Range: 0-3km	D0132/001/02	BDir2.2, S42, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	☒
<i>Anguis fragilis</i> (Slow-worm / Neidr Ddefaid)	SJ3849	2 records, both in 1999	Young Assoc.; Consultant			Wrexham Industrial Estate		D0035/002/01 D1076/001/02	Bern, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	☒
<i>Anguis fragilis</i> (Slow-worm / Neidr Ddefaid)	SJ380490	Before 2009	Anon.			Redwither Brook		D0035/002/01	Bern, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	☒
<i>Chiasmia clathrata</i> (Latticed Heath / Seffyr Delltog)	SJ378491	19/06/2010	Justin Williams	1 Adult		Wrexham Industrial Estate	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Chiasmia clathrata</i> (Latticed Heath / Seffyr Delltog)	SJ381488	02/06/2004	Rob W Whitehead	2 Adult		Spectrum Ind Estate - nr Calypso	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Chiasmia clathrata</i> (Latticed Heath / Seffyr Delltog)	SJ382489 (Approximate)	22/06/2007	John Smith	1 Adult		Calypso-WIE	Sect.9	D1470/001/01	S42, UKBAP, LBAP[GWY]	1	☒
<i>Chiasmia clathrata</i> (Latticed Heath / Seffyr Delltog)	SJ386492	22/06/2007	John Smith	2 Adult		Wrexham Ind. estate	Grassland: neutral. Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Chiroptera</i> (Bat Species / Ystlum)	SJ3848 (Estimated Centroid of Site))	2005 approx	BASC Recorder (15534803-2)			Site Name Withheld	Comments Withheld	D0132/001/02	S42, WCA5, LBAP[ANG, DEN, FLI, SNP]	4	☒
<i>Chiroptera</i> (Bat Species / Ystlum)	SJ3848	20/08/1981	Anon			Site Name Withheld	Comments Withheld	D1486/001/01	S42, WCA5, LBAP[ANG, DEN, FLI, SNP]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ3748	25/08/2010	A.N. & J.E. Graham	5 Adult		Wrexham Industrial Estate	Daytime observation. Habitat: Brownfield, calcareous newly-seeded herb-rich grassland and old	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ378485	4 records, between 02/06/2004 and 07/05/2009	Rob W Whitehead; John Smith; Peter Heywood	12; 5 Adult; 2 Adult		Wrexham Ind Estate	Field record / observation; Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ381488	5 records, between 25/05/2004 and 07/08/2005	Rob W Whitehead; Ian Waller	1 Adult; 12; 8		Spectrum Ind Estate - nr Calypso	Daytime observation; Field record / observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ382489 (Approximate)	29 records, between 02/05/2007 and 23/05/2010	John Smith	2; 3; 5; 8; 1		Calypso WIE	Section 7; Section 1; Section 2; Section 3; Section 4; Section 5; Section 6; Section 8; Section 9	D1470/002/01 D1470/001/01	RD1(UK), S42, UKBAP, LBAP[GWY]	1	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ385493 (Estimated Centroid of Site))	5 records, between 01/06/1998 and 18/05/2010	Bryan Formstone; Brian & Sue Roberts; John V. Smith; Peter Heywood	2; 3; 2 Adult; 7 Adult		Wrexham Industrial Estate	Breeding: No. Mature: Yes. Record type: Field record / observation; JVS's Map Ref SJ 384493 : also recorded PBF - not accepted yet. Field record / observation; Daytime observation	D0127/001/02 D1399/001/01 D1373/001/03	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ386492	1991 - 1998	Formstone, Mr J.B.			The Oaks		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[GWY]	4	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ388493	19/05/2004	Rob W Whitehead	4		Wrexham Ind Estate - S of Bryn Lane	Field record / observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒
<i>Coenonympha pamphilus</i> (Small Heath / Gweirlöyn Bach y Waun)	SJ396482	22/08/1984	Formstone, Mr J.B.	2 present		Afon Clywedog, trib. of R. Dee		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[GWY]	1	☒
<i>Cuculus canorus</i> (Cuckoo / Cog)	SJ382489 (Approximate)	14/05/2007	John Smith	1		Calypso WIE	Heard	D1470/001/01	S42, UKBA, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	4	☒
<i>Cuculus canorus</i> (Cuckoo / Cog)	SJ383487 (Approximate)	31/05/2013	Emma Broad	1 Adult		Firestones	Bird heard in that approximate location from the firestones site	D1117/001/01	S42, UKBA, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	4	☒
<i>Ecliptopera silaceata</i> (Small Phoenix / Ffenics Bach)	SJ385495	2 records, both in 1972	Zamojski, Z.D.; Mold NCC Files, Z.D. Zamojski	present; Present	Field record	Wrexham Industrial Estate		D1050/003/01 D0217/001/01	S42, UKBAP, LBAP[GWY]	1	☒
<i>Ecliptopera silaceata</i> (Small Phoenix / Ffenics Bach)	SJ386492	1972	Z.D.Zamojski	1 Adult		Wrexham Ind Estate (Oaks Site)	Scrub: scattered. Method: Unknown	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Emberiza schoeniclus</i> (Reed Bunting / Bras y Cyrs)	SJ3749	03/05/2007	Neil Hughes	1		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, S42, UKBA, UKBAP, UKBR, WBA, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3748	12/05/2005	Ian Waller	5 Adult		SJ3748	Wrexham Ind Estate. Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ378485	7 records, between 02/06/2004 and 23/05/2009	Rob W Whitehead; John Smith; Peter Heywood	7; 3 Adult; 1 Adult; 10 Adult; 2 Adult; 15 Adult		Wrexham Ind Estate	Field record / observation; Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3848	2 records, between 1995 and 12/05/2005	Ian Waller; Bryan Formstone	2 Adult; 2		SJ3848	Wrexham Ind Estate. Daytime observation; Breeding: No. Mature: Yes. Record type: Field record / observation	D1373/001/03 D0127/001/02	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3804648707 (Selected from Interactive Map)	31/05/2013	Emma Broad	1		Firestones		D1117/001/01	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	1	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ381488	6 records, between 25/05/2004 and 21/05/2006	Rob W Whitehead; Bryan Formstone; Ian Waller; John V. Smith	15; 19; 19 Adult; 1 Adult; 40 Adult; 7 Adult		Spectrum Ind Estate - nr Calypso	Field record / observation; Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ382489 (Approximate)	35 records, between 02/05/2007 and 13/05/2012	John Smith	1; 5; 6; 2; 4; 3; 9; 1 Adult; 4 Adult		Calypso WIE; Calypso-WIE	Section 3; Section 6; Section 7; Section 8; Section 9; Section 4; Section 1; Section 2; Section 5; Near pond	D1470/002/01 D1470/001/01	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	1	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ3849	2 records, between 12/05/2000 and 15/05/2000	Anon.			The Oaks		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	1	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ385493	10 records, between 29/05/2001 and 30/05/2010	John V. Smith; Peter Heywood; John Smith	2; 15 Adult; 20 Adult; 2 Adult; 10 Adult; 7 Adult; 4 Adult		Wrexham Industrial Estate	JVS's Map Ref SJ 384493 : also recorded PBF - not accepted yet. Field record / observation; Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ387492	21/05/2006	John V. Smith	1 Adult		Wxm Ind Estate, Oak Road	Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ388491	30/04/2007	Emma Broad	1		Off Oak Road Wrexham industrial Estate		D1117/001/01	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	4	☒
<i>Erynnis tages</i> (Dingy Skipper / Gwibiwr Llwyd)	SJ388493	19/05/2004	Rob W Whitehead	4		Wrexham Ind Estate - S of Bryn Lane	Field record / observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[CON, FLI, GWY]	3	☒
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3849	2 records, between 16/04/2008 and 17/03/2009	Norman Hallas	1		Wrexham, Industrial Estate, W		D1297/002/01	Bern, Bonn, CITES, S42, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	☒
<i>Falco tinnunculus</i> (Kestrel / Cudyll Coch)	SJ3949	16/04/2008	Norman Hallas	2		Wrexham, Industrial Estate, E		D1297/002/01	Bern, Bonn, CITES, S42, UKBA, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	☒
<i>Hemistola chrysoprasaria</i> (Small Emerald / Emrallt Barf yr Hen Wr)	SJ385495	2 records, both in 1972	Zamojski, Z.D.; Mold NCC Files, Z.D. Zamojski	present; Present	Field record	Wrexham Industrial Estate		D1050/003/01 D0217/001/01	S42, UKBAP, LBAP[GWY]	1	☒
<i>Hemistola chrysoprasaria</i> (Small Emerald / Emrallt Barf yr Hen Wr)	SJ386492	1973	Z.D.Zamojski	1 Adult		Wrexham Ind. estate	Grassland: neutral. Method: MV Light Trap	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ3848 (Estimated (Centroid of Site))	1995	Bryan Formstone	2		SJ3848	Breeding: No. Mature: Yes. Record type: Field record / observation	D0127/001/02	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ381488	2 records, between 02/06/2004 and 13/05/2005	Rob W Whitehead; Bryan Formstone	1; 1 Adult		Spectrum Ind Estate - nr Calypso	Field record / observation; Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[GWY]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ386492	1991 - 1998	Formstone, Mr J.B.			The Oaks		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[GWY]	4	☒
<i>Lasiommata megera</i> (Wall / Gweirlöyn y Cloddiau)	SJ396482	22/08/1984	Formstone, Mr J.B.	20 present		Afon Clywedog, trib. of R. Dee		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[GWY]	4	☒
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ3749	3 records, between 06/01/2004 and 05/04/2007	David Owen Jones; Kevin Smith; Neil Hughes	40+; 1; 2		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, S42, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3	☒
<i>Linaria cannabina</i> (Linnet / Llinos)	SJ3848	2 records, between 24/04/2011 and 19/06/2011	Neil Hughes	4		Site Name Withheld	Comments Withheld	D0062/003/01	Bern, S42, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	3	☒
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ381488 (Selected from Interactive Map)	31/07/2012	Emma Broad	6 Adult		Firestones, wrexham Industrial Estate	Under wooden pallet	D1117/001/01	Bern, WCA5, LBAP[CON, DEN, FLI]	4	☒
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39714882	03/06/1992	Anon - Herpetofauna Consultants International					D1122/002/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3	☒
<i>Lissotriton vulgaris</i> (Smooth Newt / Madfall Ddwr Gyffredin)	SJ39094934	11/06/1992	Anon - Herpetofauna Consultants International					D1122/002/01	Bern, WCA5, LBAP[CON, DEN, FLI]	3	☒
<i>Lissotriton vulgaris</i> (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	Bern, WCA5, LBAP[CON, DEN, FLI]	1	☒
<i>Locustella naevia</i> (Grasshopper Warbler / Troellwr Bach)	SJ3749	03/05/2007	Neil Hughes	1+		Site Name Withheld	Comments Withheld	D0062/001/01	S42, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Locustella naevia</i> (Grasshopper Warbler / Troellwr Bach)	SJ3848	24/04/2011	Neil Hughes	4		Site Name Withheld	Comments Withheld	D0062/003/01	S42, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ3948	11 records, between 20/07/1991 and 17/07/2002	Jane Walsh; John Bridge; Elizabeth Andrews; Anon		Tracks/Trail; Dung/Droppings /Frass/Pellet, etc.	Site Name Withheld	Comments Withheld	D1153/001/02 D1118/006/01	Bern, CITES, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Lutra lutra</i> (Otter / Dyfrgi)	SJ3948	06/11/2003	Phil Morgan			Site Name Withheld	Comments Withheld	D1153/001/02	Bern, CITES, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3748	02/01/2003	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	BA, Bern, LBAP[CON, DEN, FLI, WRE]	3	☒
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3749	19/08/2003	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	BA, Bern, LBAP[CON, DEN, FLI, WRE]	3	☒
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3848	02/01/2003	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	BA, Bern, LBAP[CON, DEN, FLI, WRE]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3849	3 records, between 02/01/2003 and 13/11/2007	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	BA, Bern, LBAP[CON, DEN, FLI, WRE]	3	☒
<i>Meles meles</i> (Badger / Mochyn Daear)	SJ3948	08/03/2007	Clwyd Badger Group (CBG)		Badger Sett	Site Name Withheld	Comments Withheld	D0059/001/01	BA, Bern, LBAP[CON, DEN, FLI, WRE]	3	☒
<i>Muscicapa striata</i> (Spotted Flycatcher / Gwybedog Mannog)	SJ3749	28/05/2006	Jason Newton	1+		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, Bonn, S42, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Muscicapa striata</i> (Spotted Flycatcher / Gwybedog Mannog)	SJ3947	14/07/2008	Neil Hughes	4		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, Bonn, S42, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Myotis mystacinus</i> (Whiskered Bat / Ystlum Barfog)	SJ3849	28/09/1999	Anon	1		Site Name Withheld	Comments Withheld	D1486/001/01	Bern, Bonn, EPS, HDir, RD2(UK), WCA5, LBAP[ANG, DEN, FLI, GWY, SNP]	3	☒
<i>Passer domesticus</i> (House Sparrow / Aderyn y To)	SJ3749	09/01/2004	David Owen Jones	2		Site Name Withheld	Comments Withheld	D0062/001/01	S42, UKBAP, UKBR, WBA, LBAP[CON, FLI, GWY]	3	☒
<i>Perdix perdix</i> (Grey Partridge / Petrisen)	SJ389482 (Estimated (Centroid of Site))	2005 approx	BASC Recorder (15534803-2)				Shoot Size Range: 0-3km	D0132/001/02	BDir2.1, S42, UKBAP, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY]	1	☒
<i>Pipistrellus</i> (Pipistrellus Bat Species)	SJ3848 (Estimated (Centroid of Site))	2005 approx	BASC Recorder (15534803-2)			Site Name Withheld	Comments Withheld	D0132/001/02	WCA5, LBAP[ANG, DEN, FLI, SNP]	1	☒
<i>Pipistrellus</i> (Pipistrellus Bat Species)	SJ3849	08/07/2003	Anon	2		Site Name Withheld	Comments Withheld	D1486/001/01	WCA5, LBAP[ANG, DEN, FLI, SNP]	3	☒
<i>Pipistrellus pipistrellus</i> (Common Pipistrelle / Ystlum Lleiaf Cyffredin)	SJ3848	20/08/1981	Anon			Site Name Withheld	Comments Withheld	D1486/001/01	Bern, Bonn, EPS, HDir, RD2(UK), S42, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3748	03/05/2009	Jason Newton	1		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, RD2(UK), S42, UKBA, UKBAP, LBAP[CON]	3	☒
<i>Prunella modularis</i> (Dunnock / Llwyd y Gwrych)	SJ3847	03/05/2009	Jason Newton	1		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, RD2(UK), S42, UKBA, UKBAP, LBAP[CON]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3748	12/05/2005	Ian Waller	3 Adult		SJ3748	Wrexham Ind Estate. Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3779048499	24/05/2012	George Tordoff	4 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ378485	7 records, between 15/05/2008 and 23/05/2009	John Smith; Peter Heywood	2 Adult; 4 Adult; 1 Adult; 5 Adult; 8 Adult		Wrexham Ind Estate	Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3783948568	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ37844862 (Selected from Interactive Map)	31/05/2013	Emma Broad	1		Firestones		D1117/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	1	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3793948599	24/05/2012	George Tordoff	3 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ37914913 (Selected from Interactive Map)	31/05/2013	Emma Broad	1		Firestones		D1117/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	1	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3848	12/05/2005	Ian Waller	1 Adult		SJ3848	Wrexham Ind Estate. Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3803848681	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ38044871 (Selected from Interactive Map)	31/05/2013	Emma Broad	1		Firestones		D1117/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	1	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3805048892	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3808048829	24/05/2012	George Tordoff	4 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3808848877	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3809648816	24/05/2012	George Tordoff	2 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3806348926	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3809748998	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ381488	5 records, between 25/05/2004 and 21/05/2006	Rob W Whitehead; Ian Waller; John V. Smith	3; 6; 40 Adult; 6 Adult; 12 Adult		Spectrum Ind Estate - nr Calypso	Field record / observation; Daytime observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3810248954	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3813548909	24/05/2012	George Tordoff	2 Adult		Wrexham Industrial Estate: Spectrum	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ382489 (Approximate)	43 records, between 28/04/2007 and 13/05/2012	John Smith	2; 1; 5; 3; 4; 3 Adult; 4 Adult		Calypso WIE; Calypso-WIE	Section 7; Section 2; Section 3; Section 4; Section 5; Section 6; Section 8; Section 9; Section 1; Near pond	D1470/002/01 D1470/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	1	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3849	2 records, between 12/05/2000 and 15/05/2000	Anon.	3 adult; 11 adult		The Oaks		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	1	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3852849251	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Redwither	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ385493 (Estimated (Centroid of Site))	10 records, between May 1993 and 30/05/2010	J.B. Formstone; Bryan Formstone; John Smith; Peter Heywood	2 Adult; 2; 4 Adult; 5 Adult; 6 Adult; 8 Adult; 1 Adult		Wrexham Industrial Estate	Breeding: No. Mature: Yes. Record type: Daytime observation; Breeding: No. Mature: Yes. Record type: Field record / observation; Daytime observation	D0127/001/02 D1373/001/03	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ386492	2 records, between 13/05/1993 and 01/06/1998	Formstone, Mr J.B.	8 adult; 2 adult		The Oaks		D1050/003/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	1	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3862549254	24/05/2012	George Tordoff	1 Adult		Wrexham Industrial Estate: Redwither	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3864649406	17/05/2011	Clare Williams	1 Adult		Wrexham Industrial Estate: Redwither	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ388493	19/05/2004	Rob W Whitehead	3		Wrexham Ind Estate - S of Bryn Lane	Field record / observation	D1373/001/03	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrgus malvae</i> (Grizzled Skipper / Gwibiwr Brith)	SJ3880949454	24/05/2012	George Tordoff	3 Adult		Wrexham Industrial Estate: Bryn Cottages	Species survey	D1466/001/01	RD1(UK), S42, UKBAP, LBAP[DEN, FLI]	3	☒
<i>Pyrrhula pyrrhula</i> (Bullfinch / Coch y Berllan)	SJ3749	2 records, both on 03/05/2004	Norman Hallas	1 Female; 1 Male		Site Name Withheld	Comments Withheld	D0062/001/01	S42, UKBA, UKBAP, UKBR, WBR, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Rana temporaria</i> (Common Frog / Llyffant Melyn)	SJ38764858	09/06/1992	Anon - Herpetofauna Consultants International					D1122/002/01	Bern, HDir, WCA5, LBAP[ANG, CON, FLI]	3	☒
<i>Salmo salar</i> (Atlantic Salmon / Eog)	SJ396483	01/08/1994	Anon - CCW			Higher Oak; Afon Clywedog		D1153/001/02	Bern, EPS, HDir, RD2(UK), S42, UKBAP, LBAP[CON, DEN, FLI, GWY]	3	☒
<i>Salmo trutta</i> (Brown/Sea Trout / Siwin; Brithyll)	SJ396483	01/08/1994	Anon - CCW			Higher Oak; Afon Clywedog		D1153/001/02	S42, UKBAP, LBAP[CON, GWY]	3	☒
<i>Satyrrium w-album</i> (White-letter Hairstreak / Brithribin W Wen)	SJ378485	11/07/2006	Mark Taylor	10 Adult		Wrexham Ind Estate	Nr animal feed unit, past Georgia Pacific building. Daytime observation	D1373/001/03	RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[FLI]	3	☒
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar / Rhesen Lydan Dywyll)	SJ3748	25/08/2010	Graham, A.N. & J.E.	10 Adult		Wrexham Industrial Estate	Common. Brownfield, calcareous newly-seeded herb-rich grassland and old. Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar / Rhesen Lydan Dywyll)	SJ3749	2 records, between 07/09/2009 and 09/07/2010	Graham, A.N. & J.E.; Justin Williams	Present - 0; 2 Adult		Wrexham Industrial Estate	Method: Unknown; Method: Netted	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar / Rhesen Lydan Dywyll)	SJ378491	06/07/2009	Graham, A.N. & J.E.	10		Wrexham Industrial Estate	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar / Rhesen Lydan Dywyll)	SJ379491	07/08/2009	Graham, A.N. & J.E.	10		Wrexham Industrial Estate	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Scotopteryx chenopodiata</i> (Shaded Broad-bar / Rhesen Lydan Dywyll)	SJ381488	07/08/2005	Rob W Whitehead	10 Adult		Spectrum Ind Estate - nr Calypso	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Sturnus vulgaris</i> (Starling / Drudwen)	SJ3849	01/03/2007	JA Jackson Per JLR	50+		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), S42, UKBAP, UKBR, WBR, LBAP[CON, FLI, GWY]	3	☒
<i>Timandra comae</i> (Blood-Vein / Gwyfyn Gwythïen Goch)	SJ396489	04/08/2006	J.B. Formstone	1 Adult		Bowling bank Pond	pond. Method: Netted	D1285/001/02	S42, UKBAP	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38424785 (Supplied by Original Recorder)	25/06/1992	Anon - Herpetofauna Consultants International					D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38524789 (Supplied by Original Recorder)	25/06/1992	Anon - Herpetofauna Consultants International					D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38604785 (Approximate)	2 records, between 1992 and 25/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Talurn Farm		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ381487 (Approximate)	16/05/1998	Dylan Lloyd	1 (Exact)		Wrexham Industrial Estate - Water Treatment Pond		D1118/011/03	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ381488 (Selected from Interactive Map)	31/07/2012	Emma Broad	3 Adult		Firestones, wrexham Industrial Estate	Under wooden pallet	D1117/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	4	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ381489 (Approximate)	29/04/1998	Dylan Lloyd	16 (Exact)		Wrexham Industrial Estate - Core Site Pond		D1118/011/03	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ3816348910	1994	ME			Spectrum Industrial Estate		D1118/011/03	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38404816 (Approximate)	2 records, between 1992 and 25/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Pickhill Bridge farm		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38484858 (Supplied by Original Recorder)	2 records, between 1992 and 09/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		Pickhill Bridge farm		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38594817 (Approximate)	2 records, between 1992 and 03/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Parkey Lodge		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38594847 (Approximate)	2 records, between 1992 and 09/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Pickhill Bridge farm		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38774819 (Supplied by Original Recorder)	2 records, between 1992 and 09/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		Pickhill Bridge farm		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38764858 (Supplied by Original Recorder)	2 records, between 1992 and 09/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		Pickhill Bridge farm		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ38854829 (Supplied by Original Recorder)	2 records, between 1992 and 09/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		Pickhill Bridge farm		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ381492 (Approximate)	15/04/1998	Dylan Lloyd	1 (Exact)		Wrexham Industrial Estate - Drainage Ditch		D1118/011/03	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ388496	04/04/2005 - 09/04/2005	Ben Milner			Oth:sa:32:2005		D1317/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39084807 (Approximate)	2 records, between 1992 and 09/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Pickhall Upper farm		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39004835 (Approximate)	2 records, between 1992 and 09/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Pickhill Bridge farm		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39174803 (Supplied by Original Recorder)	09/06/1992	Anon - Herpetofauna Consultants International				Probable record (supplied by local resident)	D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39264898 (Approximate)	1992	Anon	Present		Diamond Farm		D1118/011/03	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39414823 (Approximate)	1991	NWES	Present		Pickhill Bridge Farm		D1118/011/03	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39584888 (Supplied by Original Recorder)	03/06/1992	Anon - Herpetofauna Consultants International					D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39534896 (Supplied by Original Recorder)	2 records, between 1992 and 03/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		Diamond Farm		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39584896 (Approximate)	1992	Anon - CCW	Present		Diamond Farm		D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39624859 (Supplied by Original Recorder)	03/06/1992	Anon - Herpetofauna Consultants International				Probable record (supplied by local resident)	D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39604861 (Approximate)	1992	Anon - CCW	Present		The Smithy		D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39624898 (Supplied by Original Recorder)	03/06/1992	Anon - Herpetofauna Consultants International					D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39704855 (Supplied by Original Recorder)	2 records, between 1992 and 05/05/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		The Smithy		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39714882 (Approximate)	2 records, between 1992 and 03/06/1992	Anon - CCW; Anon - Herpetofauna Consultants International	Present		Higher Oak		D0137/001/01 D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ390493	01/05/2004	Raymond Paul Gemmell			Oth:sa:83:2004		D1317/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39024932 (Supplied by Original Recorder)	11/06/1992	Anon - Herpetofauna Consultants International				Probable record (supplied by local resident)	D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39034939 (Supplied by Original Recorder)	11/06/1992	Anon - Herpetofauna Consultants International				Probable record (supplied by local resident)	D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39094934 (Supplied by Original Recorder)	2 records, between 1992 and 11/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		BICC cables		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (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	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	1	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39604912 (Approximate)	1992	Anon - CCW	Present		BICC cables		D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39604918 (Supplied by Original Recorder)	2 records, between 1992 and 17/06/1992	Anon - Herpetofauna Consultants International; Anon - CCW	Present		BICC cables		D1122/001/01 D0137/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Triturus cristatus</i> (Great Crested Newt / Madfall Ddwr Gribog)	SJ39614912 (Supplied by Original Recorder)	17/06/1992	Anon - Herpetofauna Consultants International					D1122/001/01	Bern, EPS, HDir, RD1(UK), RD2(UK), S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, SNP, WRE]	3	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3748	2 records, between 10/04/2008 and 03/05/2009	Neil Hughes; Jason Newton	2; 1		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), S42, UKBAP, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3749	07/05/2007	Norman Hallas	2		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), S42, UKBAP, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Turdus philomelos</i> (Song Thrush / Bronfraith)	SJ3848	2 records, between 07/05/2009 and 26/04/2011	Neil Hughes	4; 1		Site Name Withheld	Comments Withheld	D0062/001/01 D0062/003/01	BDir2.2, Bern, RD2(UK), S42, UKBAP, UKBR, WBA, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	3	☒
<i>Tyria jacobaeae</i> (Cinnabar / Teigr y Benfelen)	SJ378491	19/06/2010	Justin Williams	1 Adult		Wrexham Industrial Estate	Method: Netted	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Tyria jacobaeae</i> (Cinnabar / Teigr y Benfelen)	SJ379491	07/08/2009	Graham, A.N. & J.E.	10 Larval		Wrexham Industrial Estate	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Tyria jacobaeae</i> (Cinnabar / Teigr y Benfelen)	SJ381488	2 records, between 25/05/2004 and 02/06/2004	Rob W Whitehead	2 Adult		Spectrum Ind Estate - nr Calypso	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Tyria jacobaeae</i> (Cinnabar / Teigr y Benfelen)	SJ381489	12/06/2010	Justin Williams	1 Adult		Wrexham Industrial Estate	Method: Daytime observation	D1285/001/02	S42, UKBAP, LBAP[GWY]	3	☒
<i>Tyria jacobaeae</i> (Cinnabar / Teigr y Benfelen)	SJ382489 (Approximate)	3 records, all on 14/06/2009	John Smith	1; 2		Calypso-WIE	Section 1; Section 2; Section 8	D1470/001/01	S42, UKBAP, LBAP[GWY]	4	☒
<i>Tyto alba</i> (Barn Owl / Tylluan Wen)	SJ34 (Estimated Centroid of Site))	2005 approx	BASC Recorder (15534803-2)			Site Name Withheld	Comments Withheld	D0132/001/02	Bern, CITES, RD2(UK), UKBA, WBA, WCA1.1, WCA9, LBAP[ANG, CON, DEN, FLI, GWY, SNP, WRE]	1	☒
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ3749	25/03/2004	David Owen Jones	2		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bonn, S42, UKBA, UKBAP, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	3	☒
<i>Vanellus vanellus</i> (Lapwing / Cornchwiglen)	SJ389482 (Estimated Centroid of Site))	2005 approx	BASC Recorder (15534803-2)				Shoot Size Range: 0-3km	D0132/001/02	BDir2.2, Bonn, S42, UKBA, UKBAP, UKBR, WBR, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	1	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Vipera berus</i> (Adder / Gwiber)	SJ3849	2 records, both in 1999	Young Assoc.; Consultant			Wrexham Industrial Estate		D0035/002/01 D1076/001/02	Bern, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	☒
<i>Vipera berus</i> (Adder / Gwiber)	SJ380490	Before 2009	Anon.			Redwither Brook		D0035/002/01	Bern, S42, UKBAP, WCA5, LBAP[ANG, CON, DEN, FLI, GWY, SNP]	4	☒
<i>Watsonalla binaria</i> (Oak Hook-tip / Bachadain y Deri)	SJ385495	2 records, both in 1972	Zamojski, Z.D.; Mold NCC Files, Z.D. Zamojski	present; Present	Field record	Wrexham Industrial Estate		D1050/003/01 D0217/001/01	S42, UKBAP, LBAP[GWY]	1	☒
<i>Watsonalla binaria</i> (Oak Hook-tip / Bachadain y Deri)	SJ386492	1972	Z.D.Zamojski	1 Adult		Wrexham Ind. estate	Grassland: neutral. Method: MV Light	D1285/001/02	S42, UKBAP, LBAP[GWY]	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 - 88 records											
Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Acanthophilus helianthi</i>	SJ3849	04/07/2000	Mike Howe		Field record	The Oaks		D0217/001/01	RD2(UK)	3	☒
<i>Andrena (Poecilandrena) labiata</i> (Girdled Mining Bee)	SJ385495	1993	Formstone, Mr J.B.			The Oaks		D1070/002/01	RD1(UK), RD2(UK)	3	☒
<i>Andrena (Poecilandrena) labiata</i> (Girdled Mining Bee)	SJ386492	2 records, between 1991 and 11/05/1993	J.B. Formstone; Formstone, Mr J.B.			Wrexham industrial estate; The Oaks		D1070/002/01	RD1(UK), RD2(UK)	3	☒
<i>Anser anser</i> (Greylag Goose / Gwydd Wylt)	SJ3749	3 records, between 16/02/2004 and 01/05/2005	Norman Hallas; Kevin Smith	7; 5; 4		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.1, Bern, Bonn, RD2(UK), UKBA, WCA1.2, LBAP[CON]	3	☒
<i>Brachytron pratense</i> (Hairy Dragonfly / Gwas Neidr Flewog)	SJ381488	2 records, both on 30/04/2007	Graham, A.N. & J.E.; A.N. and J.E. Graham	2; 2 Adult		Wrexham Industrial Estate; Denbighshire - Unknown, Wrexham Industrial Estate	Netted for close examination; B. pratense netted. Grid reference type: Estimated from Map	D0135/001/04 D0067/001/03	RD2(UK), LBAP[GWY, SNP]	4	☒
<i>Chrysotus gramineus</i>	SJ3849	04/07/2000	Mike Howe		Field record	The Oaks		D0217/001/01	RD2(UK)	3	☒
<i>Columba oenas</i> (Stock Dove / Colomen Wylt)	SJ3748	2 records, between 05/04/2007 and 03/05/2009	Jason Newton; Neil Hughes	1		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), UKBA, LBAP[GWY]	3	☒
<i>Columba oenas</i> (Stock Dove / Colomen Wylt)	SJ3749	03/08/2004	David Owen Jones	2		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), UKBA, LBAP[GWY]	3	☒
<i>Columba oenas</i> (Stock Dove / Colomen Wylt)	SJ3947	21/05/2008	Neil Hughes	2		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), UKBA, LBAP[GWY]	3	☒
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ3749	2 records, both on 11/06/2011	BSBI; Anon - BSBI			Wrexham Industrial Site; Wrexham Industrial Estate		D1169/001/02 D1169/002/01	WVP, LBAP[CON]	3	☒
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ3848	2 records, both on 11/06/2011	Anon - BSBI; BSBI			Wrexham Industrial Estate; Wrexham Industrial Site		D1169/002/01 D1169/001/02	WVP, LBAP[CON]	3	☒

Species 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)	SJ3849	11/06/2011	BSBI			Wrexham Industrial Site		D1169/001/02	WVP, LBAP[CON]	3	☒
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ387494	2 records, both in 1998	Anon.; Anon			Wrexham Industrial Estate; Redwither	Redwither.	D1169/002/01 D0216/001/03	WVP, LBAP[CON]	3	☒
<i>Crepis biennis</i> (Rough Hawk's-beard / Gwalchlys Garw)	SJ38894915	11/06/2011	Anon - BSBI			Wrexham Industrial Estate		D1169/002/01	WVP, LBAP[CON]	3	☒
<i>Deileptenia ribeata</i> (Satin Beauty / Rhisglyn Sidan)	SJ385495	1972 - 1973	Mold NCC Files, Z.D. Zamojski	Present	Field record	Wrexham Industrial Estate		D0217/001/01	RD2(UK)	3	☒
<i>Deileptenia ribeata</i> (Satin Beauty / Rhisglyn Sidan)	SJ386492	1972	Z.D.Zamojski	1 Adult		Wrexham Ind Estate (Oaks Site)	Scrub: scattered. Method: Unknown	D1285/001/02	RD2(UK)	3	☒
<i>Delichon urbicum</i> (House Martin / Gwennol y Bondo)	SJ3748	03/05/2009	Jason Newton	3		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[CON]	3	☒
<i>Diplapion stolidum</i>	SJ3849	04/07/2000	Adrian Fowles	1 Adult	Field record	The Oaks		D0217/001/01	RD2(UK)	3	☒
<i>Eudonia pallida</i> (Marsh Grey)	SJ381488	07/08/2009	Graham A.N & J.E	2 Adult		Spectrum Ind Estate - nr Calypso	Method: Daytime observation	D1427/001/02	RD2(UK)	3	☒
<i>Eudonia pallida</i> (Marsh Grey)	SJ380491	07/08/2009	Graham, A.N. & J.E.	2		Wrexham Industrial Estate	Flushed from ditch. Method: Daytime observation	D1285/001/02	RD2(UK)	3	☒
<i>Eumerus ornatus</i>	SJ386492	19/06/1992	J. B. Formstone	1 Adult		Wrexham Ind. estate	Habitat: Grassland: neutral. Method: Netted	D1397/001/01	RD2(UK)	1	☒
<i>Gallinago gallinago</i> (Snipe / Giach Cyffredin)	SJ3749	20/02/2005	Kevin Smith	10		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.1, Bonn, UKBA, WBA, LBAP[ANG, CON, DEN, FLI, GWY]	3	☒
<i>Gallinago gallinago</i> (Snipe / Giach Cyffredin)	SJ3848	10/04/2009	Neil Hughes	1		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.1, Bonn, UKBA, WBA, LBAP[ANG, CON, DEN, FLI, GWY]	3	☒
<i>Gomphus vulgatissimus</i> (Common Club-tail / Gwas Neidr Dindrom)	SJ37984866	21/05/2009	Peter Heywood			Denbighshire - Wrexham Industrial Estate Nature Reserve (Calypso site)	Female perched on gorse.	D0067/001/03	RD1(UK), RD2(UK), LBAP[SNP]	3	☒
<i>Gomphus vulgatissimus</i> (Common Club-tail / Gwas Neidr Dindrom)	SJ38054872	21/05/2008	Peter Heywood	1 Adult (Estimate)		Denbighshire - Wrexham Industrial Estate Nature Reserve (Calypso site)	Brown field site next to calypso soft drinks.	D0067/001/03	RD1(UK), RD2(UK), LBAP[SNP]	3	☒
<i>Gomphus vulgatissimus</i> (Common Club-tail / Gwas Neidr Dindrom)	SJ381487	2 records, between 29/05/2010 and 30/05/2010	Peter Heywood; Emma Broad	1 Adult (Estimate)		Denbighshire - Wrexham Industrial Estate Nature Reserve (Calypso site)		D0067/001/03	RD1(UK), RD2(UK), LBAP[SNP]	3	☒
<i>Gomphus vulgatissimus</i> (Common Club-tail / Gwas Neidr Dindrom)	SJ382489	02/05/2007	Neil Friswell	1 Adult		Denbighshire - Unknown, Wrexham Industrial Estate	Grid reference type: Estimated from Map	D0067/001/03	RD1(UK), RD2(UK), LBAP[SNP]	3	☒
<i>Grapholita lunulana</i> (Northern Crescent Piercer)	SJ381488	30/04/2007	Graham A.N & J.E	1 Adult		Spectrum Ind Estate - nr Calypso	Photo. Method: Daytime observation	D1427/001/02	RD2(UK)	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3748	03/05/2009	Jason Newton	3		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	3	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3749	13/04/2007	Neil Hughes	3		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	3	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3847	03/05/2009	Jason Newton	4		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	3	☒
<i>Hirundo rustica</i> (Swallow / Gwennol)	SJ3849	6 records, between 03/10/2007 and 16/09/2010	Neil Hughes	6; 2; 3 Adult; 3 Juvenile; 2 Adult		Site Name Withheld	Comments Withheld	D0062/003/01 D0062/001/01	Bern, UKBA, WBA, LBAP[ANG, CON, GWY]	3	☒
<i>Ischnomera caerulea</i>	SJ388476	16/02/1993	Bryan Formstone	1 Adult	Field record	Marchwiell, Denbighshire	In rotten black poplar	D0217/001/01	RD1(UK)	3	☒
<i>Lampropteryx otregiata</i> (Devon Carpet / Brychan Dyfnaint)	SJ385495	1972 - 1973	Mold NCC Files, Z.D. Zamojski	Present	Field record	Wrexham Industrial Estate		D0217/001/01	RD2(UK)	3	☒
<i>Lampropteryx otregiata</i> (Devon Carpet / Brychan Dyfnaint)	SJ386492	1972	Z.D.Zamojski	1 Adult		Wrexham Ind Estate (Oaks Site)	Scrub: scattered. Method: Unknown	D1285/001/02	RD2(UK)	3	☒
<i>Lepidium latifolium</i> (Dittander / Pupurlys Llydanddail)	SJ3813849120	16/06/2012	Stead, M.O.			Wrexham Industrial Estate		D1169/002/01	RD2(UK), LBAP[CON, FLI]	3	☒
<i>Lepidium latifolium</i> (Dittander / Pupurlys Llydanddail)	SJ3841249093	2 records, both on 12/07/2010	Denbighshire Plant Group; Denbsgroup			Wrexham Industrial Estate	2nd for vc. Large stand 50m from road.; Large stand 50m from road.	D1169/002/01 D1169/001/02	RD2(UK), LBAP[CON, FLI]	3	☒
<i>Monochroa lucidella</i> (Buff-marked Neb)	SJ381488	30/06/2009	Graham A.N & J.E	10 Adult		Spectrum Ind Estate - nr Calypso	On Spike-rush by pond. Method: Daytime observation	D1427/001/02	RD2(UK)	3	☒
<i>Monochroa lucidella</i> (Buff-marked Neb)	SJ381489	30/06/2009	Graham, A.N. & J.E.	10		Wrexham Industrial Estate	Abundant in spike rush around pond. One male dissected. Method: Daytime observation	D1285/001/02	RD2(UK)	3	☒
<i>Motacilla cinerea</i> (Grey Wagtail / Siglen Lwyd)	SJ3748	03/05/2009	Jason Newton	1		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, RD2(UK), UKBA, LBAP[CON]	3	☒
<i>Neophytobius quadrinodosus</i>	SJ3849	04/07/2000	Adrian Fowles	1 Female	Field record	The Oaks		D0217/001/01	RD1(UK), RD2(UK)	3	☒
<i>Oxya nebulosa</i>	SJ3849	04/07/2000	Mike Howe	2 Female; 2 male	Field record	The Oaks		D0217/001/01	RD1(UK)	3	☒
<i>Periparus ater</i> (Coal Tit / Titw Penddu)	SJ3947	26/09/2009	Neil Hughes	6+		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, WBA, LBAP[CON]	3	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ3749	4 records, between 01/05/2005 and 03/05/2009	Jason Newton; Kevin Smith; Neil Hughes	1; 2+; 2		Site Name Withheld	Comments Withheld	D0062/001/01	UKBA, WBR, LBAP[CON]	3	☒
<i>Phylloscopus trochilus</i> (Willow Warbler / Telor yr Helyg)	SJ3848	3 records, between 10/04/2009 and 24/04/2011	Neil Hughes	4; 1; 3		Site Name Withheld	Comments Withheld	D0062/001/01 D0062/003/01	UKBA, WBR, LBAP[CON]	3	☒
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ3749	24/02/2007	Neil Hughes	1		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, UKBA, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	3	☒
<i>Picus viridis</i> (Green Woodpecker / Cnocell Werdd)	SJ3848	2 records, between 24/04/2011 and 19/06/2011	Neil Hughes	2; 1		Site Name Withheld	Comments Withheld	D0062/003/01	Bern, UKBA, WBA, LBAP[CON, DEN, FLI, GWY, SNP]	3	☒

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Polemonium caeruleum</i> (Jacob's-ladder / Ysgol Jacob)	SJ38894915	11/06/2011	Anon - BSBI			Wrexham Industrial Estate	4th for VC.	D1169/002/01	RD1(UK), RD2(UK), LBAP[CON]	3	☒
<i>Pseudorchestes pratensis</i>	SJ3849	04/07/2000	Adrian Fowles	1 Adult	Field record	The Oaks		D0217/001/01	RD2(UK)	3	☒
<i>Saxicola rubicola</i> (Stonechat)	SJ3749	8 records, between 29/06/2004 and 17/07/2004	David Owen Jones	1 Male; 2; 1		Site Name Withheld	Comments Withheld	D0062/001/01	Bern, RD2(UK), UKBA, LBAP[ANG, CON, DEN, FLI, GWY]	3	☒
<i>Scolopax rusticola</i> (Woodcock / Cyffyllog)	SJ389482 (Estimated (Centroid of Site))	2005 approx	BASC Recorder (15534803-2)				Shoot Size Range: 0-3km	D0132/001/02	BDir2.1, Bonn, UKBA, WBA, LBAP[CON, DEN, FLI, GWY]	1	☒
<i>Sesia bembeciformis</i> (Lunar Hornet Moth / Fflug-Bicwnen Dorchog)	SJ385496	07/05/2009	J B Formstone	2 Larval feeding signs		Wrexham Industrial Estate	Built-up areas: industrial. Method: Daytime observation	D1285/001/02	RD2(UK)	3	☒
<i>Sylvia communis</i> (Whitethroat / Llwydfron)	SJ3749	4 records, between 03/05/2004 and 03/05/2009	Kevin Smith; Neil Hughes; Jason Newton	5; 1; 3		Site Name Withheld	Comments Withheld	D0062/001/01	UKBA, WBA, LBAP[CON]	3	☒
<i>Sylvia communis</i> (Whitethroat / Llwydfron)	SJ3848	07/05/2009	Neil Hughes	10+		Site Name Withheld	Comments Withheld	D0062/001/01	UKBA, WBA, LBAP[CON]	3	☒
<i>Sylvia communis</i> (Whitethroat / Llwydfron)	SJ382489 (Approximate)	14/05/2007	John Smith	1		Calypso WIE		D1470/001/01	UKBA, WBA, LBAP[CON]	4	☒
<i>Turdus viscivorus</i> (Mistle Thrush / Brych y Coed)	SJ3847	03/05/2009	Jason Newton	1		Site Name Withheld	Comments Withheld	D0062/001/01	BDir2.2, Bern, RD2(UK), UKBA	3	☒
<i>Vicia sativa subsp. nigra</i> (Narrow-leaved Vetch)	SJ3848	11/06/2011	Anon - BSBI			Wrexham Industrial Estate		D1169/002/01	WVP	3	☒

Category 3 Species (LBAP Species not identified under Categories 1 & 2, Locally Important species as specified by local experts) within 1000m - **4 records**

Species Name	Grid Reference	Date	Recorder(s)	Abundance	Record Type	Site Name	Comments	Dataset ID	Lists	V	☒
<i>Populus nigra</i> (Black-poplar / Poplysen Ddu)	SJ39264879 (Supplied by Original Recorder)	4 records, between 24/02/2004 and 19/11/2008	Gerry Owen & Sue Owen	6; 3; 2		River Clywedog; Pickhill Bridge farm	Two tall trees only	D1446/001/01	LBAP[DEN, FLI, SNP, WRE]LI[VC52]	4	☒

Statutory Sites intersecting 1000m buffer	None
Wildlife Sites intersecting 1000m buffer	Wrexham W337: Wrexham Industrial Estate (220m), Wrexham W319: Peter's Dingle (544m)
NWWT Reserves intersecting 1000m buffer	None
RSPB Reserves intersecting 1000m buffer	None
RIGS intersecting 1000m buffer	None
Ancient Woodland intersecting 1000m buffer	33343: Ancient Semi Natural Woodland (556m), 33344: Ancient Semi Natural Woodland (577m), 33342: Ancient Semi Natural Woodland (712m), 30644: Ancient Semi Natural Woodland (947m)
Habitats intersecting 1000m buffer (Habitat at central point shown in red)	B.4: Improved Grassland (51.57% / 1,619,819 sq.m) , J.3.6: Buildings (15.44% / 484,925 sq.m), J.1.3: Ephemeral/Short Perennial (8.8% / 276,373 sq.m), A.2.1: Dense Scrub (7.13% / 223,958 sq.m), J.1.1: Arable (5.47% / 171,685 sq.m), J.1.2: Amenity Grassland (2.13% / 66,880 sq.m), B.2.2: Semi-improved Neutral Grassland (1.81% / 56,738 sq.m), A.1.3.2: Planted Mixed Woodland (1.78% / 55,831 sq.m), G.2: Running Water (1.25% / 39,402 sq.m), A.1.1.1: Semi-natural Broad-leaved Woodland (0.85% / 26,802 sq.m), A.1.1.2: Planted Broad-leaved Woodland (0.48% / 15,038 sq.m), G.1: Standing Water (0.4% / 12,658 sq.m), A.1.2.2: Planted Coniferous Woodland (0.38% / 11,802 sq.m), J.4: Bare Ground (0.34% / 10,701 sq.m), C.3.1: Tall Ruderal Herb (0.31% / 9,666 sq.m)

Important Issues

1. Usage of the above information is governed by Cofnod's **Terms and Conditions of Data Release**, which can be downloaded [here](#).
2. Records shown in **bold** typeface are sensitive species records, and **must not be released into the public domain**. A public version of this report is also available and this can be released into the public domain. In the public version the resolution of sensitive species grid references are reduced and site names and comments are 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

Mobile Species: Cofnod uses a search system which reports species (usually high priority or protected species) within a specified search radius or buffer. Where required a search will also include high priority 'Mobile Species', such as bats, otters, amphibians and certain invertebrates, which lie outside the specified search radius. These species are highlighted on the report with **(Mobile)** next to the distance. They have been selected as 'Mobile Species' as their territory (possibly due to foraging activity or life cycle) could intersect with the search radius. The list of 'Mobile Species', invasive non-native species and species categories used in Cofnod's reporting system can be found at www.cofnod.org.uk/Enquiries under the 'Species Categories' tab.

1km Records: Records with 4 figure grid references are displayed as 1km squares on any relevant maps. They are highlighted with **(1km)** next to the distance.

Distances: Where searches specify a single or multiple grid reference, the distance from each record to the grid reference will be shown in the 'Distance (m)' column (except in public versions of reports as referred to above). Distances are highlighted in **red** where records fall within 50m of the grid reference. Distances are measured from the search location to the centre point of a record's grid square.

Grid References: Click on any grid references within the report to view them on an interactive map on Cofnod's website.

Sites: As well as designated and non-statutory Wildlife Sites, NWWT and RSPB reserves are shown. Where they are within 50m of the search location, they are highlighted in **red**. Where further information is available for a site, the name will appear as a link which you can click on to visit an external website. 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.

Habitats: Habitats shown are from the Habitat Survey of Wales (1979 to 1997) using the Phase 1 survey methodology. The habitat at the search location is shown in **red**. Habitats are ordered in descending size order, with the area and percentage cover of each habitat within the search radius shown in brackets.

Dataset ID: All species records within the reports include Dataset ID codes. Click on the link to find the relevant Metadata from the **Data We Hold** page on Cofnod's website (www.cofnod.org.uk/DataWeHold). 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.

✉ column: - Click on the red envelope icon next to a record to send us an email if you think there is a problem with a record, or if you would like more information about it.

Maps: This report should be used in conjunction with any relevant maps, where these are supplied. Where a Phase 1 Habitat map has been supplied, this illustrates habitats mapped by NRW as part of their Habitat Survey of Wales 1979 to 1997. A separate key is also supplied.

Raptor Data: 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.

Abbreviations Used:

Status Lists: **ANG** - Anglesey County Council Local Biodiversity Action Plan, **BA** - Protection of Badgers Act, **BDir2.1** - EU Birds Directive Annex 2.1, **BDir2.2** - EU Birds Directive Annex 2.2, **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, **CITES** - Convention on International Trade in Endangered Species, **CON** - Conwy County Borough Council Local Biodiversity Action Plan, **DEN** - Denbighshire County Council Local Biodiversity Action Plan, **EPS** - European Protected Species, **FLI** - Flintshire County Council Local Biodiversity Action Plan, **GWY** - Gwynedd County Council Local Biodiversity Action Plan, **HDir** - EU Habitats Directive, **RD1(UK)** - Red Data Book listing for the UK based on IUCN guidelines, **RD2(UK)** - Red Data Book listing for the UK not based on IUCN guidelines, **S42** - Natural Environment and Rural Communities Act 2006 (Section 42), **SNP** - Snowdonia National Park Local Biodiversity Action Plan, **UKBA** - UK Amber listed birds (not based on IUCN criteria), **UKBAP** - UK Biodiversity Action Plan Priority Species, **UKBR** - UK Red listed birds (not based on IUCN criteria), **VC52** - Locally Important within Vice-County 52: Anglesey, **WBA** - Welsh Amber listed birds (not based on IUCN criteria), **WBR** - Welsh Red listed birds (not based on IUCN criteria), **WCA1.1** - Wildlife & Countryside Act 1981 Schedule 1.1, **WCA1.2** - Wildlife & Countryside Act 1981 Schedule 1.2, **WCA5** - Wildlife & Countryside Act 1981 Schedule 5, **WCA9** - Wildlife & Countryside Act 1981 Schedule 9, **WRE** - Wrexham County Council Local Biodiversity Action Plan, **WVP** - IUCN Threat Listing of Welsh Vascular Plants

Site Types: **AW** - Ancient Woodland Sites, **WS** - Wildlife Sites

Contact Us:

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