Environmental Statement

Appendix 8.1: Ecology Desk Study Report

Land at Lower Berse Farm, Wrexham

On behalf of Redrow Homes Ltd

July 2024



THE ENVIRONMENT PARTNERSHIP



RUTHIN ROAD
WREXHAM
ECOLOGY DESK STUDY

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Document Title	Ecology Desk Study
Prepared for	Redrow Homes
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Document Ref	8745.001.01

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Date	April 2021
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Amendment History					
Version	Date	Modified by	Check / Approved by	Reason(s) issue	Status
2.0	01/06/23	AP	PB	Change of development description	Superceded
3.0	05/06/23	AP	PB	Client amendments	Superceded
4.0	10/08/23	AP	PB	Change of housing numbers	Final

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APPENDICES

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APPENDIX B: Citations for Statutory Designated Wildlife Sites of National Importance

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APPENDIX C: Species Records within 2km of the Site

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1.0 Introduction

1.1 The Environment Partnership (TEP) were commissioned, by Redrow Homes in April 2021, to complete an ecology desk based assessment of land known as Ruthin Road in Wrexham (hereafter referred to as 'the site'). This assessment is required to inform planning applications for development of up to 1,520 dwellings on a 72.85 ha site at Ruthin Road.

1.2 The central grid reference of the site is SJ 31500 49800 and the location of the site is shown in Figure 1 below.

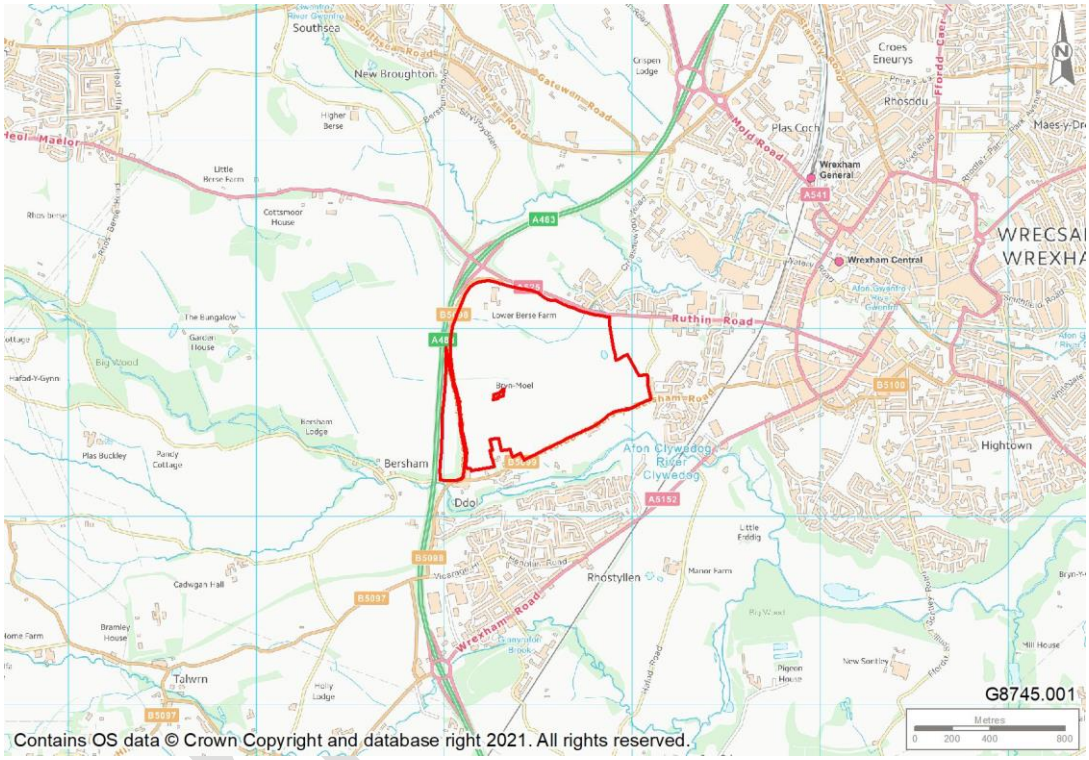


Figure 1: Site Location Plan

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2.0 Method

2.1 Information regarding historic species records and protected sites was requested/gathered from the sources listed in Table 1. This collated data gives a useful indication of the distribution and abundance of ecological receptors at a given locale. An absence of records does not indicate the absence of protected species from the search area.

Table 1: Sources of Ecological Information

Source of Information	Nature of Information
Natural Resources Wales (NRW)	Statutory designated wildlife sites of international importance within 10km Statutory designated wildlife sites of national importance within 5km Statutory designated wildlife sites of local importance within 2km
LANDMAP	Notable habitats within and adjacent to the site
Cofnod	Protected species records within 2km Non-statutory designated wildlife sites of local importance within 2km
Wrexham County Borough Council	Land allocations and relevant policies
ArcMap10	Ordnance & Aerial survey mapping

2.2 Statutory designated wildlife sites of international importance may include:

- Ramsar sites;
- Special Areas of Conservation (SAC); and
- Special Protection Areas (SPA).

2.3 Statutory designated wildlife sites of national importance may include:

- Site of Special Scientific Interest (SSSI);
- National Nature Reserve (NNR);
- Marine Nature Reserve (MNR); and
- Area of Outstanding National Beauty (AONB).

2.4 Statutory designated wildlife sites of local importance refers to Local Nature Reserves (LNR).

2.5 Non-statutory designated wildlife sites of local importance may include:

- Local Wildlife Site (LWS);
- Site of Biological Importance (SBI); and
- Biological Heritage Site (BHS).

2.6 Habitats of value may include those listed under any of the following:

- Ancient woodland;

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- Main rivers[1];
- Habitats of principal importance under Section 7 of the Environment (Wales) Act 2016 (S7); and
- Local Biodiversity Action Plan Habitats (LBAP).

2.7 Protected species records may include those listed under any of the following:

- European Protected Species (EPS);
- Protected bird species under Schedule 1 of the Wildlife and Countryside Act 1981, as amended (WCA1);
- Protected animal species under Schedule 5 of the Wildlife and Countryside Act 1981, as amended (WCA5);
- Protected plant species under Schedule 8 of the Wildlife and Countryside Act 1981, as amended (WCA8);
- Invasive non-native plant species under Schedule 9 of the Wildlife and Countryside Act 1981, as amended (WCA9);
- Invasive Alien Species (Enforcement and Permitting) Order 2019 (IAS);
- Protection of Badgers Act 1992 (PBA);
- Species of principal importance under Section 7 of the Environment (Wales) Act 2016 (S7);
- Red and Amber listed Birds of Conservation Concern (BRd/BAm); and
- Local Biodiversity Action Plan Species (LBAP).

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[1] Main rivers are statutory watercourses designated by the Environment Agency (in England). 'Main rivers' are usually larger streams and rivers, but some of them are small watercourses of significance. Works within 8m of main rivers are generally prohibited or require permission as there could be flood risk implications.

3.0 Legislation and Planning Policy

3.1 This section details legislation and planning policy which may have relevance to the site. Only legislation and policy relevant to biodiversity are included.

International Planning Policy

Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

Protected Species

3.2 European Protected Species (EPS) and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which makes it illegal to:

- Deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs;
- Deliberately disturb such an animal; and
- Damage or destroy a breeding site or resting place of such an animal.

3.3 European Protected Species (EPS) licenses can be granted by NRW in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed, namely:

- The development is for reasons of overriding public interest;
- There is no satisfactory alternative; and
- The favourable conservation status of the species concerned will be maintained and/or enhanced.

3.4 Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a duty to 'have regard to the requirements of the EC Habitats Directive' i.e. LPA's must consider the above 3 'tests' when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations.

Protected Sites

3.5 The Regulations also deal with the assessment of potential impacts on sites of European nature conservation importance. Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process.

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3.6 All plans and projects (including planning applications) which are not directly connected with, or necessary for, the conservation management of a habitat site, require consideration of whether the plan or project is likely to have significant effects on that site. This consideration should take into account the potential effects both of the plan/project itself and in combination with other plans or projects. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured.

National Planning Policy

Planning Policy Wales 2018

3.7 Planning Policy Wales delivers land use planning policy for Wales and provides a framework for the effective preparation of local planning authorities' development plans. This is supplemented by 21 topic based Technical Advice Notes (TANs). Technical Advice Note 5- Nature Conservation and Planning is a key TAN in relation to nature conservation and biodiversity.

3.8 TAN 5 states that the town and country planning system in Wales should:

- work to achieve nature conservation objectives through a partnership between local planning authorities, NRW, the Environment Agency Wales, voluntary organisations, developers, landowners and other key stakeholders;
- integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time;
- ensure that the UK's international and national obligations for site, species and habitat protection are fully met in all planning decisions;
- look for development to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally;
- help to ensure that development does not damage, or restrict access to, or the study of, geological sites and features or impede the evolution of natural processes and systems especially on rivers and the coast;
- forge and strengthen links between the town and country planning system and biodiversity action planning particularly through policies in local development plans and the preparation of supplementary planning guidance that adds value to Local Biodiversity Action Plans (LBAPs) by highlighting the ways in which the planning system can help to deliver the objectives of LBAPs in practical ways; and
- plan to accommodate and reduce the effects of climate change by encouraging development that will reduce damaging emissions and energy consumption and that help habitats and species to respond to climate change.

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Wildlife and Countryside Act 1981

3.9 Animal species listed under Schedule 5 of the Wildlife and Countryside Act 1981 (and as amended) receive full protection which makes it illegal (subject to certain exceptions) to:

- Intentionally kill, injure or take any such animal;
- Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and
- Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.

3.10 Some species receive partial protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which provide protection against intentional killing or injury of any such animal.

3.11 All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to exceptions) to:

- Intentionally kill, injure or take any wild bird;
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

3.12 Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (and as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to:

- Intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.

3.13 Plant species listed under Schedule 8 of the Wildlife and Countryside Act 1981 (and as amended) are protected from unauthorised intentional picking, uprooting and destruction.

Environment (Wales) Act 2016

3.14 Section 6 of the Environment Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'.

3.15 Section 7 of the Environment Act requires The Welsh Ministers to publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales. This is known as the S7 list.

Protection of Badgers Act 1992

3.16 The Protection of Badgers Act 1992 makes it an offence to kill, injure or take a badger from the wild. It is also an offence to disturb, damage or interfere with a sett unless a licence is obtained from a statutory authority.

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Local Planning Policy

Natural Resources Wales Area Statements

3.17 Natural Resources Wales have developed seven Area Statements covering different areas of Wales. These statements are seen as a collaborative response to the Natural Resources Policy, published by the Welsh Government in 2017.

3.18 The Area Statement for North East Wales can be viewed by following the link: Natural Resources Wales / North East Wales Area Statement

3.19 The following sections of the Area Statement relate to biodiversity and nature conservation:

- Climate emergency
- Develop and improve urban and rural green infrastructure
- Increasing woodlands
- Promoting the resilience of ecosystems in maintaining and enhancing biodiversity
- Farming and sustainable land management

Wrexham Unitary Development Plan

3.20 The Wrexham Unitary Development Plan sets out a planning strategy to safeguard the County Borough's natural environment whilst allowing the provision of future built development.

3.21 The Wrexham Unitary Development Plan can be viewed by following the link: Wrexham Unitary Development Plan 1996-2011https://www.wrexham.gov.uk/sites/default/files/2020-05/udp-statement.pdf

3.22 The Wrexham Unitary Development Plan proposals map can be viewed by following the link: https://www.wrexham.gov.uk/sites/default/files/2021-02/map3_inset5.pdf In the Wrexham Unitary Development Plan, the site at Ruthin Road is classified as a Green Barrier (see Policy EC1) and a Special Landscape Area (see Policy EC5). The site also features some walking/cycling routes (see Policy T10).

3.23 The following policies relate to biodiversity and nature conservation:

- Policy PS11 - Biodiversity;
- Policy GDP1 - Development Objectives;
- Policy EC1 - Green Barriers;
- Policy EC2 - Agricultural Land;
- Policy EC3 - Agricultural Buildings;
- Policy EC4 - Hedgerows, Trees and Woodland;
- Policy EC5 - Special Landscape Areas;
- Policy EC6 - Biodiversity Conservation;
- Policy EC7 - Conservation Areas;
- Policy EC10 - Environmental Enhancement;
- Policy T10 - Walking and Cycling Routes.

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Wrexham Local Development Plan 2 (LDP2)

3.24 The Wrexham Local Development Plan 2 (LDP2) will be a long-term land use and development strategy that will focus on achieving sustainable development.

3.25 In March 2018, the Council issued the Deposit version of its LDP2 to cover the period between 2013 and 2028, an Examination was held to consider objections and, In February 2023, the Inspector's issued their report which, subject to a number of changes, found the Plan sound.

3.26 The progress of the LDP2 can be viewed by following the link: Wrexham Local Development Plan 2 (LDP2) 2013 to 2028 | Wrexham County Borough Council

Local Biodiversity Action Plans (LBAP)

3.27 The LBAP document for Wrexham can be viewed by following the link: https://webarchive.nationalarchives.gov.uk/20110303154000/http://www.ukbap.org.uk/lbap.aspx?id=499#6

3.28 The following habitats are identified within LBAPs by Wrexham County Borough Council:

- Derelict and Industrial Land
- Garden
- Linear aquatic habitats (rivers, streams, canals)
- Ponds
- Upland Moorland
- Woodland
- Lowland raised bog
- Lowland wood-pasture and parkland
- Wet Woodland

3.29 The following species are identified within LBAPs by Wrexham County Borough Council:

- Great Crested Newt (*Triturus cristatus*)
- Barn Owl (*Tyto alba*)
- Song Thrush (*Turdus philomelos*)
- Badger (*Meles meles*)
- Otter (*Lutra lutra*)
- Lesser Horseshoe Bat (*Rhinolophus hipposideros*)
- Black Poplar (*Populus nigra*)

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4.0 Site Designations

Statutory Designated Wildlife Sites of International Importance

4.1 There are four internationally designated wildlife sites within 10km of the site (Figure 2). These are detailed in Table 2 below. Citations are included in Appendix A.

Table 2: Details of Internationally Designated Wildlife Sites within 10km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Johnstown Newt Sites	SAC (Wales)	1.90km south	This site is composed of two post-industrial sites where coal and clay have been extracted. The population of great crested newts is one of the largest known in Great Britain. Good populations of the widespread amphibian species are also present.
Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains	SAC (Wales)	3.70km west	The site is designated for its habitats, including: blanket bog; base-rich scree; plants in crevices in base-rich rocks; dry heaths; dry grasslands and scrublands on chalk or limestone; very wet mires often identified by an unstable 'quaking' surface.
Midland Meres & Mosses Phase 2	RAMSAR (England) RAMSAR (Wales)	5.54km northeast	The site is a particularly good example of a natural or near-natural wetland, comprising the full range of habitats from open water to raised bog. It supports a number of rare plant and invertebrate species associated with wetlands.
River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid	SAC (England) SAC (Wales)	7.16km southeast at nearest point.	The site is designated for its species, including: bullhead; river lamprey; brook lamprey; floating water-plantain; otter; sea-lamprey; and Atlantic salmon. The site also has rivers with floating vegetation often dominated by water-crowfoot.

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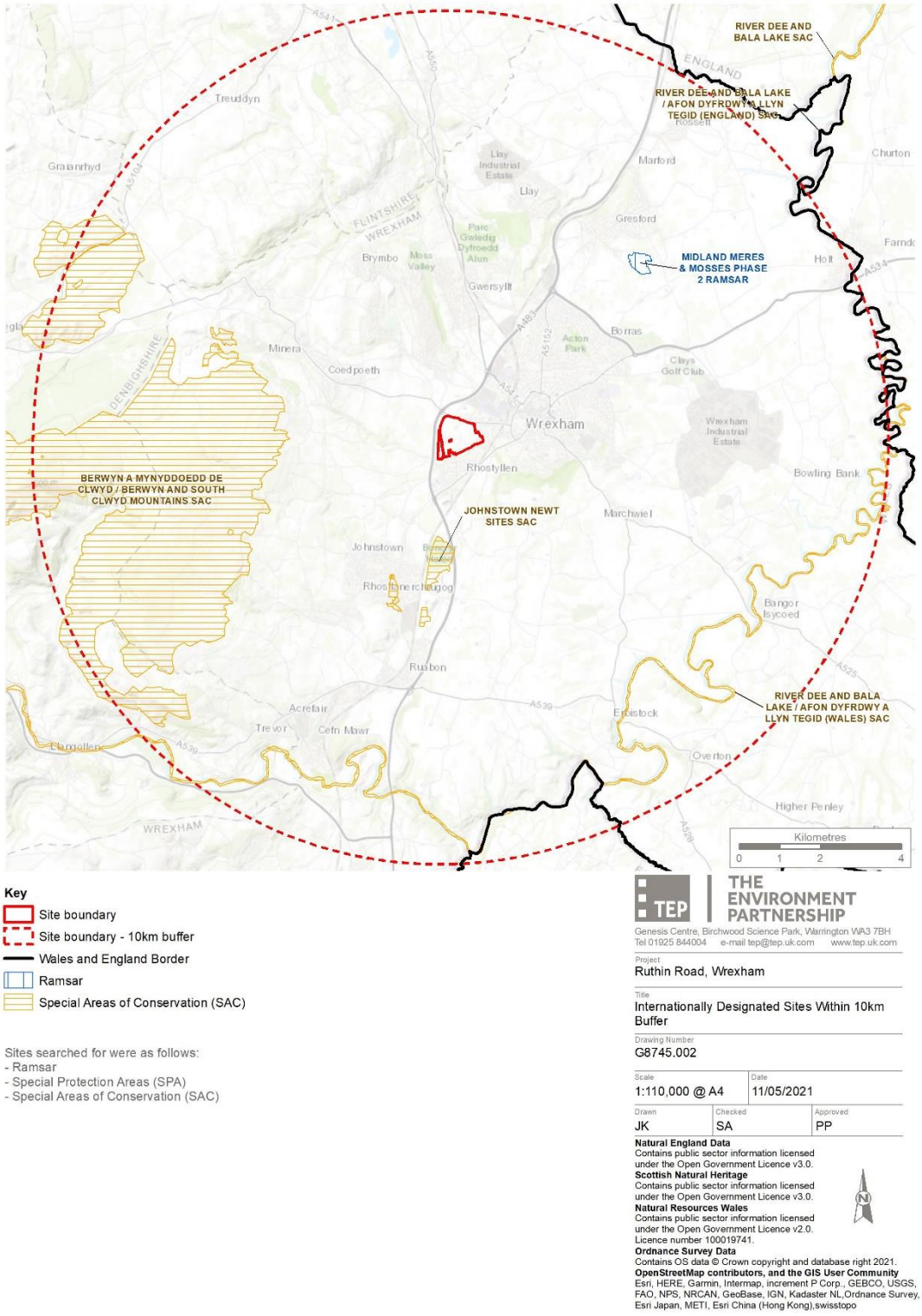


Figure 2: Internationally Designated Wildlife Sites within 10km of the Site

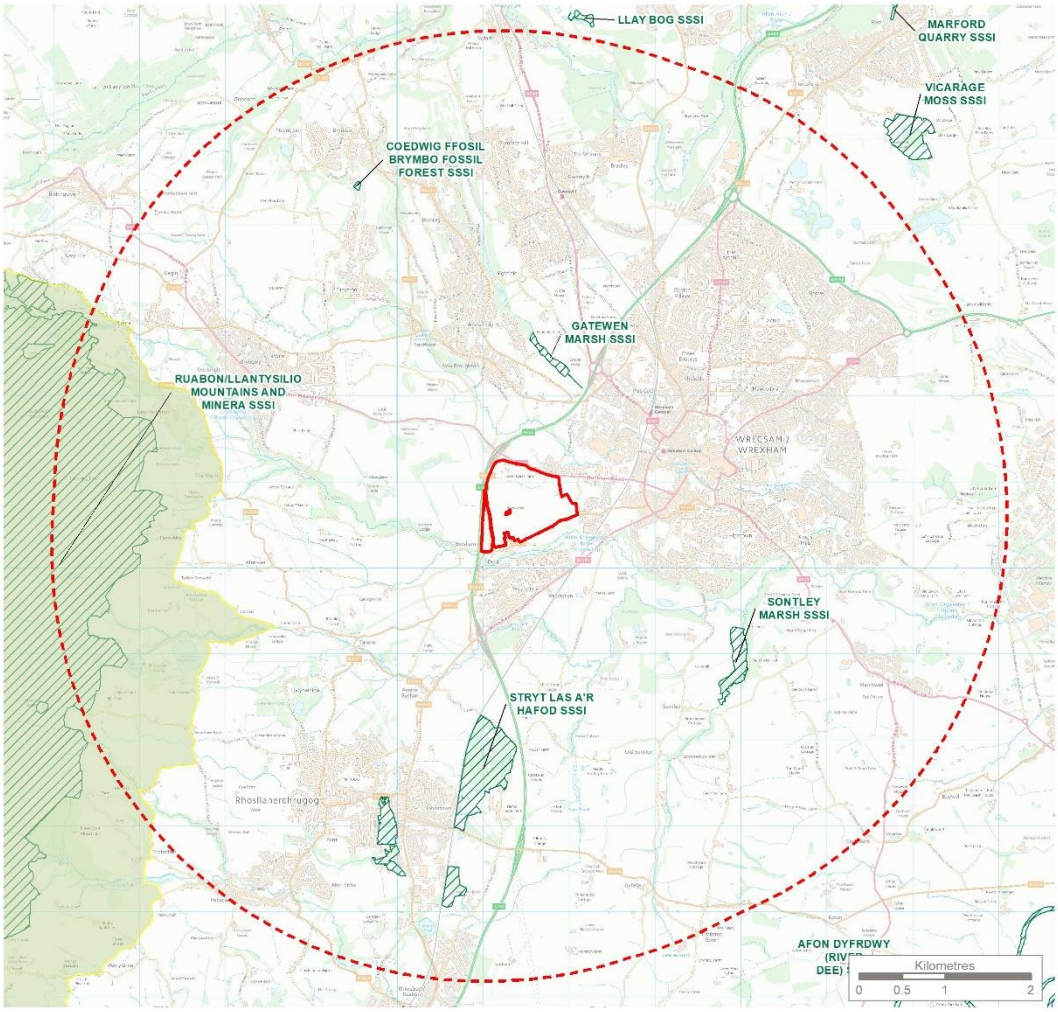
Statutory Designated Wildlife Sites of National Importance

4.2 There are five nationally designated wildlife sites within 5km of the site (Figure 3). These are detailed in Table 3 below. Citations are included in Appendix B.

Table 3: Details of Nationally Designated Wildlife Sites within 5km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Gatewen Marsh	SSSI (Wales)	1.07km north	One of only three significant examples in the former county of Clwyd of the "southern mesotrophic mires" wetland type. The marsh is unusual in containing substantial stands of Great Reedmace in shallow water with Brooklime, Water Plantain and Bottle Sedge.
Stryt Las A'r Hafod	SSSI (Wales)	1.90km south	The site is of special interest for its amphibians. The water bodies at Stryt Las and Hafod support one of the largest known breeding populations of the great crested newt in Great Britain.
Sontley Marsh	SSSI (Wales)	2.27km southeast	The site is of botanical interest with extensive areas of alder carr woodland, tall fen vegetation and herb-rich damp grassland.
Coedwig Ffosil Brymbo Fossil Forest	SSSI (Wales)	3.57km northwest	The site is of geological interest and features an internationally important plant fossil assemblage.
Ruabon/Llantysilio Mountains and Minera	SSSI (Wales)	3.70km west	The site is primarily noted for its heather moor, limestone and neutral grassland habitats, and its species, comprising various upland breeding birds, bats and rare and uncommon plants.

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Key

- Site boundary
- Site boundary - 5km buffer
- Areas of Outstanding Natural Beauty
- Sites of Special Scientific Interest (SSSI)

Sites searched for were as follows:
- Sites of Special Scientific Interest (SSSI)
- National Nature Reserve (NNR)
- Area of Outstanding Natural Beauty (AONB)

THE ENVIRONMENT PARTNERSHIP
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project: Ruthin Road, Wrexham

Title: Nationally Designated Sites Within 5km Buffer

Drawing Number: G8745.003

Scale	Date
1:60,000 @ A4	10/05/2021

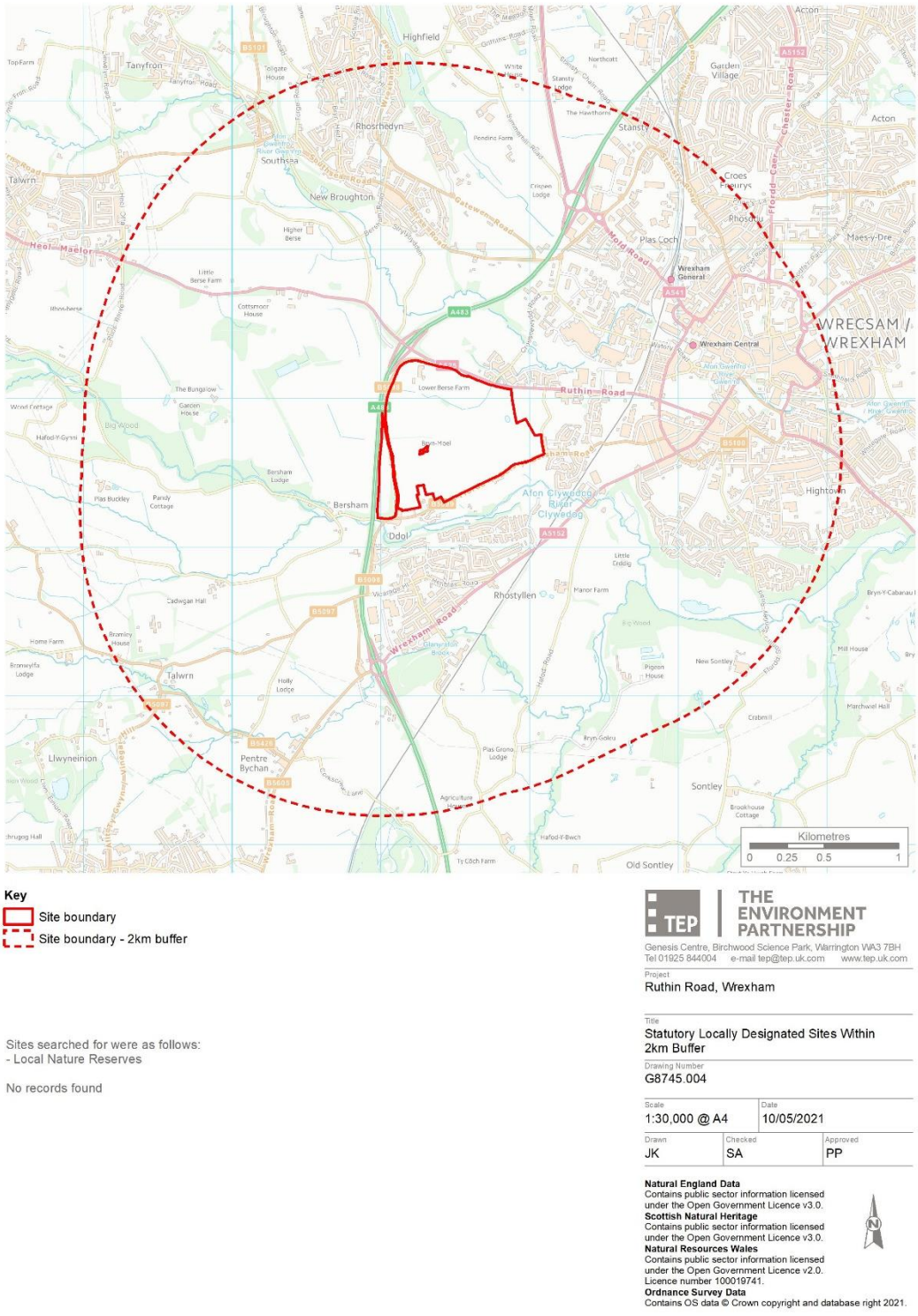
Drawn	Checked	Approved
JK	SA	PP

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Figure 3: Nationally Designated Wildlife Sites within 5km of the Site

Statutory Designated Wildlife Sites of Local Importance

4.3 There are no statutory locally designated wildlife sites within 2km of the site (Figure 4).



Key

Site boundary

Site boundary - 2km buffer

Sites searched for were as follows:
- Local Nature Reserves

No records found

THE ENVIRONMENT PARTNERSHIP
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project: Ruthin Road, Wrexham

Title: Statutory Locally Designated Sites Within 2km Buffer

Drawing Number: G8745.004

Scale	Date
1:30,000 @ A4	10/05/2021

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Figure 4: Statutory Locally Designated Wildlife Sites within 2km of the Site

Non-statutory Designated Wildlife Sites of Local Importance

4.4 There are ten non-statutory locally designated wildlife sites within 2km of the site (Figure 5). These are detailed in Table 4 below.

Table 4: Details of Non-statutory Locally Designated Wildlife Sites within 2km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Erddig Estate	Local Wildlife Site	350m southeast	National Trust estate with woodlands, semi-improved neutral grasslands and marshes. The amount of mature trees in the park is exceptional and these have correspondingly excellent insect communities with 12 notable species and 1 red data species discovered.
Big Wood	Local Wildlife Site	440m west	The wood along the River Clywedog is a mixture of conifer plantation, beech plantation and patches of semi-natural broad-leaved woodland.
Berse Drelincourt	Local Wildlife Site	460m south	A mosaic of semi-natural habitats including woodland, a stream and grassland containing common spotted orchid, glaucous sedge and bird's-foot trefoil.
New Broughton Meadow	Local Wildlife Site	1.09km northwest	A site with a variety of semi-natural habitats including diverse sandy grassland with such species as goatsbeard, oxeye daisy, common toadflax and bird's-foot trefoil.
Nant Mill – Grasslands	Local Wildlife Site	1.20km west	Grassland habitat.
Higher Berse Marsh	Local Wildlife Site	1.21km northwest	Two marshy areas separated by a road, the southern one is unsurveyed. The northern marsh is dominated by soft rush and great willowherb and the diversity is only fair. Around the edge of the marsh is dry semi-improved grassland which is rushy in places
Crematorium	Local Wildlife Site	1.33km southwest	The two hay meadows in front of the crematorium are herb-rich semi-improved neutral grassland. Behind the crematorium there is a broadleaved woodland with many exotic trees and shrubs and patches of parkland. There are two ponds with fringed water lily, common reedmace, water plantain and reed sweet grass.
Legacy Substation	Local Wildlife Site	1.47km southwest	Electricity substation surrounded by embankment with semi-improved grasslands and scrub. Bee orchid, yellow-wort and common centuary occur.

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Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Moss Valley	Local Wildlife Site	1.51km north	Well wooded valley slopes with adjoining grassland. To the south-west, there is a disused railway line with uncommon species present, such as upright brome, ratstail fescue, and hare's-foot clover.
Afon Gwenfro	Local Wildlife Site	1.79km northwest	A reclaimed coal site with grasslands, scrub, a small wetland and an ash/alder wood. The semi-improved neutral grassland are species rich with black knapweed, common bent, yellow oat grass and common spotted orchid.

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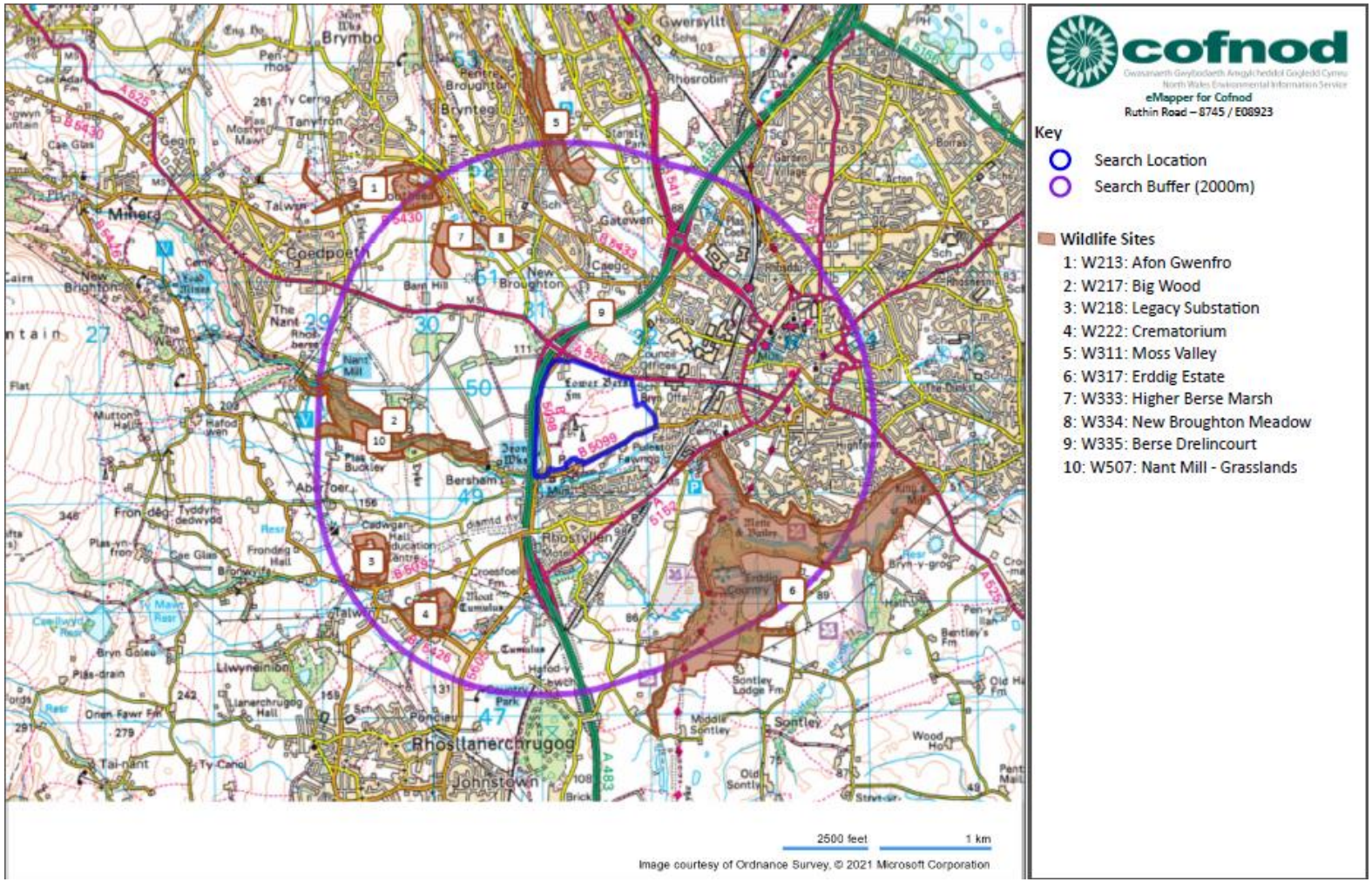


Figure 5: Non-statutory Locally Designated Wildlife Sites within 2km of the Site

5.0 Habitats

5.1 The following notable habitats are present within or adjacent to the site (Figure 6):

- Ancient woodland
- Mosaic
- Residential green space

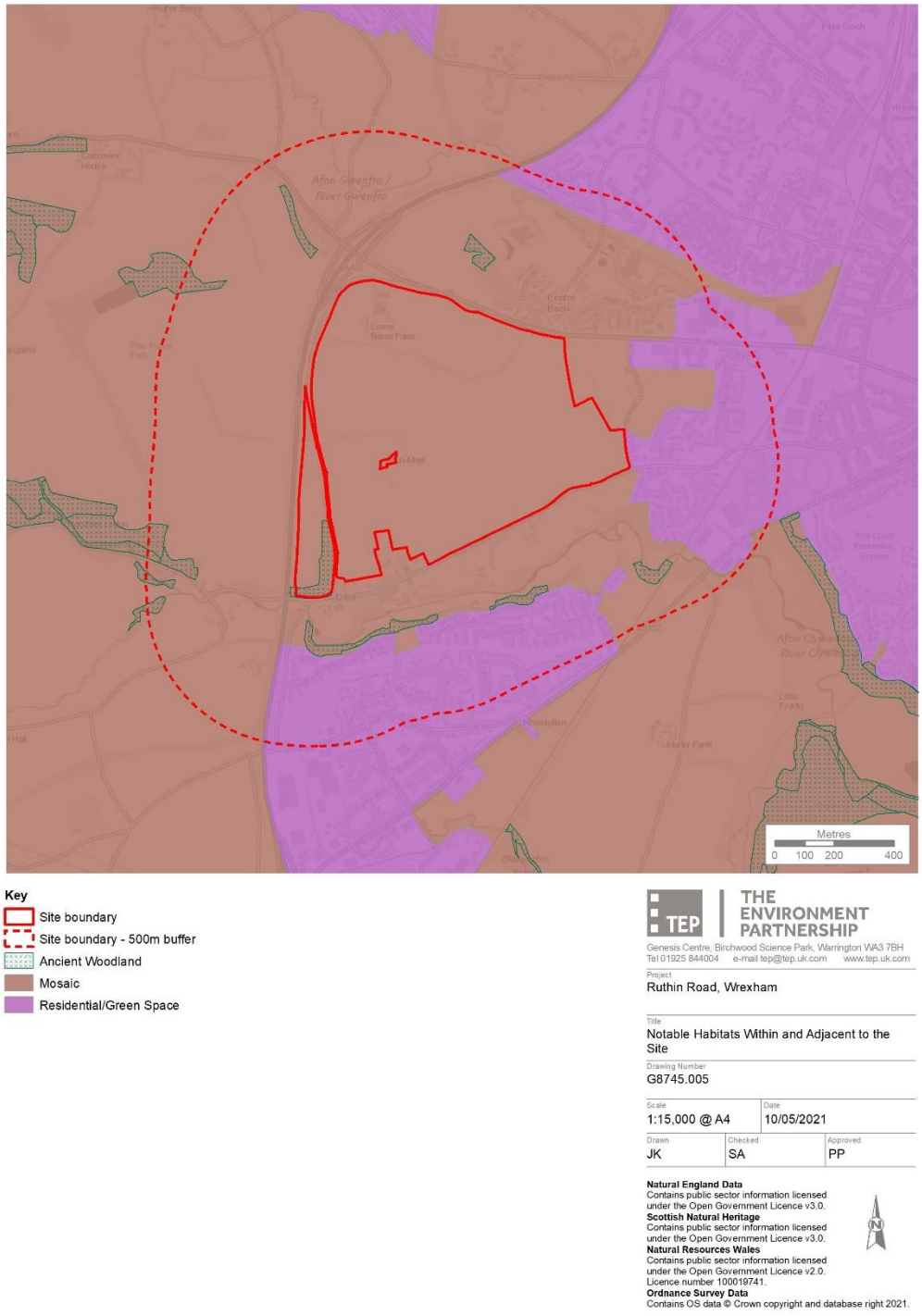


Figure 6: Notable Habitats within and adjacent to the Site

6.0 Species

6.1 1764 species records were returned from cofnod for within 2km of the site. These are shown in Table 5 and Figures 7 to 14. Species Record Identifiers are included in Appendix C.

6.2 A review of Magic Maps did not return any pond survey data for great crested newts between 2017 and 2019 within 2km of the site.

Table 5: Notable Species Records within 2km of the Site

Name of Species	Legislation	Number of Records Returned	Closest Record to Site
Amphibians			
Great Crested Newt	EPS, WCA5, S7, LBAP	23	290m northeast
Common Frog	WCA5	7	400m south
Common Toad	WCA5, S7	4	910m southeast
Unspecified Lissotriton Species	WCA5	4	1.43km southeast
Palmate Newt	WCA5	5	1.43km southeast
Smooth Newt	WCA5	5	1.65km southeast
Birds			
Bullfinch	S7, BAm	20	0m (on site)
Coal Tit	BAm	24	0m (on site)
Common Gull	BAm	10	0m (on site)
Dipper	BAm	19	0m (on site)
Dunnock	S7, BAm	35	0m (on site)
Fieldfare	WCA1, BRd	14	0m (on site)
Herring Gull	S7, BRd	23	0m (on site)
House Martin	BAm	21	0m (on site)
House Sparrow	S7, BRd	27	0m (on site)
Kestrel	S7, BAm	23	0m (on site)
Lapwing	S7, BRd	14	0m (on site)
Lesser Black-backed Gull	BAm	18	0m (on site)
Meadow Pipit	BAm	9	0m (on site)
Song Thrush	S7, BRd, LBAP	25	0m (on site)
Starling	S7, BRd	22	0m (on site)
Swift	BAm	35	0m (on site)
Woodcock	BRd	5	40m west
Barn Owl	WCA1	17	300m northwest
Willow Warbler	BAm	15	300m northwest

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Name of Species	Legislation	Number of Records Returned	Closest Record to Site
Black-headed Gull	S7, BAm	24	430m southeast
Brambling	WCA1	5	430m southeast
Mallard	BAm	17	430m southeast
Marsh Tit	S7, BRd	7	430m southeast
Redwing	WCA1, BRd	22	430m southeast
Willow Tit	S7, BRd	5	430m southeast
Cuckoo	S7, BRd	3	480m southwest
Grasshopper Warbler	S7, BRd	1	480m southwest
Lesser Spotted Woodpecker	S7, BRd	6	480m southwest
Yellowhammer	S7, BRd	8	480m southwest
Kingfisher	WCA1, BAm	9	760m east
Lesser Redpoll	S7, BRd	5	760m east
Mute Swan	BAm	7	760m east
Peregrine	WCA1	11	760m east
Redstart	WCA1	1	760m east
Linnet	S7, BRd	7	850m southwest
Reed Bunting	S7, BAm	10	850m southwest
Skylark	S7, BRd	3	850m southwest
Shoveler	BAm	3	1.20km southeast
Spotted Flycatcher	S7, BRd	8	1.20km southeast
Teal	BAm	2	1.20km southeast
Red Kite	WCA1	5	1.30km northwest
Hobby	WCA1	8	1.32km southwest
Dunlin	BAm	1	1.42km southeast
Osprey	WCA1, BAm	1	1.42km southeast
Pied Flycatcher	S7, BRd	3	1.42km southeast
Quail	WCA1, BAm	1	1.42km southeast
Snipe	BAm	4	1.42km southeast
Hawfinch	S7, BRd	2	1.65km southwest
Common Crossbill	WCA1	1	1.77km southwest
Tree Sparrow	S7, BRd	3	1.77km southwest
Gadwall	BAm	1	1.81km southeast
Mediterranean Gull	WCA1, BAm	1	1.81km southeast
Pochard	BRd	1	1.81km southeast
Ruddy Duck	IAS	1	1.81km southeast

Confidential

Name of Species	Legislation	Number of Records Returned	Closest Record to Site
Wigeon	BAm	1	1.81km southeast
Fish			
European Eel	S7	1	1.02km southeast
Brown/Sea Trout	S7	2	1.02km southeast
Fungi			
Bearded Tooth	S7, WCA8	1	1.20km southeast
Invertebrates			
Blood-vein Moth	S7	5	330m south
Wall Butterfly	S7	4	510m south
Shaded Broad-bar Moth	S7	3	590m southeast
Centre-barred Sallow Moth	S7	3	600m southeast
September Thorn Moth	S7	1	600m southeast
Southern Iron Blue (Mayfly)	S7	1	1.05km southeast
Buff Ermine Moth	S7	7	1.46km southeast
Dusky Thorn Moth	S7	1	1.46km southeast
Mottled Rustic Moth	S7	1	1.46km southeast
White-letter Hairstreak Butterfly	S7, WCA5	2	1.54km northeast
Cinnabar Moth	S7	3	1.84km east
Autumnal Rustic Moth	S7	2	1.88km northwest
Brown-spot Pinion Moth	S7	3	1.88km northwest
Feathered Gothic Moth	S7	3	1.88km northwest
Ghost Moth	S7	2	1.88km northwest
Rosy Rustic Moth	S7	3	1.88km northwest
Sallow Moth	S7	1	1.88km northwest
Small Emerald Moth	S7	1	1.88km northwest
White Ermine Moth	S7	4	1.89km northwest
Mammals			
Unspecified bat species	EPS, WCA5	19	0m (on site)
Unspecified Pipistrelle Species	EPS, WCA5	17	0m (on site)
Common Pipistrelle	EPS, S7, WCA5	156	0m (on site)
Soprano Pipistrelle	EPS, S7, WCA5	135	0m (on site)
Unspecified Long-eared Bat Species	EPS, WCA5	20	0m (on site)
Unspecified myotis bat species	EPS, WCA5	26	0m (on site)

Confidential

Name of Species	Legislation	Number of Records Returned	Closest Record to Site
Daubenton's Bat	EPS, WCA5	10	0m (on site)
Brandt's Bat	EPS, WCA5	5	0m (on site)
Natterer's Bat	EPS, WCA5	7	0m (on site)
Whiskered Bat	EPS, WCA5	27	0m (on site)
Noctule Bat	EPS, S7, WCA5	63	0m (on site)
Lesser Horseshoe Bat	EPS, S7, WCA5, LBAP	2	0m (on site)
Hedgehog	S7	62	0m (on site)
Polecat	S7	10	0m (on site)
[redacted]			
Otter	EPS, S7, WCA5, LBAP	16	150m southwest
Brown Long-eared Bat	EPS, S7, WCA5	9	800m northwest
Hare	S7	4	1.30km southeast
Plants			
Himalayan Balsam	IAS, WCA9	15	120m southwest
Wall Cotoneaster	WCA9	1	430m southeast
Bluebell	WCA8	29	480m southwest
Rhododendron ponticum	WCA9	3	480m southwest
New Zealand Pigmyweed	WCA9	6	530m southeast
Japanese Knotweed	WCA9	18	560m northeast
Black Poplar	LBAP	1	1.21km west
Montbretia	WCA9	2	1.48km southwest
Variegated Yellow Archangel	WCA9	2	1.48km southwest
Reptiles			
Adder	WCA5, S7	1	520m southeast
Grass Snake	WCA5, S7	5	616m southeast
Common Lizard	WCA5, S7	2	850m northeast

Confidential

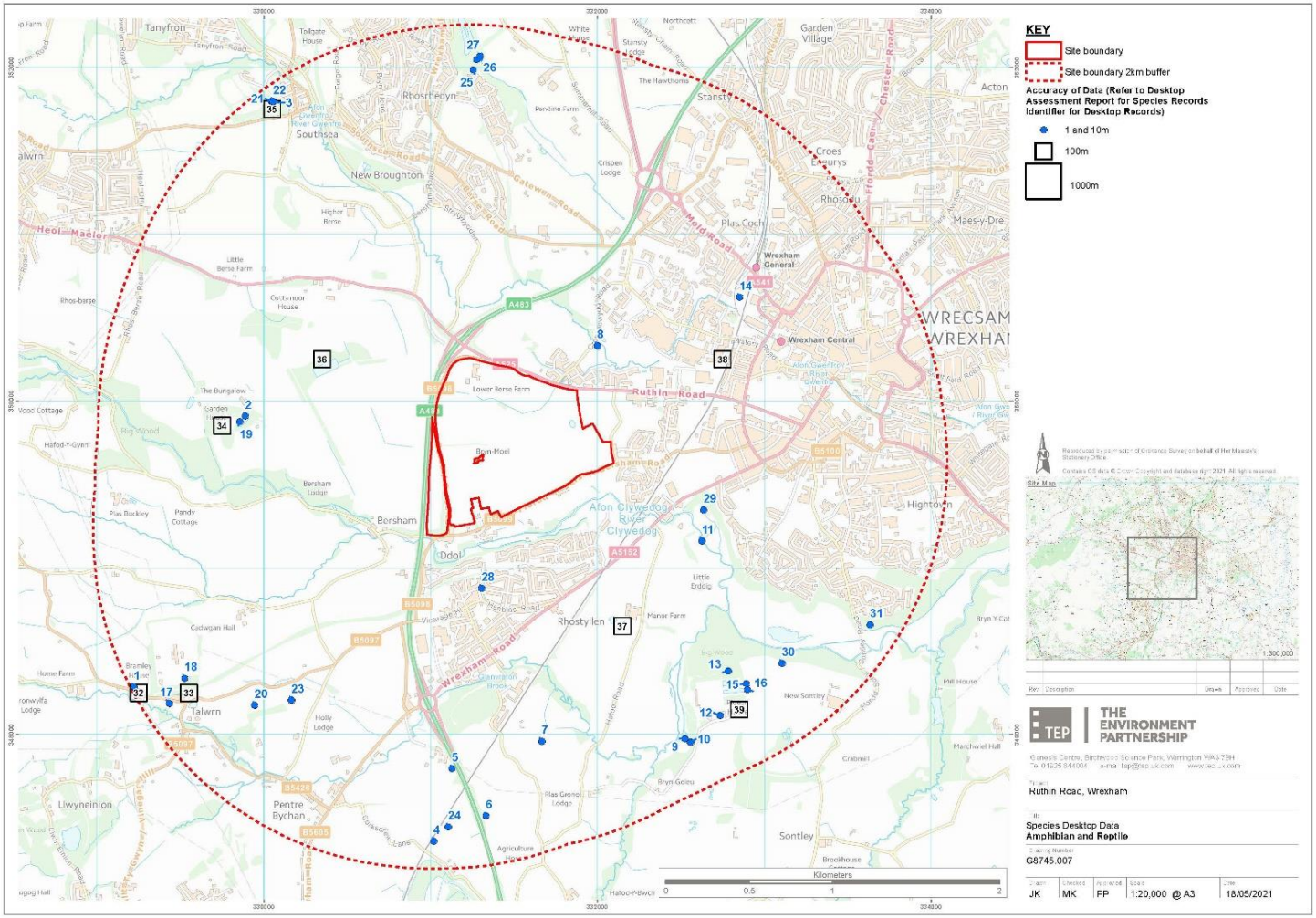


Figure 7: Notable Amphibian and Reptile Records within 2km of the Site

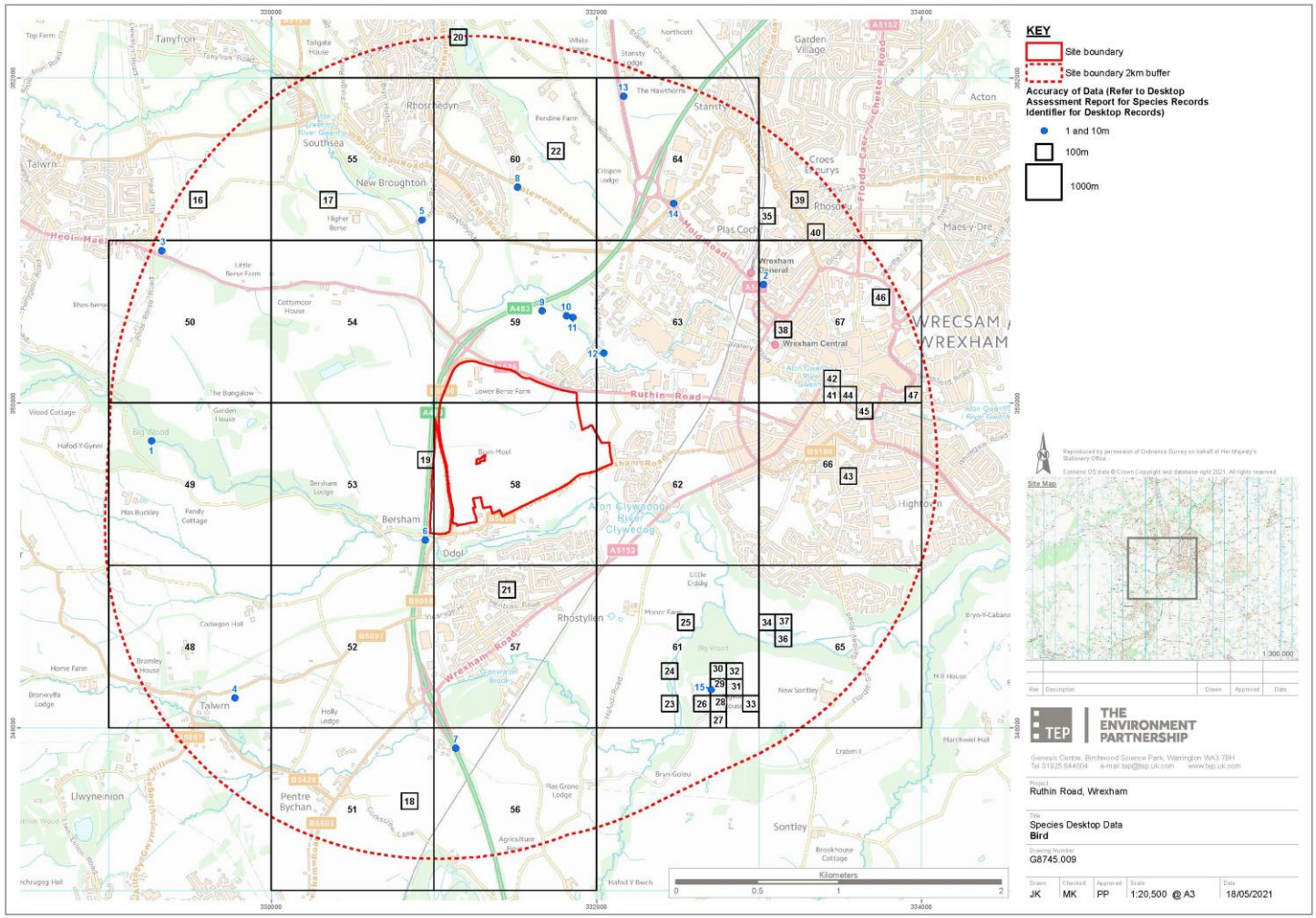


Figure 8: Notable Bird Records within 2km of the Site

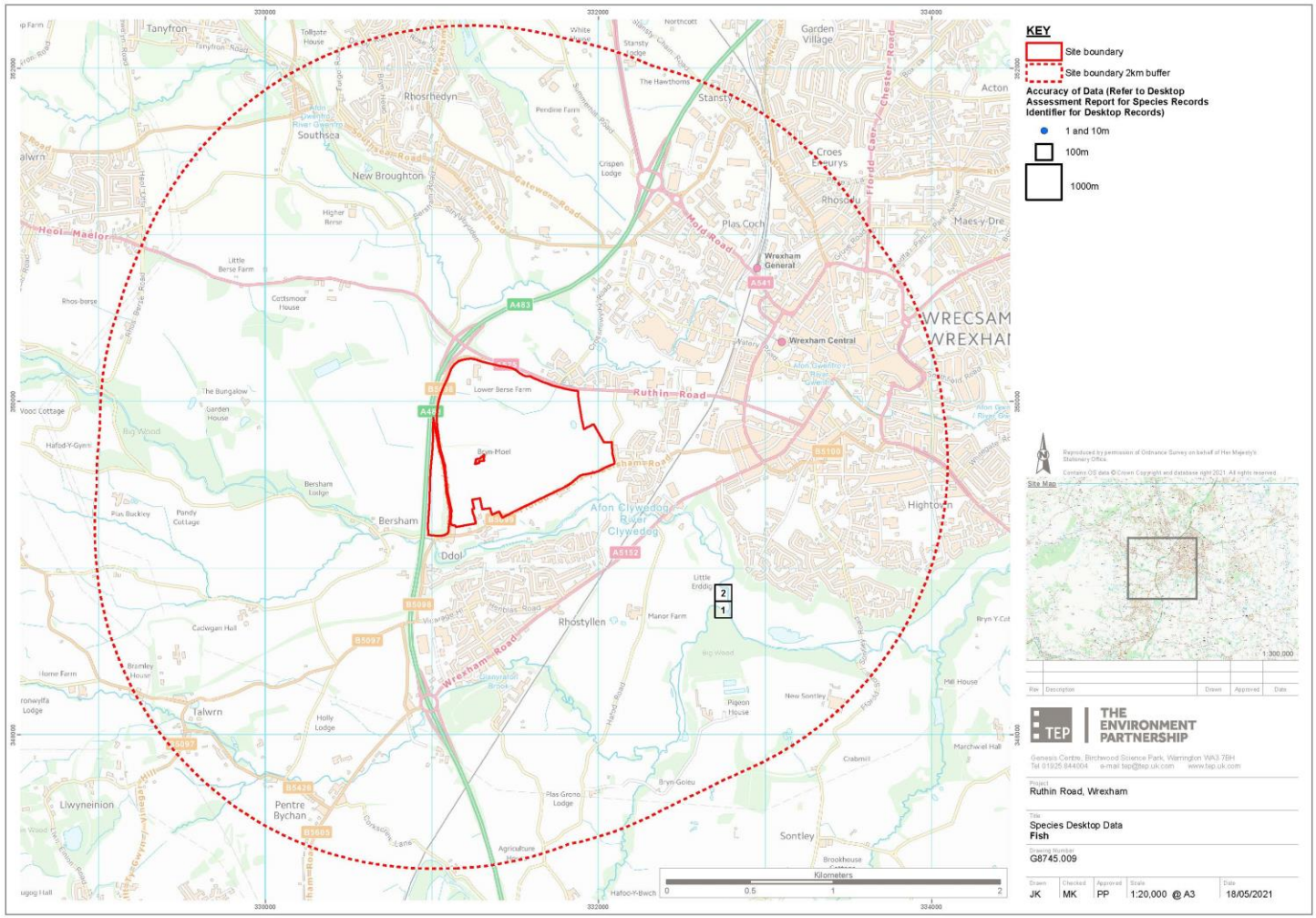


Figure 9: Notable Fish Records within 2km of the Site

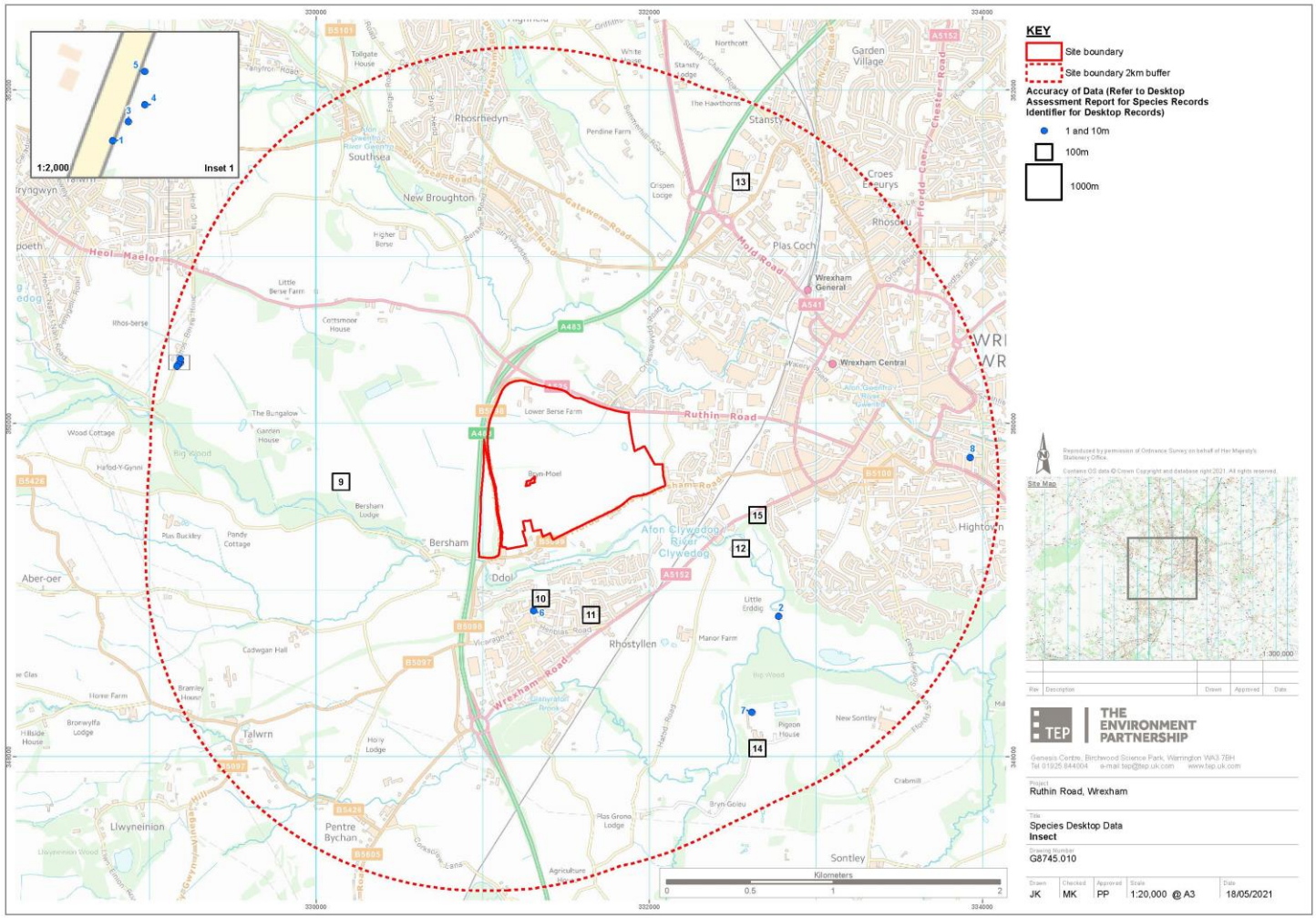


Figure 10: Notable Insect Records within 2km of the Site

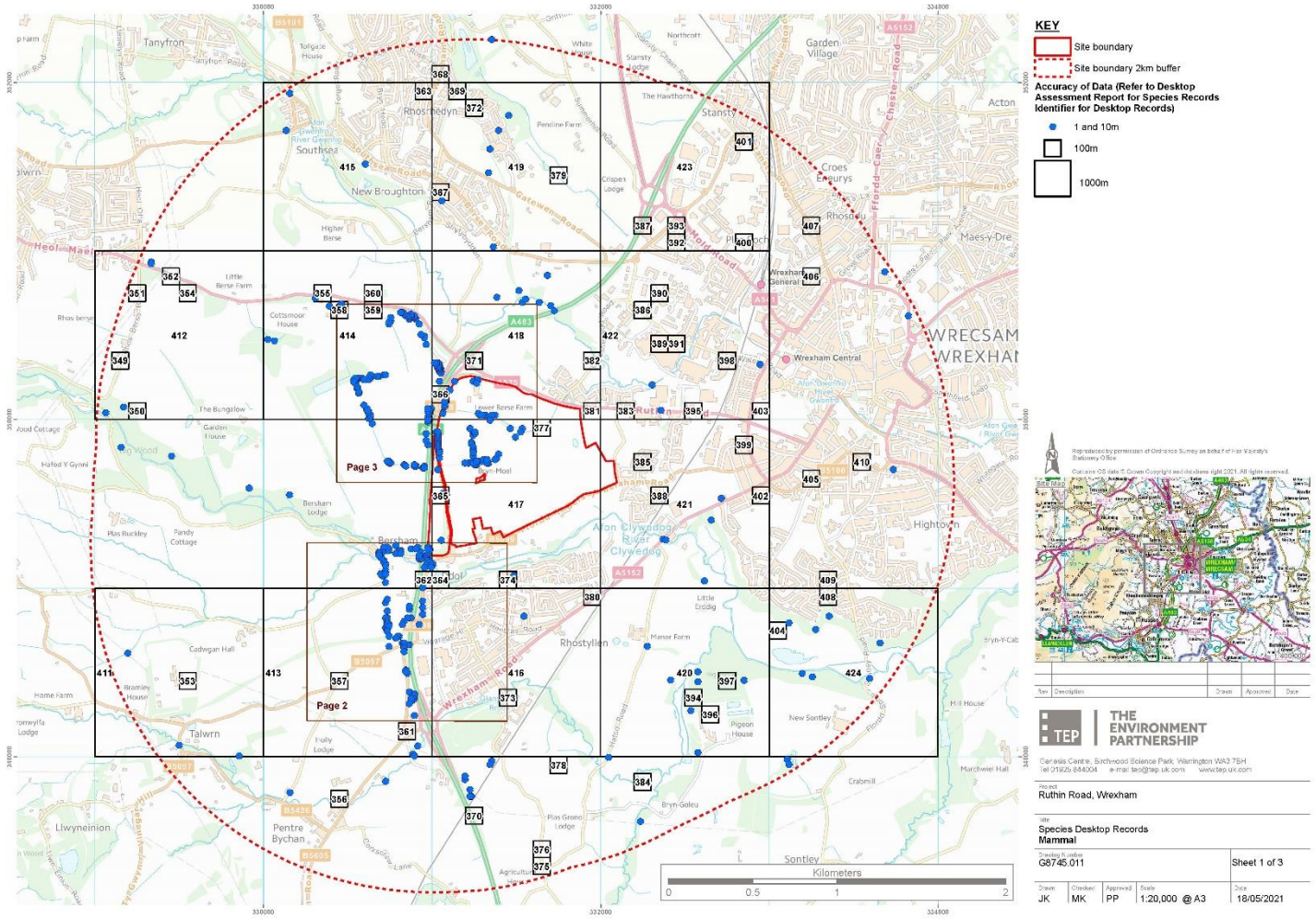


Figure 11: Notable Mammal Records within 2km of the Site

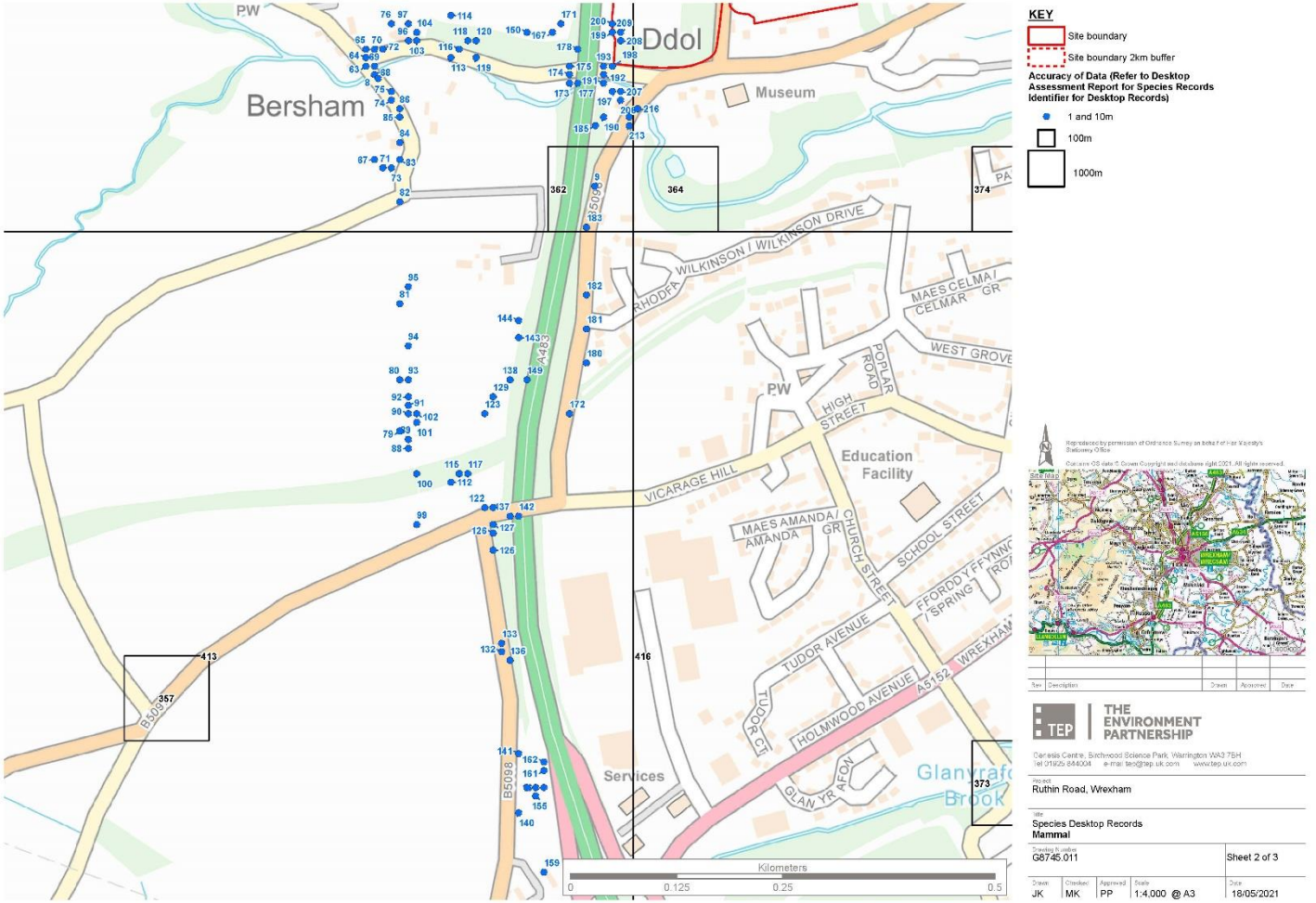


Figure 12: Notable Mammal Records within 2km of the Site

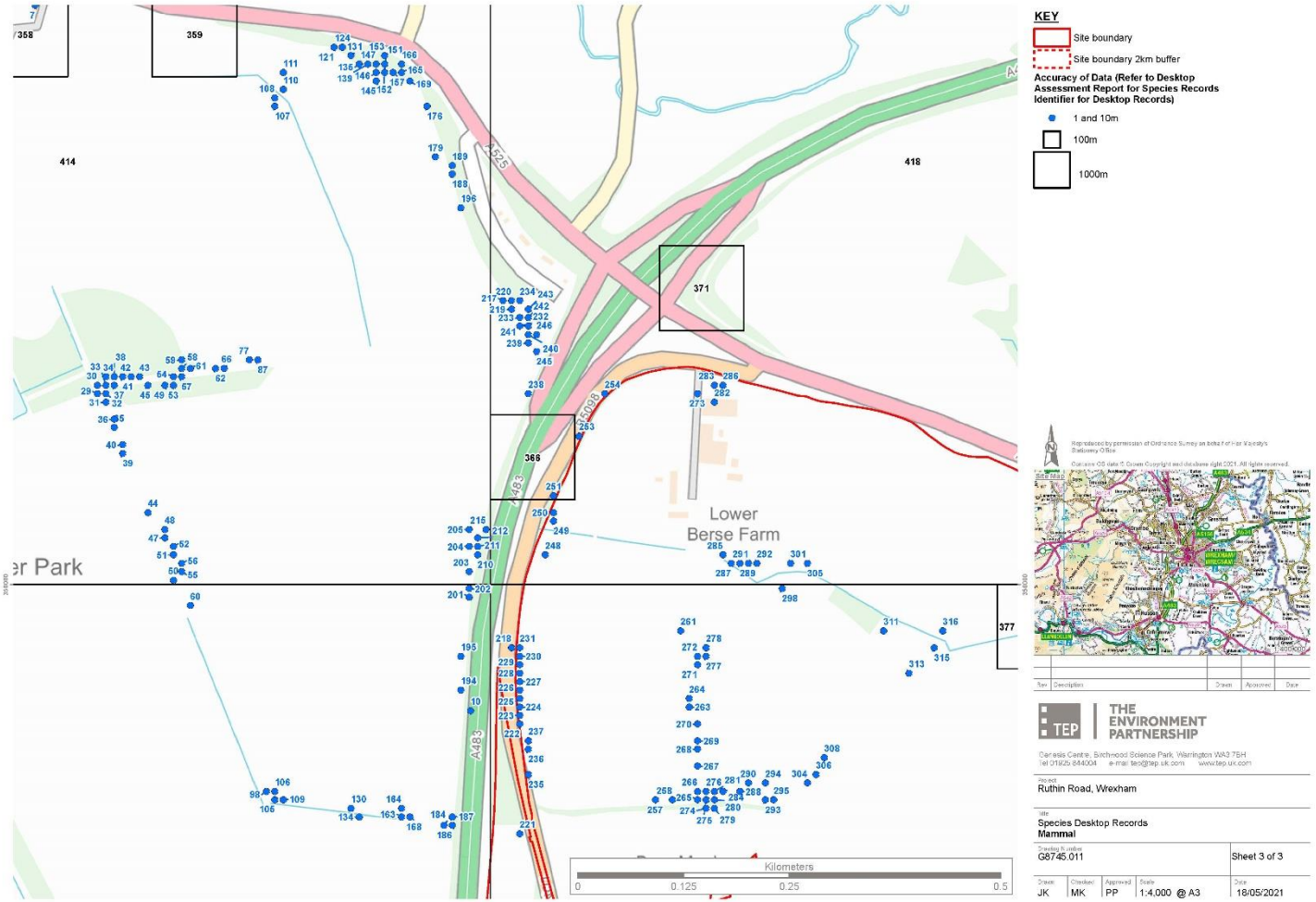


Figure 13: Notable Mammal Records within 2km of the Site

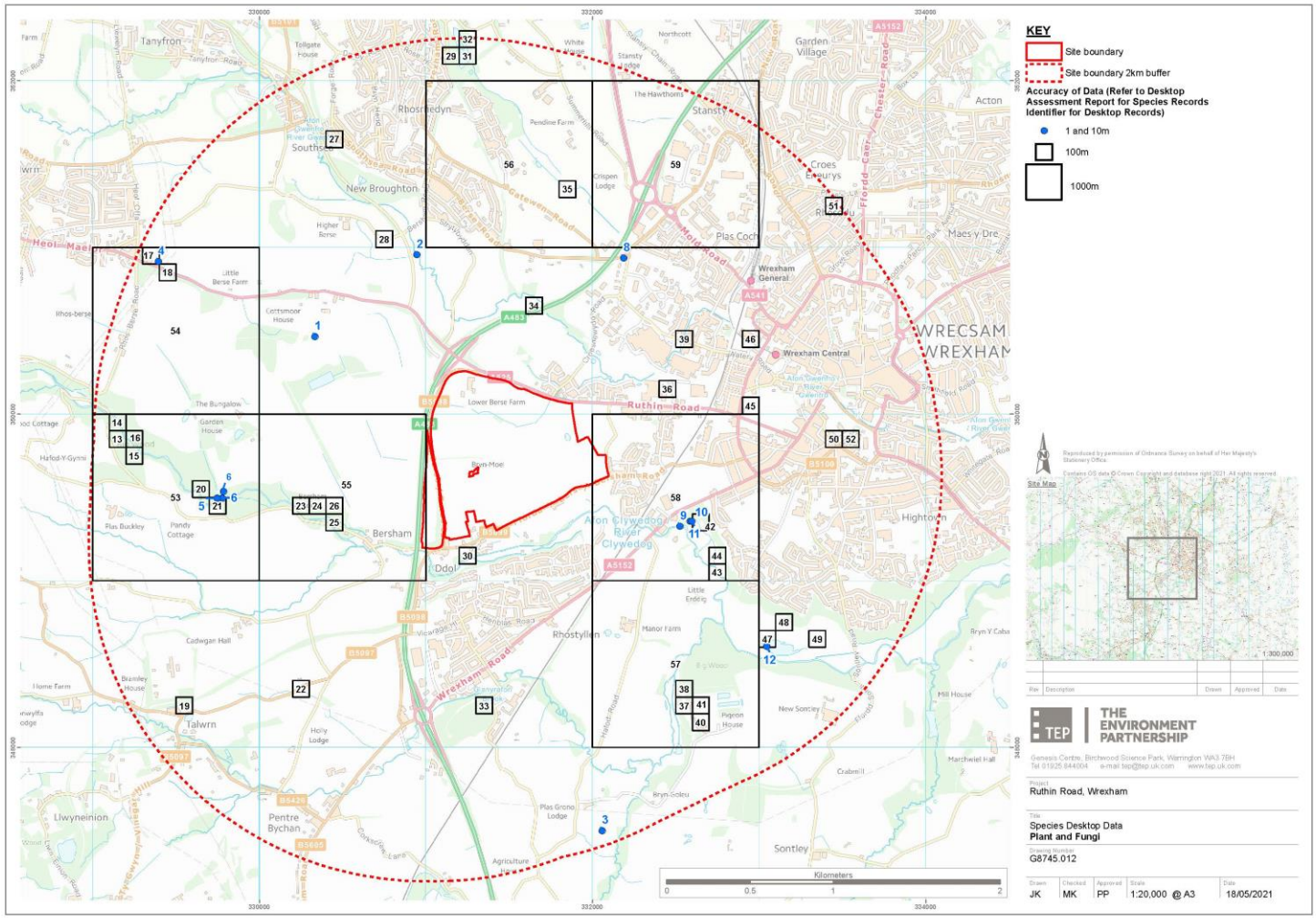


Figure 14: Notable Plant and Fungi Records within 2km of the Site

APPENDIX A: Citations for Statutory Designated Wildlife Sites of International Importance

Ramsar Convention on Wetlands of International Importance

MIDLAND MERES AND MOSSES (PHASE 2)

The Meres and Mosses of the Clwyd-Shropshire-Cheshire-Staffordshire plain form an internationally important series of open water and peatland sites. These have developed in natural depressions in the glacial drift left by receding ice sheets, which formerly covered this plain. The majority lie in Cheshire and north Shropshire, with a small number of outlying sites in adjacent parts of Staffordshire and Clwyd.

The origin of most of the hollows can be accounted for by glaciation but a small number have been formed, at least in part, by more recent subsidence resulting from the removal in solution of underlying salt deposits.

There are more than 60 open water bodies known as ‘meres' or 'pools' and a smaller number of peatland sites or mires known as 'mosses'. The meres range in depth from about one metre to 27 metres and vary between less than one hectare to 70 hectares, in area.

Although the majority of the meres are naturally nutrient rich (eutrophic), the water chemistry is very variable reflecting the heterogeneous nature of the surrounding drift deposits. Associated fringing habitats such as reedswamp, fen, carr and damp pasture add to the value of the meres. The development of these habitats is associated with peat accumulation which in some cases has led to the complete infilling of the basin. During this process the nutrient status of the peat surface changes and typically becomes nutrient poor (oligotrophic) and acidic, thus allowing species such as the bog mosses *Sphagnum* spp. to colonise. The resultant peat bogs are the 'mosses'. In a few cases colonisation of the water surface by floating vegetation has resulted in the formation of a quaking bog known as a 'schwingmoor'.

Phase 2 of the proposed Ramsar site is entirely coincident with the following 19 Sites of Special Scientific Interest (SSSI): Abbots Moss; Aqualate Mere; Black Firs & Cranberry Bog;. Brownheath Moss; Chapel Mere; Cole Mere; Cop Mere; Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses; Hanmer Mere; Hencott Pool; Linmer Moss; Llyn Bedydd; Morton Pool & Pasture: Oak Mere; Oakhanger Moss; Oss Mere; Rostherne Mere; Sweat Mere & Crose Mere; Vicarage Moss.

Phase 2 of the proposed Ramsar site covers 1740.3 hectares.

Phase 2 of the proposed Midland Meres and Mosses Ramsar site qualifies under criterion la of the Ramsar Convention as it is a particularly good example of a natural or near-natural wetland, characteristic of this biogeographical region. The proposed Ramsar site comprises the full range of habitats from open water to raised bog. .

The site qualifies under Criterion 2a by supporting a number of rare species of plants associated with wetlands, including the nationally scarce cowbane *cicuta virosa,*

elongated sedge Carex *elongata* and bog rosemary *Andromeda polifolia.* Also present are the nationally scarce byophytes *Dicranum undulatum*, *Dicranum affine* and *Sphagnum pulchrum.*

The site also qualifies under Criterion 2a by containing an assemblage of invertebrates, including several rare wetland species. There are 16 species of Red Data Book insect listed for this site, including the following endangered species: the moth *Glyphipteryx lathamella,* the caddisfly *Hagenella clathrata* and the sawfly *Trichiosoma vitellinae.*

Ramsar Citation (Montreaux criteria 1990)
countryside Council for Wales/English Nature
February 1995

Conservation (Natural Habitats, &c.) Regulations 1994 (SI 1994 No. 2716),
fel y'u diwygiwyd / as amended.

COFNOD YN Y GOFRESTR O SAFLEOEDD EWROPEAIDD I GYMRU

ENTRY IN THE REGISTER OF EUROPEAN SITES FOR WALES

(Rheoliad / Regulation 11.2)

***ENW'R SAFLE*:**
***SITE NAME*:** Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains

***MATH O SAFLE*:** Ardal Cadwraeth Arbennig (ACA)
***SITE TYPE*:** Special Area of Conservation (SAC)

***COD Y SAFLE*:**
***SITE CODE*:** UK0012926

***HANES DYNODIAD*:**

***Dyddiad y trosglwyddwyd i'r Comisiwn Ewropeaidd (Rheoliad 7.4)*:**
Hydref 2002

***Dyddiad y mabwysiadwyd fel safle o bwysigrwydd cymunedol (Council Directive 92/42/EEC, Erthygl 4.2)*:**
7 Rhagfyr 2004

***Dyddiad dynodi*:**
13 Rhagfyr 2004

***Dynodwyd gan (Rheoliad 8.1)*:**
Cynulliad Cenedlaethol Cymru

***LLEOLIAD*:**

Awdurdod unedol:
Sir Ddinbych, Sir y Fflint, Gwynedd, Powys, Wrecsam

***Cyfesurynnau*:**
Hydred 03 36 26 Gor, Lledred 52 50 19 Gog
Cyfeirnod Grid Cenedlaethol Arolwg Ordnans: SH917280

Gweler hefyd y map(iau) amgaeëdig, nad ydynt yn ffurfio rhan o'r cofnod hwn.

***DESIGNATION HISTORY*:**

***Date transmitted to the European Commission (Regulation 7.4)*:**
October 2002

Date adopted as a site of community importance (Council Directive 92/42/EEC, Article 4.2):
7 December 2004

***Date designated*:**
13 December 2004

Designated by (Regulation 8.1):
National Assembly for Wales

***LOCATION*:**

Unitary authority:
Denbighshire, Flintshire, Gwynedd, Powys, Wrexham

***Coordinates*:**
Longitude 03 36 26 W, Latitude 52 50 19 N
Ordnance Survey National Grid Reference: SH917280

See also the accompanying map(s), which do not form part of this entry.

MATHAU O GYNEFIN A/NEU RYWOGAETHAU Y DYNODIR Y SAFLE O'U PLEGID:
HABITAT TYPES AND/OR SPECIES FOR WHICH THE SITE IS DESIGNATED:

		Enw cyffredin	**Common name**	**Term Gwyddonol**	**Scientific term**
1	*	Gorgors	Blanket Bog	Gorgorsydd	Blanket bogs
2		Mae'r rhain yn rhediadau serth o sgri yn yr ucheldiroedd, sydd wedi deillio, i raddau helaeth, o graig tra-fasig, sy'n cynnwys calchfaen, sgistiau calchaidd a basalt	Base-rich scree	Sgrïau calchaidd a chalchsgistaidd y lefelau mynyddig ac alpaidd *(Thlaspietea rotundifolii)*	Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*)
3		Planhigion mewn agennau mewn creigiau tra-fasig	Plants in crevices in base-rich rocks	Llethrau creigiog calchaidd gyda llystyfiant hafn-ffytig	Calcareous rocky slopes with chasmophytic vegetation
4		Rhostiroedd sych	Dry heaths	Rhostiroedd sych Ewropeaidd	European dry heaths
5		Glaswelltiroedd sych a phrysgdir ar briddgalch neu galchfaen	Dry grasslands and scrublands on chalk or limestone	Glaswelltiroedd sych lled-naturiol â wyneb o brysgdir: ar swbstradau calchaidd (*Festuco-Brometalia*)	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)
6		Corsydd gwlyb iawn a adwaenir yn aml oddi wrth eu harwyned ansad 'crynedig'	Very wet mires often identified by an unstable 'quaking' surface	Corsydd trosiannol a siglennydd crynedig	Transition mires and quaking bogs

*Mae'n dynodi mathau o gynefin neu rywogaeth y rhoddir blaenoriaeth iddynt (a ddiffinnir yn Erthyglau 1(d) ac 1(h) o Council Directive 92/43/EEC).

*Denotes a priority habitat type or species (defined in Articles 1(d) and 1(h) of Council Directive 92/43/EEC).

***GWNAED Y COFNOD HWN*:**
14 Mehefin 2005

***THIS ENTRY MADE*:**
14 June 2005

***GAN*:**
Trish Fretten, ar ran Gweinidog dros yr Amgylchedd, Cynllunio a Chefn Gwlad, Cynulliad Cenedlaethol Cymru

***BY*:**
Trish Fretten, on behalf of the Minister for Environment, Planning and Countryside, National Assembly for Wales

***LLOFNOD*:**

***SIGNATURE*:**



***DYDDIAD(AU) COFNODION BLAENOROL AR GYFER Y SAFLE HWN*:**
Dim

***DATE(S) OF PREVIOUS ENTRIES FOR THIS SITE*:**
None

Conservation (Natural Habitats, &c.) Regulations 1994 (SI 1994 No. 2716),
fel y'u diwygiwyd / as amended.

COFNOD YN Y GOFRESTR O SAFLEOEDD EWROPEAIDD I GYMRU

ENTRY IN THE REGISTER OF EUROPEAN SITES FOR WALES

(Rheoliad / Regulation 11.2)

***ENW'R SAFLE*:**
***SITE NAME*:** Johnstown Newt Sites

***MATH O SAFLE*:** Ardal Cadwraeth Arbennig (ACA)
***SITE TYPE*:** Special Area of Conservation (SAC)

***CÔD Y SAFLE*:**
***SITE CODE*:** UK0030173

***HANES DYNODIAD*:**

***Dyddiad y trosglwyddwyd i'r Comisiwn Ewropeaidd (Rheoliad 7.4)*:**
Hydref 2002

***Dyddiad y mabwysiadwyd fel safle o bwysigrwydd cymunedol (Council Directive 92/42/EEC, Erthygl 4.2)*:**
7 Rhagfyr 2004

***Dyddiad dynodi*:**
13 Rhagfyr 2004

***Dynodwyd gan (Rheoliad 8.1)*:**
Cynulliad Cenedlaethol Cymru

***LLEOLIAD*:**

Awdurdod unedol:
Wrecsam

***Cyfesurynnau*:**
Hydred 03 01 42 Gor, Lledred 53 00 44 Gog
Cyfeirnod Grid Cenedlaethol Arolwg Ordnans: SJ310466

Gweler hefyd y map(iau) amgaeëdig, nad ydynt yn ffurfio rhan o'r cofnod hwn.

***DESIGNATION HISTORY*:**

***Date transmitted to the European Commission (Regulation 7.4)*:**
October 2002

Date adopted as a site of community importance (Council Directive 92/42/EEC, Article 4.2):
7 December 2004

***Date designated*:**
13 December 2004

Designated by (Regulation 8.1):
National Assembly for Wales

***LOCATION*:**

Unitary authority:
Wrexham

***Coordinates*:**
Longitude 03 01 42 W, Latitude 53 00 44 N
Ordnance Survey National Grid Reference: SJ310466

See also the accompanying map(s), which do not form part of this entry.

MATHAU O GYNEFIN A/NEU RYWOGAETHAU Y DYNODIR Y SAFLE O'U PLEGID:
HABITAT TYPES AND/OR SPECIES FOR WHICH THE SITE IS DESIGNATED:

		Enw cyffredin	Common name	Term Gwyddonol	Scientific term
1		Y fadfall ddŵr gribog	Great crested newt	*Triturus cristatus*	

*Mae'n dynodi mathau o gynefin neu rywogaeth y rhoddir blaenoriaeth iddynt (a ddiffinnir yn Erthyglau 1(d) ac 1(h) o Council Directive 92/43/EEC).

*Denotes a priority habitat type or species (defined in Articles 1(d) and 1(h) of Council Directive 92/43/EEC).

***GWNAED Y COFNOD HWN*:**
14 Mehefin 2005

***THIS ENTRY MADE*:**
14 June 2005

***GAN*:**
Trish Fretten, ar ran Gweinidog dros yr Amgylchedd, Cynllunio a Chefn Gwlad, Cynulliad Cenedlaethol Cymru

***BY*:**
Trish Fretten, on behalf of the Minister for Environment, Planning and Countryside, National Assembly for Wales

***LLOFNOD*:**

***SIGNATURE*:**



DYDDIAD(AU) COFNODION BLAENOROL AR GYFER Y SAFLE HWN:
Dim

DATE(S) OF PREVIOUS ENTRIES FOR THIS SITE:
None

Conservation (Natural Habitats, &c.) Regulations 1994 (SI 1994 No. 2716),
fel y'u diwygiwyd / as amended.

COFNOD YN Y GOFRESTR O SAFLEOEDD EWROPEAIDD I GYMRU

ENTRY IN THE REGISTER OF EUROPEAN SITES FOR WALES

(Rheoliad / Regulation 11.2)

***ENW'R SAFLE*:**
***SITE NAME*:** River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid

***MATH O SAFLE*:** Ardal Cadwraeth Arbennig (ACA)
***SITE TYPE*:** Special Area of Conservation (SAC)

***CÔD Y SAFLE*:**
***SITE CODE*:** UK0030252

HANES DYNODIAD:

***Dyddiad y trosglwyddwyd i'r Comisiwn Ewropeaidd (Rheoliad 7.4)*:**
Mai 2003

***Dyddiad y mabwysiadwyd fel safle o bwysigrwydd cymunedol (Council Directive 92/42/EEC, Erthygl 4.2)*:**
7 Rhagfyr 2004

***Dyddiad dynodi*:**
13 Rhagfyr 2004

***Dynodwyd gan (Rheoliad 8.1)*:**
Cynulliad Cenedlaethol Cymru

LLEOLIAD:

Awdurdod unedol:
Cheshire, Shropshire, Gwynedd, Sir y Fflint, Wrecsam, Sir Ddinbych

Cyfesurynnau:
Hydred 02 51 40 Gor, Lledred 53 02 50 Gog
Cyfeirnod Grid Cenedlaethol Arolwg Ordnans: SJ423503

Gweler hefyd y map(iau) amgaeëdig, nad ydynt yn ffurfio rhan o'r cofnod hwn.

DESIGNATION HISTORY:

***Date transmitted to the European Commission (Regulation 7.4)*:**
May 2003

Date adopted as a site of community importance (Council Directive 92/42/EEC, Article 4.2):
7 December 2004

***Date designated*:**
13 December 2004

Designated by (Regulation 8.1):
National Assembly for Wales

LOCATION:

Unitary authority:
Cheshire, Shropshire, Gwynedd, Flintshire, Wrexham, Denbighshire

***Coordinates*:**
Longitude 02 51 40 W, Latitude 53 02 50 N
Ordnance Survey National Grid Reference: SJ423503

See also the accompanying map(s), which do not form part of this entry.

MATHAU O GYNEFIN A/NEU RYWOGAETHAU Y DYNODIR Y SAFLE O'U PLEGID:
HABITAT TYPES AND/OR SPECIES FOR WHICH THE SITE IS DESIGNATED:

	*	Enw cyffredin	Common name	Term Gwyddonol	Scientific term
1		Penlletwad	Bullhead	*Cottus gobio*	
2		Lamprai neu lysywen bendoll yr afon	River lamprey	*Lampetra fluviatilis*	
3		Lamprai'r nant	Brook lamprey	*Lampetra planeri*	
4		Llyriad nofiadwy	Floating water-plantain	*Luronium natans*	
5		Dyfrgi	Otter	*Lutra lutra*	
6		Lamprai neu lysywen bendoll y môr	Sea lamprey	*Petromyzon marinus*	
7		Eog yr Iwerydd	Atlantic salmon	*Salmo salar*	
8		Afonydd gyda llystyfiant nofiadwy - hynny'n aml yn grafanc y dŵr yn bennaf	Rivers with floating vegetation often dominated by water-crowfoot	Cyrsiau dŵr o 'r iseldir hyd at safleoedd mynyddig gyda llystyfiant *Ranunculion fluitantis* a *Callitricho-Batrachion*	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

*Mae'n dynodi mathau o gynefin neu rywogaeth y rhoddir blaenoriaeth iddynt (a ddiffinnir yn Erthyglau 1(d) ac 1(h) o Council Directive 92/43/EEC).

*Denotes a priority habitat type or species (defined in Articles 1(d) and 1(h) of Council Directive 92/43/EEC).

***GWNAED Y COFNOD HWN*:**
14 Mehefin 2005

***THIS ENTRY MADE*:**
14 June 2005

***GAN*:**
Trish Fretten, ar ran Gweinidog dros yr Amgylchedd, Cynllunio a Chefn Gwlad, Cynulliad Cenedlaethol Cymru

***BY*:**
Trish Fretten, on behalf of the Minister for Environment, Planning and Countryside, National Assembly for Wales

***LLOFNOD*:** ***SIGNATURE*:**



DYDDIAD(AU) COFNODION BLAENOROL AR GYFER Y SAFLE HWN:
Dim

DATE(S) OF PREVIOUS ENTRIES FOR THIS SITE:
None

COFNODWYD Y SAFLE HWN HEFYD YN Y GOFRESTR O SAFLEOEDD EWROPEAIDD AR GYFER LLOEGR

GAN:
Trevor Salmon, ar ran yr Ysgrifennydd Gwladol dros yr Amgylchedd, Bwyd a Materion Gwledig

DYDDIAD: 14 Mehefin 2005

THIS SITE HAS ALSO BEEN ENTERED IN THE REGISTER OF EUROPEAN SITES FOR ENGLAND

BY:
Trevor Salmon, on behalf of the Secretary of State for the Environment, Food and Rural Affairs

DATE: 14 June 2005

LLOFNOD: ***SIGNATURE:***

Trevor Salmon

APPENDIX B: Citations for Statutory Designated Wildlife Sites of National Importance

CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

DENBIGHSHIRE/ WREXHAM

RUABON/LLANYSILIO MOUNTAINS AND MINERA

Date of Notification: 1955, 1972, 1979, 1983, 1984, 1991

National Grid Reference: SJ215495

O.S. Maps: 1:50,000 Sheet number: 116, 117, 125
1:25,000 Sheet number: SJ14, SJ24, SJ25

Site Area: 4795 ha

Description:

Ruabon/Llantysilio Mountains and Minera SSSI occupies a major upland block stretching north from the Dee Valley between Corwen and Ruabon for a distance of up to 9 kms. It rises to an altitude of around 580 m. The site is notified firstly on biological grounds, for its heather moor, limestone and neutral grassland habitats and for its species interest comprising a range of upland breeding birds, rare and uncommon plants and the use of mines and caves by bats. The site is also notified on geological grounds as it contains three sites of special interest within its boundaries.

The area supports a range of sub-montane vegetation types reflecting its underlying geology, which includes both acidic and base rich rock types. The most characteristic and extensive vegetation is dry dwarf shrub heath usually dominated by heather *Calluna vulgaris* but more locally by bilberry *Vaccinium myrtillus*. The usual range of associated species occur including cowberry *V. vitis-idaea*. This is the second largest block of heather dominated dry dwarf shrub heath in Wales. A range of other acidic vegetation types are present including bracken *Pteridium aquilinum*, acidic grassland and gorse *Ulex spp*. scrub whilst locally wetter vegetation including flushes along watercourses and heather/hare's-tail cotton-grass *Eriophorum vaginatum* blanket bog occurs. Much of the area has recently or is being actively managed as a grouse moor and a good assemblage of upland breeding bird species is present including merlin, short-eared owl, golden plover and ring ouzel. Carboniferous Limestone outcrops over parts of the area particularly on the prominent scarp with its extensive cliffs, screes and grasslands and Mynydd Eglwyseg but also in the north around the Aber Sychnant. A number of nationally rare plant species are associated with the former including species at their southern limit in Britain (e.g. rigid buckler-fern *Dryopteris submontana*. The grassland here is heavily grazed by sheep and is relatively poor in species and contrasts with the species rich neutral/limestone grassland vegetation types around the Aber Sychnant, which additionally support a wide range of uncommon plant species. Parts of the vegetation here have developed on old mineral workings, including disused limestone quarries and waste product tips from lime burning and mine spoil heaps. A number of the disused mines are used by hibernating bats including the nationally uncommon lesser horseshoe bat *Rhinolophus hipposideros*.

Three geological sites are encompassed within the site boundary.

These are:

1. The Minera Caves (Karst/Cave) are a key site for their cave geomorphology and geology. The interest comprises three cave systems, Ogof Llyn Parc, Ogof Dydd Braf and Ogof Llyn Du, that together provide an exceptionally good example of multi-phase karst drainage. The cave system developed in a series of stages as water tables were lowered in direct response to new lower resurgence outlets from the limestone. The new resurgences were the consequence of surface lowering through the later Pleistocene, and specifically the down-cutting of the Minera Valley which progressively exposed the top of the limestone at lower altitudes in a down-dip direction. The shifting patterns of karst drainage can be reconstructed through five phases. The site also provides one of the best examples in Britain of the controls on karst drainage imposed by stratigraphy and structure close to the base of an aquifer. Clastic sediment sequences are thick, extensive, well exposed and of major importance. They constitute an important research resource for studies of Pleistocene history and landform development, and are complemented with fine calcite and gypsum precipitates.

2. The Creigiau Egiwyseg (Mass Movement) site supports the most impressive set of limestone screes in Britain. The Carboniferous Limestone presents a west and southwest facing multiple cliff with an extensive scree accumulation below each cliff. At many locations along the hillside, unusually, there is a steep bedrock slope below the cliffs, across which rock particles detached from the cliffs must roll or bounce before accumulating on the substantial, lower-angled scree slopes below.

3. The Eglwyseg Mountain (Dinantian) site exhibits classic sections through the youngest Carboniferous Limestone. The scarp shows stepped topography resulting from the erosion of cyclic limestone repetitions within this Asbian-Brigantian sediment pile. This extensive site yields abundant fossil faunas and a wealth of sedimentological features including sediments associated with emergence as well as more marine carbonates. An outstanding site giving unrivalled exposures of Dinantian rocks.

Remarks:

Most of the site is registered as common land.

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CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

WREXHAM **SONTLEY MARSH**

Date of Notification: 1986

National Grid Reference: SJ339478

O.S. Maps: 1:50,000 Sheet number: 117
1:25,000 Sheet number: SJ34

Site Area: 13 ha

Description:

Botanical interest.

One of the best wetland examples in Clwyd of the "southern mesotrophic mire" type more characteristic of south-west Wales and, in North Wales, largely restricted to Ynys Môn, Dwyfor and Clwyd.

The site occupies the western valley side of the Gefeiliau Brook, a tributary of the Afon Clywedog, and is fed by a series of springs along the valley slope, and by run-off.

Extensive areas of alder carr (woodland) occur, particularly adjacent to the Gefeiliau Brook and along spring-fed water courses. Alder *Alnus glutinosa* dominates, but there are extensive stands of Common Sallow *Salix cinerea* and Goat Willow *S. capraea* together with Bird Cherry *Prunus padus* and Guelder Rose *Viburnum opulus*.

Much of the site is dominated by tall fen vegetation with stands of Great Pond-sedge *Carex riparia*, Meadow-sweet *Filipendula ulmaria*, Lesser Pond-sedge *Carex acutiformis* and Great Horsetail *Equisetum telmateia*. Wetter areas here support Reed-grass *Phalaris arundinacea* and Hemp Agrimony *Eupatorium cannabinum* with Spindle *Euonymus europaeus* on drier sites. Dense strands of *Equisetum telmateia* also support Panicled Sedge *Carex paniculata* and Purple Loosestrife *Lythrum salicaria*. Marsh Valerian *Valeriana dioica* occurs throughout the site.

At the southern end of the site herb-rich damp grassland occurs with Ragged Robin *Lychnis flos-cuculi*, Yellow-rattle *Rhinanthus minor* and Devil's-bit Scabious *Succisa pratensis*.

Remarks:

The major part of the site is owned by the National Trust and managed as a Nature Reserve by the North Wales Naturalists Trust.

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SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

WREXHAM **GATEWEN MARSH**

Date of Notification: 1986

National Grid Reference: SJ317515

O.S. Maps: 1:50000 Sheet number: 117
1:25000 Sheet number: SJ35

Site Area: 4.5 ha

Description:

Botanical interest:

One of only three significant examples in the former county of Clwyd of the "southern mesotrophic mires" wetland type. This type is more characteristic of south-west Wales and, in North Wales, is largely restricted to Ynys Môn and Dwyfor.

The site occupies the flat valley bottom of a tributary of the River Gwenfro, the stream running through the eastern side of the marsh. At its northern end the marsh is bounded by the spoil banks of the former Gatewen Colliery, and mining subsidence, following closure of the colliery, has been a major factor in creating suitable conditions for the development of wetland vegetation.

The marsh is unusual in containing substantial stands of Great Reedmace *Typha latifolia* in shallow water with Brooklime *Veronica beccabunga*, Water Plantain *Alisma plantago-aguatica* and Bottle Sedge *Carex strata*. The fringes of these areas support stands of Common Spike-rush *Eleocharis palustris* with Water Mint *Mentha aguatica*, Gipsy-wort *Lycopus europaeus*, Narrow-leaved Water-parsnip *Berula erecta* and Lesser Spearwort *Ranunculus flammula*. Further north are stands of Great Pond-sedge *Carex riparia* and Bur-reed *Sparganium erectum* with Reed-grass *Phalaris arundinacea* on the fringes and Broad-leaved Pondweed *Potamogeton natans* in open channels. Willows *Salix spp.* are establishing in part of the site and the area adjacent to the colliery spoil banks is dominated by Great Hairy Willow-herb *Epilobium hirsutum* suggesting past disturbance.

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APPENDIX C: Species Records within 2km of the Site

Confidential

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Cornwall
TR12 7BW

Tel: 01326 240081
E-mail: cornwall@tep.uk.com

Amphibian and Reptile Desktop Records

Refer to drawing G8745.007 for spatial location of species data

Species Record Identifyer	Species Common Name	Count
1	Great Crested Newt	1
2	Great Crested Newt	4
3	Smooth Newt	1
4	Great Crested Newt	6
5	Great Crested Newt	14
6	Great Crested Newt	2
7	Great Crested Newt	3
8	Great Crested Newt	1
9	Great Crested Newt	1
	Lissotriton	1
	Palmate Newt	1
10	Common Frog	3
11	Grass Snake	1
12	Great Crested Newt	7
	Lissotriton	10
	Smooth Newt	9
13	Common Frog	0
	Great Crested Newt	4
	Lissotriton	10
	Palmate Newt	3
14	Common Lizard	3
15	Grass Snake	1
16	Common Toad	0
	Lissotriton	2
17	Great Crested Newt	1
18	Great Crested Newt	1
19	Great Crested Newt	1
20	Great Crested Newt	1
21	Common Frog	20
22	Common Frog	64
23	Great Crested Newt	1
24	Great Crested Newt	5
25	Common Frog	0
	Common Toad	0
	Palmate Newt	64
	Smooth Newt	20
26	Great Crested Newt	1
27	Great Crested Newt	1
	Palmate Newt	100
	Smooth Newt	45
28	Common Frog	5
29	Grass Snake	1
30	Grass Snake	1
31	Common Toad	0
32	Great Crested Newt	1
33	Great Crested Newt	11

Species Record Identifyer	Species Common Name	Count
33	Palmate Newt	7
	Smooth Newt	110
34	Great Crested Newt	1
35	Common Frog	0
36	Great Crested Newt	1
37	Common Toad	1
38	Common Lizard	1
39	Grass Snake	1

Bird Desktop Records

Refer to drawing G8745.008 for spatial location of species data

Species Record Identifyer	Species Common Name	Count
1	Mallard	2
2	Black-headed Gull	2
3	Bullfinch	1
4	Barn Owl	1
5	Swift	2
6	Dipper	1
7	Hobby	1
8	Barn Owl	1
9	Kestrel	1
10	Kestrel	1
11	Woodcock	1
12	Dipper	1
13	Kestrel	1
14	Herring Gull	1
15	Mallard	1
16	Redwing	30
17	Red Kite	1
18	Hawfinch	12
19	Woodcock	1
20	Black-headed Gull	2
21	Swift	20
22	Bullfinch	2
23	Spotted Flycatcher	1
24	Dipper	2
25	Mallard	3
26	Dunnock	1
	Mallard	7
27	Red Kite	1
28	Dunnock	1
29	Dunnock	1
	Mallard	1
30	Mallard	4
31	Redwing	11
32	Black-headed Gull	1
33	Dunnock	1
34	Black-headed Gull	200
35	Kestrel	1
36	Black-headed Gull	20
	Mute Swan	2
	Shoveler	1
37	Reed Bunting	4
	Snipe	2
38	Dunnock	1
39	Swift	6

Species Record Identifyer	Species Common Name	Count
40	Swift	6
41	Dipper	1
42	Dipper	2
43	Swift	12
44	Dipper	0
45	Dipper	1
46	Peregrine	1
	Spotted Flycatcher	1
47	Swift	8
48	Barn Owl	1
	Coal Tit	2
	Dunnock	1
	Hobby	1
	House Sparrow	4
	Lapwing	450
	Lesser Spotted Woodpecker	1
	Meadow Pipit	100
	Swift	8
49	Bullfinch	1
	Coal Tit	1
	Dunnock	1
	Herring Gull	1
	House Martin	0
	House Sparrow	1
	Lapwing	2
	Lesser Black-backed Gull	1
	Linnet	1
	Mallard	1
	Marsh Tit	1
	Meadow Pipit	1
	Redwing	2
	Song Thrush	1
	Starling	1
	Swift	0
	Willow Warbler	1
	Yellowhammer	4
50	Barn Owl	1
	Black-headed Gull	1
	Dunnock	2
	Fieldfare	15
	House Sparrow	1
	Lapwing	12
	Redwing	25
	Song Thrush	1

50	Starling	15
	Swift	3
	Willow Warbler	1
	Yellowhammer	2
51	Barn Owl	1
	Common Crossbill	6
	Dipper	2
	Hobby	1
	Lapwing	2000
	Tree Sparrow	1
52	Barn Owl	1
	Black-headed Gull	20
	Bullfinch	2
	Dunnock	2
	Fieldfare	20
	House Sparrow	1
	Kestrel	1
	Lapwing	3
	Lesser Black-backed Gull	2
	Lesser Spotted Woodpecker	1
	Linnet	1
	Meadow Pipit	2
	Peregrine	1
	Redwing	100
	Reed Bunting	1
	Skylark	1
	Song Thrush	1
	Starling	40
	Swift	25
	Willow Warbler	1
	Yellowhammer	1
53	Barn Owl	1
	Black-headed Gull	2
	Coal Tit	2
	Cuckoo	1
	Dipper	2
	Dunnock	1
	Fieldfare	54
	Grasshopper Warbler	1
	Herring Gull	2
	House Martin	1
	House Sparrow	6
	Lapwing	1
	Lesser Spotted Woodpecker	1
	Redwing	145
	Song Thrush	1
	Swift	2

53	Willow Tit	2
	Willow Warbler	1
	Yellowhammer	3
54	Bullfinch	2
	Kestrel	1
55	Barn Owl	2
	Black-headed Gull	1
	Bullfinch	2
	Coal Tit	1
	Dunnock	2
	Fieldfare	11
	Herring Gull	
	House Martin	6
	House Sparrow	1
	Kestrel	4
	Kingfisher	1
	Mallard	1
	Redwing	50
	Song Thrush	2
	Starling	1
	Swift	5
	Willow Warbler	1
56	Dunnock	1
	Herring Gull	1
	Redwing	75
	Song Thrush	1
	Swift	20
57	Dunnock	1
	Herring Gull	1
	House Sparrow	20
	Kestrel	1
	Lapwing	90
	Lesser Black-backed Gull	1
	Swift	1
58	Bullfinch	1
	Coal Tit	1
	Common Gull	1
	Dipper	1
	Dunnock	3
	Fieldfare	1
	Herring Gull	1
	House Martin	15
	House Sparrow	20
	Kestrel	
	Lapwing	1
	Lesser Black-backed Gull	1
	Meadow Pipit	2

58	Song Thrush	1
	Starling	1
	Swift	3
59	Barn Owl	1
	Dipper	1
	Dunnock	1
	Herring Gull	1
	House Martin	2
	House Sparrow	3
	Kestrel	1
	Lapwing	1
	Swift	3
	Willow Warbler	1
60	Barn Owl	0
	Black-headed Gull	1
	Bullfinch	5
	Coal Tit	2
	Common Gull	1
	Dunnock	2
	Fieldfare	70
	Herring Gull	3
	House Martin	3
	House Sparrow	30
	Kestrel	2
	Lapwing	50
	Lesser Black-backed Gull	1
	Linnet	5
	Mallard	1
	Mute Swan	1
	Redwing	15
	Reed Bunting	3
	Skylark	3
	Song Thrush	1
	Starling	1
	Swift	20
	Willow Warbler	1
	Yellowhammer	3
61	Barn Owl	0
	Black-headed Gull	35
	Brambling	1
	Bullfinch	2
	Coal Tit	4
	Common Gull	1
	Dipper	2
	Dunnock	2
	Fieldfare	200
	Herring Gull	2
	House Martin	20
	Kestrel	1

61	Kingfisher	2
	Lesser Black-backed Gull	1
	Lesser Spotted Woodpecker	1
	Mallard	48
	Marsh Tit	2
	Peregrine	1
	Redwing	200
	Reed Bunting	1
	Shoveler	1
	Song Thrush	4
	Spotted Flycatcher	1
	Starling	200
	Swift	2
	Teal	1
	Willow Tit	1
	Willow Warbler	1
62	Black-headed Gull	20
	Brambling	12
	Bullfinch	3
	Coal Tit	3
	Common Gull	2
	Dipper	2
	Dunnock	3
	Herring Gull	14
	House Martin	6
	House Sparrow	10
	Kestrel	1
	Lesser Black-backed Gull	2
	Mallard	2
	Marsh Tit	2
	Redwing	40
	Song Thrush	4
	Starling	50
	Swift	6
	Willow Tit	2
	Willow Warbler	1
	Woodcock	1
63	Black-headed Gull	1
	Coal Tit	1
	Dipper	1
	Dunnock	1
	Fieldfare	1
	Herring Gull	7
	House Sparrow	25
	Kestrel	1
	Kingfisher	1
	Lesser Redpoll	3
	Mallard	10
	Mute Swan	1

63	Peregrine	2
	Redstart	1
	Redwing	30
	Song Thrush	1
	Starling	5000
	Swift	12
64	Coal Tit	1
	Dunnock	1
	Herring Gull	1
	House Sparrow	6
	Kestrel	1
	Lesser Black-backed Gull	1
	Reed Bunting	1
	Starling	1
	Swift	1
65	Barn Owl	1
	Black-headed Gull	50
	Brambling	20
	Bullfinch	6
	Coal Tit	6
	Common Gull	20
	Dipper	4
	Dunnock	4
	Fieldfare	100
	Gadwall	2
	Herring Gull	14
	Hobby	0
	House Martin	50
	House Sparrow	30
	Kestrel	2
	Kingfisher	2
	Lapwing	15
	Lesser Black-backed Gull	3
	Lesser Redpoll	8
	Lesser Spotted Woodpecker	2
	Mallard	100
	Marsh Tit	3
	Meadow Pipit	8
	Mediterranean Gull	1
	Mute Swan	200
	Pied Flycatcher	1
	Pochard	2
	Redwing	100
	Reed Bunting	8
	Ruddy Duck	9
	Shoveler	18
	Snipe	40
	Song Thrush	3
	Starling	200

65	Swift	12
	Teal	11
	Wigeon	12
	Willow Warbler	4
66	Black-headed Gull	40
	Brambling	11
	Bullfinch	3
	Coal Tit	13
	Cuckoo	1
	Dipper	2
	Dunlin	1
	Dunnock	2
	Fieldfare	100
	Herring Gull	4
	Hobby	1
	House Martin	20
	House Sparrow	14
	Kestrel	1
	Kingfisher	1
	Lesser Black-backed Gull	6
	Lesser Redpoll	8
	Mallard	5
	Marsh Tit	2
	Mute Swan	6
	Osprey	1
	Peregrine	3
	Pied Flycatcher	1
	Quail	1
	Red Kite	1
	Redwing	50
	Reed Bunting	8
	Snipe	2
	Song Thrush	1
	Starling	3
	Swift	20
	Willow Warbler	1
67	Black-headed Gull	4
	Coal Tit	1
	Common Gull	1
	Dunnock	3
	Fieldfare	
	Herring Gull	8
	Hobby	1
	House Martin	
	House Sparrow	40
	Kestrel	1
	Lesser Black-backed Gull	6
	Lesser Redpoll	12
	Mallard	1

67	Meadow Pipit	1
	Mute Swan	1
	Peregrine	1
	Redwing	50
	Song Thrush	3
	Spotted Flycatcher	1
	Starling	1000
	Swift	8

Fish Desktop Records

Refer to drawing G8745.009 for spatial location of species data

Species Record Identifyer	Species Common Name	Count
1	Brown/Sea Trout	7
2	Brown/Sea Trout	99
	Eel	9

Insect Desktop Records

Refer to drawing G8745.010 for spatial location of species data

Species Record Identifyer	Species Common Name	Count
1	Buff Ermine	8
	White Ermine	1
2	Southern Iron Blue	5
3	Buff Ermine	1
	Ghost Moth	1
	Small Emerald	1
4	Brown-spot Pinion	1
5	Autumnal Rustic	1
	Buff Ermine	1
	Feathered Gothic	1
	Rosy Rustic	1
	Sallow	1
6	Blood-vein	1
7	Buff Ermine	1
	Dusky Thorn	1
	Mottled Rustic	1
8	Cinnabar	2
9	Blood-vein	1
10	Blood-vein	1
11	Wall	1
12	Centre-barred Sallow	1
	September Thorn	2
13	White-letter Hairstreak	1
14	Wall	2
15	Shaded Broad-bar	2

Mammal Desktop Records

Refer to drawing G8745.011 for spatial location of species data

Species Record Identifyer	Species Common Name	Count
1	Otter	1
[redacted]		
3	Otter	1
4	Otter	1
5	Brown Long-eared Bat	1
	Common Pipistrelle	2
	Noctule Bat	3
6	Brown Long-eared Bat	19
	Common Pipistrelle	2
7	Brown Long-eared Bat	1
	Common Pipistrelle	1
	Noctule Bat	1
	Soprano Pipistrelle	1
8	Otter	2
9	Otter	4
10	Polecat	1
11	Hedgehog	1
12	Otter	5
13	Otter	1
14	Otter	1
15	Hedgehog	1
16	Otter	2
[redacted]		
[redacted]		
19	Unknown Bat	1
20	Soprano Pipistrelle	5
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
28	Hedgehog	1
29	Soprano Pipistrelle	1
30	Common Pipistrelle	1
31	Common Pipistrelle	1
	Myotis Bat Species	1
	Soprano Pipistrelle	1
32	Common Pipistrelle	1
33	Soprano Pipistrelle	1
34	Noctule Bat	1
	Soprano Pipistrelle	1
35	Common Pipistrelle	1
36	Common Pipistrelle	1
	Soprano Pipistrelle	1
37	Noctule Bat	1

Species Record Identifyer	Species Common Name	Count
37	Soprano Pipistrelle	1
38	Soprano Pipistrelle	1
39	Myotis Bat Species	1
	Soprano Pipistrelle	1
40	Myotis Bat Species	1
	Soprano Pipistrelle	1
41	Noctule Bat	1
42	Noctule Bat	1
43	Noctule Bat	1
44	Soprano Pipistrelle	1
45	Soprano Pipistrelle	1
46	Common Pipistrelle	3
	Noctule Bat	1
47	Whiskered Bat	1
48	Common Pipistrelle	1
	Soprano Pipistrelle	1
49	Soprano Pipistrelle	1
50	Soprano Pipistrelle	1
51	Whiskered Bat	1
52	Whiskered Bat	1
53	Soprano Pipistrelle	1
54	Noctule Bat	1
	Soprano Pipistrelle	1
55	Whiskered Bat	1
56	Whiskered Bat	1
57	Noctule Bat	1
	Soprano Pipistrelle	1
58	Soprano Pipistrelle	1
59	Soprano Pipistrelle	1
60	Soprano Pipistrelle	1
61	Soprano Pipistrelle	1
62	Noctule Bat	1
63	Common Pipistrelle	1
	Soprano Pipistrelle	1
64	Soprano Pipistrelle	1
65	Soprano Pipistrelle	1
66	Noctule Bat	1
67	Long-eared Bat Species	1
68	Common Pipistrelle	1
69	Common Pipistrelle	1
70	Common Pipistrelle	1
71	Long-eared Bat Species	1
72	Pipistrellus Bat Species	1
73	Long-eared Bat Species	1
74	Noctule Bat	1
75	Noctule Bat	1
76	Common Pipistrelle	1

77	Noctule Bat	1
[redacted]		
79	Common Pipistrelle	1
80	Noctule Bat	1
81	Common Pipistrelle	1
82	Common Pipistrelle	1
83	Noctule Bat	1
84	Noctule Bat	1
85	Noctule Bat	1
	Whiskered Bat	1
86	Noctule Bat	1
87	Noctule Bat	1
	Soprano Pipistrelle	1
88	Soprano Pipistrelle	1
89	Common Pipistrelle	1
90	Common Pipistrelle	1
	Soprano Pipistrelle	1
91	Common Pipistrelle	1
	Soprano Pipistrelle	1
92	Common Pipistrelle	1
	Soprano Pipistrelle	1
93	Common Pipistrelle	1
94	Common Pipistrelle	1
95	Soprano Pipistrelle	1
96	Common Pipistrelle	1
97	Common Pipistrelle	1
98	Common Pipistrelle	1
	Soprano Pipistrelle	1
99	Soprano Pipistrelle	1
100	Common Pipistrelle	1
	Soprano Pipistrelle	1
101	Soprano Pipistrelle	1
102	Soprano Pipistrelle	1
103	Common Pipistrelle	1
104	Common Pipistrelle	1
105	Soprano Pipistrelle	1
106	Common Pipistrelle	1
107	Noctule Bat	1
108	Noctule Bat	1
109	Common Pipistrelle	1
	Myotis Bat Species	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
110	Noctule Bat	1
111	Noctule Bat	1
112	Common Pipistrelle	1
113	Common Pipistrelle	1
114	Common Pipistrelle	1
115	Common Pipistrelle	1
116	Common Pipistrelle	1
117	Common Pipistrelle	1
118	Common Pipistrelle	1
119	Common Pipistrelle	1
	Myotis Bat Species	1
120	Common Pipistrelle	1

121	Soprano Pipistrelle	1
122	Long-eared Bat Species	1
123	Soprano Pipistrelle	1
124	Soprano Pipistrelle	1
125	Pipistrellus Bat Species	1
126	Noctule Bat	1
127	Noctule Bat	1
128	Noctule Bat	1
129	Common Pipistrelle	1
130	Common Pipistrelle	1
131	Soprano Pipistrelle	1
132	Soprano Pipistrelle	1
133	Common Pipistrelle	1
134	Soprano Pipistrelle	1
135	Soprano Pipistrelle	1
136	Common Pipistrelle	1
137	Brandt's Bat	1
138	Common Pipistrelle	1
139	Soprano Pipistrelle	1
140	Noctule Bat	1
141	Noctule Bat	1
142	Brandt's Bat	1
143	Common Pipistrelle	1
144	Long-eared Bat Species	1
	Soprano Pipistrelle	1
145	Noctule Bat	1
146	Noctule Bat	1
	Soprano Pipistrelle	1
147	Common Pipistrelle	1
	Noctule Bat	1
	Soprano Pipistrelle	1
148	Common Pipistrelle	1
	Daubenton's Bat	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Natterer's Bat	1
	Noctule Bat	1
	Soprano Pipistrelle	1
	Unknown Bat	1
	Whiskered Bat	1
149	Common Pipistrelle	1
150	Common Pipistrelle	1
151	Common Pipistrelle	1
	Noctule Bat	1
	Soprano Pipistrelle	1
152	Common Pipistrelle	1
	Noctule Bat	1
	Soprano Pipistrelle	1
153	Noctule Bat	1
	Soprano Pipistrelle	1
154	Soprano Pipistrelle	1
155	Common Pipistrelle	1
156	Common Pipistrelle	1
	Daubenton's Bat	1
	Long-eared Bat Species	1

156	Myotis Bat Species	1
	Natterer's Bat	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
	Unknown Bat	1
	Whiskered Bat	1
157	Common Pipistrelle	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
158	Soprano Pipistrelle	1
159	Myotis Bat Species	1
160	Common Pipistrelle	1
	Daubenton's Bat	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Natterer's Bat	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
	Unknown Bat	1
	Whiskered Bat	1
161	Common Pipistrelle	1
	Long-eared Bat Species	1
	Noctule Bat	1
	Soprano Pipistrelle	1
	Unknown Bat	1
162	Brown Long-eared Bat	1
	Common Pipistrelle	1
	Daubenton's Bat	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
163	Common Pipistrelle	1
164	Soprano Pipistrelle	1
165	Soprano Pipistrelle	1
166	Soprano Pipistrelle	1
167	Common Pipistrelle	1
	Soprano Pipistrelle	1
168	Common Pipistrelle	1
169	Common Pipistrelle	1
	Soprano Pipistrelle	1
170	Pipistrellus Bat Species	1
171	Common Pipistrelle	1
172	Common Pipistrelle	1
173	Common Pipistrelle	1
174	Common Pipistrelle	1
	Myotis Bat Species	1
	Noctule Bat	1
175	Soprano Pipistrelle	1
176	Pipistrellus Bat Species	1
177	Noctule Bat	1

178	Soprano Pipistrelle	1
179	Soprano Pipistrelle	1
180	Common Pipistrelle	1
181	Common Pipistrelle	1
182	Noctule Bat	1
183	Common Pipistrelle	1
184	Noctule Bat	1
185	Soprano Pipistrelle	1
186	Daubenton's Bat	1
	Myotis Bat Species	1
	Whiskered Bat	1
187	Common Pipistrelle	1
	Long-eared Bat Species	1
	Soprano Pipistrelle	1
188	Pipistrellus Bat Species	1
189	Common Pipistrelle	1
190	Soprano Pipistrelle	1
191	Common Pipistrelle	1
192	Common Pipistrelle	1
193	Common Pipistrelle	1
194	Soprano Pipistrelle	1
195	Soprano Pipistrelle	1
196	Common Pipistrelle	1
197	Soprano Pipistrelle	1
198	Common Pipistrelle	1
199	Brandt's Bat	1
	Common Pipistrelle	1
	Soprano Pipistrelle	1
200	Common Pipistrelle	1
201	Soprano Pipistrelle	1
202	Soprano Pipistrelle	1
203	Common Pipistrelle	1
204	Common Pipistrelle	1
	Soprano Pipistrelle	1
205	Soprano Pipistrelle	1
206	Soprano Pipistrelle	1
207	Common Pipistrelle	1
208	Common Pipistrelle	1
	Myotis Bat Species	1
209	Common Pipistrelle	1
210	Soprano Pipistrelle	1
211	Soprano Pipistrelle	1
212	Common Pipistrelle	1
	Noctule Bat	1
	Soprano Pipistrelle	1
213	Soprano Pipistrelle	1
214	Soprano Pipistrelle	1
215	Common Pipistrelle	1
216	Common Pipistrelle	1
	Soprano Pipistrelle	1
217	Soprano Pipistrelle	1
218	Soprano Pipistrelle	1
219	Soprano Pipistrelle	1
220	Soprano Pipistrelle	1
221	Common Pipistrelle	1

222	Whiskered Bat	1
223	Whiskered Bat	1
224	Whiskered Bat	1
225	Common Pipistrelle	1
	Whiskered Bat	1
226	Whiskered Bat	1
227	Whiskered Bat	1
228	Whiskered Bat	1
229	Whiskered Bat	1
230	Whiskered Bat	1
231	Daubenton's Bat	1
	Myotis Bat Species	1
	Whiskered Bat	1
232	Soprano Pipistrelle	1
233	Soprano Pipistrelle	1
234	Soprano Pipistrelle	1
235	Common Pipistrelle	1
	Soprano Pipistrelle	1
236	Whiskered Bat	1
237	Common Pipistrelle	1
238	Soprano Pipistrelle	1
239	Soprano Pipistrelle	1
240	Common Pipistrelle	1
	Soprano Pipistrelle	1
241	Common Pipistrelle	1
	Soprano Pipistrelle	1
242	Soprano Pipistrelle	1
243	Soprano Pipistrelle	1
244	Common Pipistrelle	1
245	Common Pipistrelle	1
	Myotis Bat Species	1
	Noctule Bat	1
	Soprano Pipistrelle	1
246	Noctule Bat	1
247	Common Pipistrelle	1
248	Soprano Pipistrelle	1
249	Common Pipistrelle	1
250	Common Pipistrelle	1
251	Common Pipistrelle	1
252	Common Pipistrelle	1
253	Soprano Pipistrelle	1
254	Myotis Bat Species	1
255	Common Pipistrelle	1
256	Noctule Bat	1
257	Soprano Pipistrelle	1
258	Soprano Pipistrelle	1
259	Soprano Pipistrelle	1
260	Myotis Bat Species	1
261	Common Pipistrelle	1
	Myotis Bat Species	1
	Noctule Bat	1
	Soprano Pipistrelle	1
	Whiskered Bat	1
262	Daubenton's Bat	1
263	Common Pipistrelle	1

264	Common Pipistrelle	1
265	Soprano Pipistrelle	1
266	Common Pipistrelle	1
	Soprano Pipistrelle	1
267	Common Pipistrelle	1
268	Soprano Pipistrelle	1
269	Soprano Pipistrelle	1
270	Common Pipistrelle	1
	Soprano Pipistrelle	1
271	Common Pipistrelle	1
	Noctule Bat	1
	Soprano Pipistrelle	1
272	Noctule Bat	1
273	Common Pipistrelle	1
274	Soprano Pipistrelle	1
275	Common Pipistrelle	1
	Soprano Pipistrelle	1
276	Common Pipistrelle	1
	Soprano Pipistrelle	1
277	Brandt's Bat	1
	Common Pipistrelle	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
	Unknown Bat	1
	Whiskered Bat	1
278	Common Pipistrelle	1
	Daubenton's Bat	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Natterer's Bat	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
	Unknown Bat	1
	Whiskered Bat	1
279	Common Pipistrelle	1
	Soprano Pipistrelle	1
280	Common Pipistrelle	1
	Soprano Pipistrelle	1
281	Soprano Pipistrelle	1
282	Common Pipistrelle	1
283	Common Pipistrelle	1
284	Common Pipistrelle	1
285	Soprano Pipistrelle	1
286	Common Pipistrelle	1
287	Common Pipistrelle	1
288	Common Pipistrelle	1
289	Soprano Pipistrelle	1
290	Common Pipistrelle	1
291	Common Pipistrelle	1
292	Common Pipistrelle	1
293	Common Pipistrelle	1

294	Common Pipistrelle	1
295	Common Pipistrelle	1
296	Hedgehog	1
297	Long-eared Bat Species	1
298	Common Pipistrelle	1
	Daubenton's Bat	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
	Unknown Bat	1
	Whiskered Bat	1
299	Hedgehog	0
300	Long-eared Bat Species	1
301	Common Pipistrelle	1
	Lesser Horseshoe Bat	1
	Long-eared Bat Species	1
	Myotis Bat Species	1
	Noctule Bat	1
	Pipistrellus Bat Species	1
	Soprano Pipistrelle	1
[redacted]		
303	Noctule Bat	1
	Pipistrelle agg.	1
	Soprano Pipistrelle	1
304	Soprano Pipistrelle	1
305	Common Pipistrelle	1
	Soprano Pipistrelle	1
306	Common Pipistrelle	1
[redacted]		
308	Common Pipistrelle	1
309	Hedgehog	1
[redacted]		
311	Soprano Pipistrelle	1
312	Hedgehog	1
313	Common Pipistrelle	1
[redacted]		
315	Common Pipistrelle	1
	Soprano Pipistrelle	1
316	Common Pipistrelle	1
[redacted]		
318	Hedgehog	0
[redacted]		
323	Hedgehog	1
[redacted]		
326	Otter	1
327	Hedgehog	1
[redacted]		

331	Soprano Pipistrelle	1
[redacted]		
335	Common Pipistrelle	13
	Myotis Bat Species	2
	Noctule Bat	4
	Soprano Pipistrelle	7
336	Hedgehog	1
337	Hedgehog	1
[redacted]		
346	Common Pipistrelle	7
	Noctule Bat	2
[redacted]		
348	Hedgehog	1
349	Hedgehog	1
350	Otter	1
351	Hedgehog	1
352	Hedgehog	1
353	Hedgehog	1
354	Polecat	1
355	Hedgehog	1
356	Pipistrellus Bat Species	1
357	Hedgehog	1
358	Brown Long-eared Bat	4
	Common Pipistrelle	2
	Natterer's Bat	1
	Noctule Bat	1
	Soprano Pipistrelle	1
359	Hedgehog	1
360	Polecat	0
[redacted]		
362	Hedgehog	1
363	Hedgehog	2
364	Hedgehog	1
365	Polecat	1
366	Polecat	1
367	Hedgehog	1
368	Hedgehog	1
369	Hedgehog	1
370	Polecat	0
[redacted]		
372	Hedgehog	1
373	Otter	1
374	Hedgehog	3
[redacted]		
376	Hare	1

377	Hedgehog	1
378	Hedgehog	1
379	Hedgehog	1
380	Hedgehog	1
381	Hedgehog	1
382	Otter	0
383	Hedgehog	1
384	Hare	1
385	Pipistrellus Bat Species	0
386	Hedgehog	1
387	Hedgehog	0
388	Hedgehog	1
389	Otter	1
390	Otter	1
391	Unknown Bat	1
392	Hedgehog	1
393	Hedgehog	1
394	Polecat	1
395	Hedgehog	1
396	Natterer's Bat	1
397	Brandt's Bat	1
	Brown Long-eared Bat	1
	Common Pipistrelle	1
	Daubenton's Bat	1
	Lesser Horseshoe Bat	1
	Natterer's Bat	1
	Noctule Bat	1
	Soprano Pipistrelle	1
	Whiskered Bat	1
398	Hedgehog	1
399	Hedgehog	1
400	Hedgehog	1
401	Hedgehog	1
402	Hedgehog	1
403	Hedgehog	1
404	Hare	0
405	Hedgehog	1
406	Hedgehog	1
407	Hedgehog	1
408	Unknown Bat	1
409	Hedgehog	1
410	Hedgehog	1
411	Hedgehog	1
412	Otter	1
413	Hedgehog	0
414	Hedgehog	1
415	Hedgehog	3
416	Hedgehog	0
417	Polecat	1
[redacted]		
419	Hedgehog	1
[redacted]		
421	Common Pipistrelle	1
422	Hedgehog	1
423	Hedgehog	0

[redacted]

Plant and Fungi Desktop Records

Refer to drawing G8745.012 for spatial location of species data

Species Record Identifyer	Species Common Name	Count
1	Himalayan Balsam	3
2	Japanese Knotweed	1
3	Himalayan Balsam	3
4	Japanese Knotweed	1
5	Japanese Knotweed	1
6	Black-poplar	3
7	Himalayan Balsam	40
8	Japanese Knotweed	1
9	New Zealand Pigmyweed	1
10	New Zealand Pigmyweed	1
11	New Zealand Pigmyweed	1
12	New Zealand Pigmyweed	4
13	Bluebell	1
14	Bluebell	1
	Himalayan Balsam	1
15	Bluebell	1
16	Bluebell	1
17	Japanese Knotweed	1
18	Japanese Knotweed	2
19	New Zealand Pigmyweed	1
20	Bluebell	1
21	Japanese Knotweed	1
22	Bluebell	1
23	Bluebell	1
24	Bluebell	1
25	Himalayan Balsam	200
26	Bluebell	1
27	Japanese Knotweed	1
28	Himalayan Balsam	1
	Japanese Knotweed	1
29	Bluebell	1
30	Himalayan Balsam	1
31	Bluebell	6
32	Bluebell	1
33	Japanese Knotweed	3
34	Himalayan Balsam	3
35	Bluebell	10

Species Record Identifyer	Species Common Name	Count
36	Himalayan Balsam	1
	Japanese Knotweed	1
37	Bluebell	1
38	Himalayan Balsam	1
	Rhododendron ponticum	1
39	Himalayan Balsam	1
	Japanese Knotweed	1
40	Bluebell	1
41	Bluebell	1
42	Bluebell	1
43	Himalayan Balsam	1
44	Bluebell	1
45	Bluebell	1
46	Himalayan Balsam	1
47	New Zealand Pigmyweed	1
48	Bluebell	1
49	Bluebell	1
50	Japanese Knotweed	1
51	Bluebell	1
52	Bluebell	1
53	Bluebell	1
	Japanese Knotweed	1
	Montbretia	1
	Rhododendron ponticum	1
	Variegated Yellow Archangel	1
54	Bluebell	1
55	Bluebell	1
	Rhododendron ponticum	1
56	Bluebell	1
57	Bearded Tooth	1
58	Himalayan Balsam	1
	Wall Cotoneaster	1
59	Bluebell	1
	Japanese Knotweed	1

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