Phase I Habitat Survey/Preliminary Ecological Assessment
Land North of Railway Line
Rhoose Point
Rhoose
Vale of Glamorgan

For Persimmon Homes/Charles Church

April 2022

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Appendix I Map showing Extended Phase I Habitats and Ecological Features Present
Appendix II Data Search Results (SEWBReC-Aderyn)

1 Introduction

1.1 Survey Brief

TerrAqua Ecological Services Ltd was commissioned by Persimmon Homes to undertake a preliminary ecological assessment of a parcel of land north of the railway line at Rhoose Point, Rhoose, Vale of Glamorgan. Approximate central grid reference ST07186 66267. The assessment was undertaken in order to ascertain the extent and current state of habitats within the survey boundary, and the potential of the site to support protected, rare and uncommon species. The survey was undertaken as part of the ecological assessment of the site required as part of the planning process prior to any future development of the site.

The survey was undertaken in April 2022 following instructions to proceed from Morgan Williams, Planner for Persimmon Homes.

1.2 Client Details

The survey was undertaken on behalf of Persimmon Homes, Persimmon House, Llantrisant Business Park, Rhondda Cynon Taf following instructions to proceed by Mr Morgan Williams acting for Persimmon Homes East Wales, Persimmon House, Llantrisant Business Park, Llantrisant, Rhondda Cynon Taf CF72 8YP.

2 Background

2.1 Rational

The survey was commissioned by the client as part of the ecological assessments undertaken during of the scoping of the site with regard to its suitability for potential change in use or future development. The site is included within the Vale of Glamorgan Local Development Plan.

The site has been subject to a number of ecological assessments and surveys across a number of years. An extended Phase 1 habitat survey plus protected species surveys of the site were undertaken in 2004-05 and furthermore detailed surveys completed in 2007 (Capita Symonds).

The following surveys were completed between 2004 and 2007:

Table 1 Surveys completed between 2004-2005 (Capita Symonds)

Survey	Reasoning	Date
Extended Phase I	Baseline Survey	2004
Hedgerow	Require assessment under hedgerow regulations 1997	2004
Badger	Suitable habitat – Phase I survey. Additional survey recommended by Capita Symonds and Biodiversity Officer, Vale of Glamorgan Council due to timing of initial work	2004-2005
Bats	Suitable habitats identified in Phase I	2004
Birds	Recommended by Biodiversity Officer, Vale of Glamorgan Council. Suitable habitat identified in Phase I survey	2005
Dormouse	Suitable habitat identified in Phase 1 survey and sub-optimal timing of initial survey. Additional surveys recommended by Biodiversity Officer, Vale of Glamorgan Council	2004-2005
Invertebrates	Suitable habitat identified in Phase I survey. Survey recommended by Biodiversity Officer, Vale of Glamorgan Council	2005
Reptiles	Slow worm recorded in Phase I survey	2005

Table 2 Surveys completed in 2007 (Capita Symonds)

Survey	Reasoning	Date
Hedgerow	Previous survey highlighted some important hedgerows.	2007
Badger	Previous survey identified signs of activity.	2007
Bats	Suitable habitat identified and foraging activity previously recorded	2007
Birds	Red list species previously identified within survey area.	2007
Dormouse	Suitable habitat previously identified, previous survey hampered by tubes being lost and/or removed. Update requested by Biodiversity Officer, Vale of Glamorgan Council	2007
Reptiles	Previous survey reptiles recorded. Update requested by Biodiversity Officer, Vale of Glamorgan Council	2007

An Environmental statement was produced by WYG for the extended Rhoose point site, a proportion of which has since been developed, and presented as part of a planning application on behalf of Persimmon and Belway Homes. in 2008:

Environmental Statement Volume 1: Main Text Land to the North of the Railway Line, Rhoose, Vale of Glamorgan The National Assembly for Wales Bellway plc Persimmon Homes (Wales) Ltd 2008

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2.2 Site Description

The site comprises approximately gently sloping agricultural land, a mix of arable and semi-improved grassland. It adjoins the eastern boundary of the village of Rhoose, 3.5 km to the west of the town of Barry. The site is bounded in the north and west by existing residential development. The railway line forms the southern boundary, beyond which lies the Rhoose Point housing development. The access road that leads from the B4265 to Rhoose Point, forms the eastern boundary of the site. A public right of way runs north-south through the site.

2.3 National Designations

No part of the site is covered by a National or International designation for its conservation importance, and no such designation is afforded to any immediately adjacent land.

The Cliffwood-Golden Stairs Site of Special Scientific Interest is located some 1.5km north-east of the site boundary. The SSSI represents best example of a mixed woodland in South Glamorgan with a canopy of pedunculate oak, ash, maple and yew. The interesting, Ungrazed ground flora and wooded cliff areas includes Purple Gromwell (*Lithospermum purpurocaeruleum*) which is restricted to a very small number of sites in the county.

2.4 Local Designations

No part of the site is covered by a local designation such as a Site of Interest to Nature Conservation (SINCs). A number of SINCs are located within a 1.5km radius of the site boundary including:

A total of ten (10) locally designated sites of interest to Nature conservation (SINCs) are located within a 1.5 km radius including:

North West Bullhouse Brook (1104m)

North Bullhouse Brook (1158m)

North East of Knock Man Down Wood (1850m)

West of The Old Rectory (1257m)

Knock Man Down Wood (1445m)

Font-y-Gary (1307m)

South West of Church Farm (948m)

Porthkerry (1090m)

Readers Way Pond (1325m)

Rhoose Point (340m)

3 Methodologies

The survey methodologies as used to assess the site are outlined below. These are accepted by both local authority and conservation bodies as the standard ecological assessment methodologies.

The survey was undertaken within the site boundaries as supplied by Mr Morgan Williams acting for Persimmon Homes.

3.1 Survey Dates and Personnel

The phase I survey was undertaken in April 2022 by Carmen Jones MSc MCIEEM Senior Ecological Consultant and Dyfrig Jones BSc Senior Ecological Consultant. Both highly experienced ecologists with extensive experience in both ecological assessment and species-specific issues.

3.2 Extended Phase I Ecological Assessment

The walkover survey consists of an assessment of the habitats present and was undertaken following the methodology as set out in the Handbook for Phase I Habitat Survey and extended to cover faunal species and their habitats according to the Chartered Institute of Ecology and Environmental Management (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland. CIEEM. Identified habitats were mapped using Pear Technology PT- Mapper Software and target notes (TN) taken where appropriate for any additional features noted. The habitats mapped and target note locations are shown in Appendix I.

In addition, as part of the extended phase I survey, a record was made of all mammals, birds, amphibian, reptile and invertebrate fauna for which a sighting or evidence of activity was observed as well as the identification of habitats present considered suitable to support both internationally and nationally protected species, or any species considered to be rare or of local significance.

Data Search

The survey included a full data search undertaken by the South East Wales Biological Record centre and supplied through **Aderyn Ref No 0223-009**

3.3 Survey Limitations

All areas of the site were fully accessible and there were no factors present likely to impact on the accuracy or effectiveness of the survey. Therefore, the results and conclusions within this report are considered an accurate reflection of the current state of habitats and species within the site boundary.

4 Results Extended Phase I Survey

4.1 Habitats

4.1.1 Arable

Field F1 is a large arable field currently planted with beans. The field has a south westerly slope and is bordered by mature hedgerows and scrub. The field margins along the eastern, southern and northern side are very narrow and limited to a width of approximately 1 metre. The western field margin is more extensive with a width of approximately 3 metres. This wide margin is dominated by short grass species and is used as an access route through to other fields within the site.

Plate 1 arable field F1

Plate 2 grass field margin F1

4.1.2 Semi Improved Grassland

Semi Improved grassland is the dominant habitat type across the site. These grasslands are divided into five fields by an extensive and mature hedgerow system. The fields have been agriculturally improved to some degree. The floristic characteristics and topography of each

individual field differs somewhat and a full description of each field, numbered F2 to F6 inclusive are given below:

F2

Semi Improved grassland, no evidence of recent grazing. Sward height of some 10-15cm. The sward is floristically poor and dominated by agricultural grasses. Dominant species present include Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*), common bent (*Agrostis tenuis*), . annual meadow grass (*Poa annua*) cocksfoot (*Dactylis glomerata*), timothy (*Phleum pratensis*), meadow foxtail (*Alopecurus pratensis*), common couch (*Elymus repens*) and perennial rye (*Lolium perenne*). Other species present include wild chives (*Allium schoeneprasum*), occasional greater knapweed (*Centaurea nigra*) sheep's sorrel (*Rumex acetosella*), common sorrel (*Rumex acetosa*), common dock (*Rumex obtusifolius*), dandelion (*Taraxacum sp*), meadow buttercup (*Ranunculus acris*), hawkbit sp (*Leontodon sp*), common cats ear (*Hypochaeris sp*), red clover (*Trifolium pratense*), white clover (*Trifolium repens*), ribwort plantain (*Plantago lanceolata*), wild carrot (*Daucus carota*), ragwort (*Jacobaea vulgaris*)common mouse ear (*Cerastium fontanum*) herb robert (*Geranium robertianum*), daisy (*Bellis perennis*) and common vetch (*Vicia sativa*). Non-native Montbretia (*Crocosmia sp*) is present in patches around the field boundary (TN1).

Plate 3 field F2

F3

Semi Improved grassland, no evidence of recent grazing. Tussocky sward with height of some 20-30cm. The sward is floristically poor and dominated by agricultural grasses. Dominant species present include Yorkshire fog, red fescue, common bent, . annual meadow grass, cocksfoot, timothy, meadow foxtail, common couch, crested dogs tail (*Cynasaurus cristatus*) and perennial rye (*Lolium perenne*). Other species present include wild chives, occasional greater knapweed sheep's sorrel, common sorrel, common dock, dandelion, meadow buttercup, hawkbit sp, common cats ear, red clover, white clover, creping thistle, ribwort plantain, wild carrot, common mouse ear, .and common vetch.

An area of stripped topsoil with exposed earth has resulted in the development of a small, short ephemeral plant community within field F3 (TN2). Species within this area include daisy , groundsel (Senecio vulgaris), pineapple mayweed (*Maticaria discoidea*), red clover, and sphagnum species

Plate 4 fiels F3

Plate 5 field F1 short ephemeral comminity (TN2)

F4

Semi Improved grassland, no evidence of recent grazing. Tussocky sward with height of some 5cm-10cm. The sward is floristically poor and dominated by agricultural grasses. Dominant species present include Yorkshire fog, red fescue, common bent, annual meadow grass, cocksfoot, timothy, meadow foxtail, common couch, crested dogs tail and perennial rye . Other species present include wild chives, occasional greater knapweed sheep's sorrel, common sorrel, common dock, dandelion, meadow buttercup, hawkbit sp, common cats ear, red clover, white clover, creping thistle, ribwort plantain, wild carrot, common mouse ear, groundsel, ragwort, goosefoot (*Chenopodium sp*) and common vetch.

Plate 6 field F4

F5

Semi Improved grassland, no evidence of recent grazing. Tussocky sward with height of some 10cm-15cm. The sward is floristically poor and dominated by agricultural grasses. Dominant

species present include Yorkshire fog, red fescue, common bent, annual meadow grass, cocksfoot, timothy, meadow foxtail, common couch, crested dogs tail and perennial rye . Other species present include wild chives, occasional greater knapweed sheep's sorrel, common sorrel, common dock, dandelion, meadow buttercup, hawkbit sp, common cats ear, red clover, white clover, creping thistle, ribwort plantain, wild carrot, common mouse ear, groundsel, ragwort, tufted vetch (*Vicia cracca*) and common vetch.

Plate 7 field F5

F6

Small field of semi-improved grassland, with no evidence of recent grazing. Sward hight 10-20cm. Dominant species present include Yorkshire fog, red fescue, common bent, annual meadow grass, cocksfoot, timothy, meadow foxtail, common couch, crested dogs tail and perennial rye . Other species present include wild chives, occasional greater knapweed sheep's sorrel, common sorrel, common dock, dandelion, meadow buttercup, hawkbit sp, common cats ear, red clover, white clover, creping thistle, ribwort plantain, field wood rush (*Luzula campestris*), occasional tufted hair grass (*Deschampsia cespitosa*), common mouse ear, groundsel, ragwort, tufted vetch (*Vicia cracca*) and common vetch.

Plate 8 field F6

4.1.3 Unimproved Grassland

Small areas of unimproved grassland are located within a mosaic of scrub, bare earth, exposed stone and short ephemeral communities along the course of the track running north to south through the site. The grass within the track way is very variable in height with bare patches common within the main course of the track with tall undisturbed vegetation immediately beneath the adjacent hedgerows and track edges. Species present within the route of the track include Yorkshire fog, rough meadow grass, common couch, cocksfoot, common bent, red fescue, foxglove (*Digitalis purpurea*), greater willowherb (*Epilobium hirsutum*), nettle (*Urtica dioica*), false oat (*Arrhenatherum elatius*), meadow brome (*Bromus commutatus*), and soft brome (*Bromus hordaeceus*).

Plate 9 mosaic of unimproved grass and scrub

4.1.4 Hedgerows

An extensive system of hedgerows is present within the site boundary. These include both intact and defunct hedges and hedgerows with standard trees. The hedgerows provide direct linkages to the hedgerow system present within wider countryside. A number of hedgerows have previously been assessed as “Important” under the Wildlife and Landscape Criteria of the 1997 Hedgerow Regulations (TerrAqua 2022 & Capita Symonds 2007).

H1

Hedgerow H1 is located along the eastern boundary of F1. The eastern field boundary is a combination of small sections of true managed hedgerow and lengths of bramble scrub. The northern section of hedgerow is short and manged by mechanical cutting on the field side with a height of some 1.5m. Further south along the hedge line the hedge becomes taller and reaches over 2m in height. A row of non-native conifers is also present immediately east of the hedgerow. A large 10m plus area of dense bramble scrub separates the hedgerow from the adjacent Rhoose Point access road. Hawthorn (*Cratageous monogyna*) is the dominant woody species within the hedge with occasional elder (*Sambucus nigra*) and ash (*Fraxinus excelsior*) with extensive climbing bramble. The ground flora is generally poor due to the management

of the adjacent arable field. Species recorded within the vase of the hedge include yorkshire fog, cocksfoot, rough meadow grass, ivy (*Hedera helix*), hedge mustard (*Sisymbrium officinale*), germander speedwell (*Veronica chamaedrys*),dog violet (*Viola riviniana*), lesser celandine (*Ficaria verna*), ribwort plantain, common vetch, common cleavers (*Galium aparine*), common mouse ear, groundsel, arum (*Arum maculatum*), herb robert and herb bennet (*Geum urbanum*).

Plate 10 hedgerow H1 northern end

Plate 11 hedgerow H1 southern end

H2

H2 forms the southern boundary of field F1 and is set on a remnant hedge bank. The hedgerow reaches a height of 2.5m and is unmanaged. Signs of historic management by traditional laying is visible within the general structure of the hedge. The dominant woody species present include hawthorn, blackthorn (*Prunus spinosa*), sycamore (*Acer pseudoplatanus*), willow (*Salix sp*) and dogwood (*Cornus sanguinea*). Bramble, dog rose (*Rosa canina*) and climbing ivy (*Hedera sp*) are common throughout the hedge. The ground flora is generally poor due to the management of the adjacent arable field. Species recorded within the vase of the hedge include yorkshire fog, cocksfoot, rough meadow grass, ivy, hedge mustard, germander speedwell, dog violet, lesser celandine, ribwort plantain, common vetch, common cleavers, common mouse ear, groundsel, arum, herb robert and herb bennet.

Plate 12 hedgerow H2

H3

The hedgerow forms the western boundary of field F1. The hedgerow is set on the remnants of a hedge bank and is currently un managed and reaches a varying height of between 1 and 3m. Signs of historic management by traditional laying is visible within the general structure of the hedge. . The dominant woody species present include hawthorn, elder and blackthorn. Bramble is common throughout the hedge along with dog rose and clematis (*Clematis alba*). Ground flora is generally poor as a result of the adjacent arable field management. Stinging nettle, creeping thistle, greater willowherb, ivy, common mouse ear, herb robert, arum, lesser celandine, hartstongue fern (*Asplenium scolopendrium*), along with grasses such as Yorkshire fog, cocksfoot, perennial rye and rough meadow grass are dominant.

Plate 13 hedgerow H3

H4

H4 forms the boundary of field F2 The hedgerow is set on the remnants of a hedge bank and reaches a height of some 3m. The hedgerow is unmanaged but shows signs of historic management by traditional laying. Woody species present include, hawthorn, blackthorn, ash, elm and elder. Bramble is common throughout the hedgerow with dog rose also present. The ground flora is generally poor with stinging nettle, creeping thistle, greater willowherb, ivy, common mouse ear, herb robert, herb bennet, arum, dog violet, lesser celandine, hartstongue

fern along with grasses such as Yorkshire fog, cocksfoot, perennial rye and rough meadow grass all present. Hedgerow H4 has been assessed as being "Important" under the 1997 Hedgerow Regulations.

Plate 14 hedgerow H4

H5/H5a

H5 forms the northern boundary of field F2 and extends as hedgerow H5a along the track through the site. Along the track the flora becomes more diverse although still restricted by bramble and scrub outgrowths. The hedge is approximately 3m in height with an overall width exceeding 2m and set on a remnant hedge bank.. The hedgerow is unmanaged but shows Signs of historic management by traditional laying. Woody species present include hawthorn, blackthorn, common elm (*Ulmus procera*), holly (*Ilex aquafolium*) and elder. Bramble is common throughout the hedgerow along with dog rose and clematis.. The ground flora is generally poor with stinging nettle, creeping thistle, greater willowherb, ivy, common mouse ear, herb robert, herb bennet, arum, lesser celandine, hartstongue fern, common vetch, common cleavers, hedge bedstraw (*Gallium mollugo*), hedge parsley (*Anthriscus sylvestris*), and teasel (*Dipsacus fullonum*), along with grasses such as Yorkshire fog, cocksfoot, perennial rye and rough meadow grass all present. Hedgerow H5a as been assessed as being "Important" under the 1997 Hedgerow Regulations.

Plate 15 hedgerow H5

H6

H6 Tall un manged hedgerow set on a remnant hedge bank. The hedge is approximately 2m in height with an overall width exceeding 2m. Hawthorn outgrowths extend into the adjacent field. Signs of historic management by traditional laying is also visible within the general structure of the hedge. Woody species present include hawthorn, ash, elder, elm, blackthorn, and willow. Dog rose., clematis and bramble are present as climbers within the hedge. . Ground flora is generally poor Those species present within the base of the hedge include ivy, herb robert, nettle, Yorkshire fog, cocksfoot, rough meadow grass, hawthorn seedlings, low bramble, ivy, lesser celandine, herb bennet, herb bennet, primrose, tormentil, arum, stinging nettle, cow parsley, dog violet, and greater willowherb.

Plate 16 hedgerow H6

H7

H7 forms the boundary along the track /footpath towards the railway crossing. The hedgerow is tall and unmanaged with hawthorn and blackthorn outgrowths. Woody species present include hawthorn, blackthorn, elm, ash, occasional holly and willow Dog rose is present as a climber within the hedge. Ground flora is generally poor due to the encroachment of outgrowths. Species present include ivy, herb robert, nettle, Yorkshire fog, cocksfoot, rough meadow grass, hawthorn seedlings, low bramble, ivy, arum, lesser celandine, herb bennet,

primrose, arum, dog violet, stinging nettle, cow parsley, and greater willowherb. Hedgerow H7 has been assessed as being “Important” under the 1997 Hedgerow Regulations.

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Plate 17 hedgerow H7

H8

Tall unmanaged hedgerow set on remnant hedge bank. The hedge is approximately 2m in height with an overall width exceeding 2m. Signs of historic management by traditional laying is also visible within the general structure of the hedge. Woody species present include blackthorn, elm, hawthorn and significant amounts of dog rose. The ground flora is poor. Species recorded within the base of the hedge include ivy, herb robert, nettle, Yorkshire fog, cocksfoot, rough meadow grass, hawthorn seedlings, low bramble, ivy, lesser celandine, herb bennet, herb robert, primrose, arum, stinging nettle, dog violet, common cleavers, hedge bedstraw, cow parsley, and greater willowherb.

Plate 18 hedgerow H8

H9

The hedgerow is approximately 2m high and set on a remnant hedge bank. The hedgerow is unmanaged but shows signs of historic management by traditional laying . Dead standards are

present within the hedge. Woody species present include hawthorn, blackthorn, elder and ash as standards Dog rose, bramble and clematis are present within the hedge as climbers. A group of standard non native conifers are present within the northern end of the hedge. Species recorded within the base of the hedge include ivy, herb robert, nettle, Yorkshire fog, cocksfoot, rough meadow grass, hawthorn seedlings, low bramble, ivy, lesser celandine, herb bennet, herb robert, primrose, arum, stinging nettle, dog violet, common cleavers, hedge bedstraw, cow parsley, and greater willowherb.

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Plate 19 hedgerow H9 with standards

H10

Large over mature hedgerow forming the western side of the trackway and separating the site from the adjacent residential development. The hedge is unmanaged and set on a remnant hedge bank. Parts of the hedge so signs of historic management through laying. Woody species present include hawthorn, ash, elder, blackthorn, elm, and willow. Dog rose., clematis and bramble are present as climbers within the hedge. The ground flora is generally poor due to expanse of bramble and scrub at the base of the hedge with stinging nettle, creeping thistle, greater willowherb, ivy, common mouse ear, herb robert, herb bennet, arum, lesser celandine, hartstongue fern, common vetch, common cleavers, hedge bedstraw, hedge parsley, teasel primrose, bluebell, along with grasses such as Yorkshire fog, cocksfoot, perennial rye and rough meadow grass all present. Hedgerow H10 has been assessed as being “Important” under the 1997 Hedgerow Regulations.

4.1.5 Scrub

Dense scrub composed primarily of stands of bramble is common along the eastern perimeter of the site and along the edges of the track running north south through the site. In addition, a large expanse of dense scrub, which includes a significant amount of gorse (*Ulex europaea*), is located on the steep bank that forms the boundary between hedgerow H1 and the main Rhoose point access road. This scrub area lies immediately outside the proposed development

zone. Scrub is also present around the area of the track crossing point with the railway line at the southern boundary of the site and adjacent to the current site access gate.

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Plate 20 scrub on eastern boundary

Plate 21 scrub on access track

4.1.6 Mature Trees

No mature trees are present within the open grasslands. A number of mature trees are present within the hedgerow system, although these are few in number. Mature ash trees are present within the western boundary of field F6 (TN3 & TN5) and within hedgerow H9. Dead standards are present within hedgerow H9. Mature/semi mature non native conifers are a common feature of the site forming a planted buffer between the Rhoose point access road and the northern boundary with Rhoose Road.

Plate 22 mature ash

Plate 23 dead standards hedgerow H9

4.1.7 Non-Native Invasive Species

Non native species present within the site include stands of *Montbretia* that were recorded within a number of hedgerows and along the track running north south through the site. Butterfly bush (*Buddleja davidii)* was recorded within the scrub along the northern boundary of field F6.

Table 3 showing target notes and feature descriptions as shown on map (appendix I)

Target Note	Description
TN1	Non Native Montbretia within base of several hedgerows
TN2	Area of stripped topsoil with short ephemeral communities within F3
TN3	Large ash category 2 Bat roost potential
TN4	Non Native Butterfly bush in scrub northern boundary F6
TN5	Group of mature Ash category 2 Bat roost potential

4.2 Data Search Results

4.2.1 Protected Sites

The data search results confirm that no part of the site is covered by a National or International designation for its conservation importance.

The Cliffwood-Golden Stairs Site of Special Scientific Interest is located some 1.5km north-east of the site boundary. The SSSI represents best example of a mixed woodland in South Glamorgan with a canopy of pedunculate oak, ash, maple and yew. The interesting, Ungrazed ground flora and wooded cliff areas includes Purple Gromwell *Lithospermum purpurocaeruleum* which is restricted to a very small number of sites in the county.

A total of ten (10) locally designated sites of interest to Nature conservation (SINCs) are located within a 1.5 km radius including:

North West Bullhouse Brook (1104m)

North Bullhouse Brook (1158m)

North East of Knock Man Down Wood (1850m)

West of The Old Rectory (1257m)

Knock Man Down Wood (1445m)

Font-y-Gary (1307m)

South West of Church Farm (948m)

Porthkerry (1090m)

Readers Way Pond (1325m)

Rhoose Point (340m)

4.2.2 Protected Species

No records from the local record centre were returned relating directly to the area within the site boundary.

A large number of records relating to bat species were found for locations within 5km of the site including:

Brown Long Eared (*Plecotus auritus*) within 2km
Whiskered (*Myotis mystacinus*) within 1.2km
Natterer's (*Myotis natteri*) within 1.2km
Common pipistrelle (*Pipistrellus pipistrellus*) within 1.2km
Noctule (*Nyctalus noctula*) within 1.2lm
Soprano pipistrelle (*Pipistrellus pygmaeus*)
Lesser Horseshoe (*Rhinolophus hipposideros*) within 3km

Badger (*Meles meles*) have been recorded at several locations within 1.2km of the site.

Great Crested Newt (*Triturus cristatus)* are known to be present within the Rhoose area with records returned for locations within 800m of the site boundary)

Large numbers of records for bird and invertebrate species were returned for areas south of the railway line (Rhoose Point).

5 Ecological Evaluation

5.1 Habitats

For reporting purposes, the ecological value of a habitat/site is based upon the following criteria:

- Currently supports, or has the potential to support protected, nationally or locally scarce species
- Supports a species listed in the Environment (Wales) Act 2016 as a Species of Principle Importance for maintaining and enhancing Biodiversity in relation to Wales
- Is listed in the Environment (Wales) Act 2016 as a Habitat of Principle Importance for maintaining and enhancing Biodiversity in relation to Wales
- Habitat has a high intrinsic value supporting a diverse range of species
- Is a UK BAP Habitat

- Local BAP Habitats with an ecological interest or cover a significant area of the site
- Natural habitats located within built up and/or urban areas

Habitats recorded within the survey area and extent of each is shown in table 2:

Table 2 Showing Extent of Habitats Present (Ha)

Habitat	Phase I Nomenclature	Area Ha (approx.)
Arable	J1	3.6
Semi Improved Grassland	B6	8.4
Unimproved Grassland	B2	0.3
Scrub	A2	0.8
Hedgerows (Species Poor) Hedgerows (Species Rich)	J2.1.2 J2.1.1	501m 990m
Tall Herb	C1	0.22

5.1.1 Arable

A single large arable field (F1) dominates the eastern side of the site. The main planted area is a monoculture bean crop which effectively dominate and shade out any less vigorous native plant species. The arable crop shows signs of weed control using herbicides either prior to planting or following seeding. The arable crop will on maturity provide potential feeding opportunities for birds and small mammals. although the cropping regime restricts the value of the site to such species.

Arable field margins can be ecologically valuable areas often containing plant communities that have disappeared or become increasingly rare as a result of agricultural intensification. As a result, cereal field margins are a UK Biodiversity Action Plan Habitat and are recognised as Habitats of Principle Importance for maintaining and enhancing Biodiversity in relation to Wales. Such field margins can also provide opportunities for a very wide range of invertebrate species, mammals such as brown hare and opportunities for ground nesting birds.

The planting regime within the field F1 includes the planting of crops close to the field boundaries and in most sections within 1m of the base of the boundary hedgerows. As a result, these margins are dominated by rank grasses, and common tall herbs such as nettle and broad leaved dock. No field margins containing diverse communities of any value remain. Occasional lengths of margin do exist where crops have failed or where machinery has flattened the crop and, in these areas, common plant species typical of disturbed ground can be found. No rare or locally uncommon species were recorded within these communities.

As a result of the close planting, monoculture, and lack of field margins the arable field F1 is considered to have a low ecological value at a site and local level.

5.1.2 Semi Improved Grassland

Grasslands can be very diverse and as such many grassland types are listed in the Environment (Wales) Act 2016 as a Habitat of Principle Importance for maintaining and enhancing Biodiversity in relation to Wales. Grasslands that show characteristics of very intensive agricultural improvement are not generally considered to have a high conservation value. The grasslands within the site have received a . degree of agricultural improvement but have not received intensive improvement. The grasslands do not have a significantly high degree of floristic diversity and are dominated by grass species with common forbs associated with formerly grazed pasture present in varying abundance.

All five of the semi improved fields are representative of MG6 grasslands or sub communities. These represent grasslands that have been subject to a degree of historic agricultural improvement and in this instance lack the significant high levels of species diversity associated with high value conservation grasslands. As a result the grasslands are not considered to have a high ecological value and do not represent grasslands that meet the criteria for SINC (Site of Interest to Nature Conservation) for the South Wales region.

5.1.3 Unimproved Grass

Unimproved grasslands are an increasingly rare habitat due to intensive agricultural practices. Unimproved grassland does survive along road verges and within areas free of cultivation or intensive grazing. The track running through the site is bounded on both sides by hedgerows. Within the boundaries of this track small narrow areas of unimproved grassland remain. These areas are dominated by grasses such as false oak, cocksfoot, perennial rye, soft brome and developing scrub which shade out less robust herb species. Dog violet, herb robert, herb bennet, fox glove, greater willowherb, ribwort plantain, major plantain ,and occasional primrose are present within the grassland strip along periphery of the track. Overall, the ecological value of the unimproved grassland along the main route of the track is considered to be low to moderate at a local level and does not meet the criteria for unimproved neutral grassland SINC selection for the South Wales region.

5.1.4 Hedgerows

Hedgerows are important habitats often forming a continuous series of wildlife corridors around the countryside. The importance of hedgerows as a habitat is recognised in their inclusion on Section 42 Habitat list. Hedgerows are important in all types of landscape including intensively farmed areas, industrial complexes and less managed land.

A total of nine (9) true hedgerows are present within and bordering the site. The hedgerows have been identified as a mix of species rich and species poor hedges with remnants of banks and signs of historic management present within most. Five of the hedgerows meet the criteria

for Important Hedgerow under the hedgerow regulations (TerrAqua, 2022). These are predominantly the hedges associated with the track running north -south through the site. Some hedgerows separating the field system are species poor and defunct with limited value in their current state of management. The hedgerows within the site have direct links to the wider countryside and adjacent railway corridor and provide potential commuting routes and feeding areas for a wide range of small mammals, birds and invertebrate species.

The hedgerow system has a high ecological value and is the most valuable feature within the site. The hedgerow system is considered to be of high ecological value at a site, local and district level. The retention or translocation of hedgerows within the site boundary should be considered during the final master plan design for the site to ensure that green corridors and connections with the wider countryside are retained and enhanced.

5.1.5 Scrub

Dense scrub is present as narrow strips around the base of the hedgerow system and along the periphery of the track running north – south through the site. The dense scrub consists primarily of bramble and saplings of trees common to the hedgerow system. The dense scrub is likely to support a wide range of common bird species providing potential nesting and feeding sites for both resident and summer migrant species and feeding opportunities for winter migrants. The scrub is also likely to support small mammal species including hedgehog, field mouse and bank voles. The scrub does afford potential refuga and feeding areas for reptile species.

Overall, the scrub is considered to have a low conservation value at a site and local level. However further survey work would be required in order to ascertain the full importance of the scrub to protected species such as dormice. If present within the site then all scrub would be considered to be of high value.

5.1.6 Mature Trees

All mature trees have an intrinsically high ecological value providing important feeding opportunities for a very diverse range of invertebrate species as well as providing nesting and feeding sites for birds. Mature trees also support small mammals both arboreal and those relying on fallen fruits at the base of the tree.

Mature trees are absent from the main grassland areas and the small number present are located within the hedgerow system and along the site boundary. A number of mature trees have been classified as Category (2) trees based on the potential roosting features relating to bats, meaning the potential exists for these trees to be used by small numbers of individual bats (TN3 & TN6).

In keeping with the recognised ecological importance of trees all of the mature trees around the site periphery are considered to have a high ecological value at both a site and local level.

Further updates to the current status of all trees in relation to bats has been commissioned by Persimmon Homes for completion in 2022.

5.2 Fauna

5.2.1 Mammals

5.2.1.1 Badger

Evidence of badger activity along the southern boundary of the site was recorded during the phase I survey and subsequent badger specific survey work (TerrAqua Ecological Services 2022). This included the identification of badger runs from the adjacent railway line and a badger latrine close to the railway fence. Opportunities for badger within the immediate site boundary are limited with none of the hedgerow system having a structure at the base suitable for the concealment or construction of a badger set other than those adjacent to the public track. The trackway hedges are subject to high levels of disturbance through dog walkers and are therefore also considered unsuitable for the concealment of a badger set. No obvious runs were observed within the main body of the site and the small number identified were confined to the railway embankment edge. This would indicate that badger are present somewhere along the railway embankment, but no evidence was found indicating any such set lies in close proximity to the survey area. Therefore, it is concluded that the site has a limited potential for use by badger and confined to that of foraging in the grasslands immediately adjacent to the southern boundary. No badger sets are located within or immediately adjacent to the site. As a consequence, badger are unlikely to be negatively affected by any proposed development.

5.2.1.2 Bats

No buildings are present within the site boundary and therefore no artificial structures suitable for roosting bats are present.

A small number of trees have been identified as having a moderate potential for use by bats and assessed as being Category (2) trees as described in Bat Conservation Guidelines (BCT 2016). These include a large mature ash located within an immediately adjacent garden at the north western corner of the site and a group of mature ash also located towards the north western side and lying adjacent to domestic gardens. All other trees within the site have been assessed as having low to negligible value to roosting bats (Category 3).

Historic surveys of the site (Capita 2004-2007) found low numbers of bats active within the site boundary and these were confined to common pipistrelle bats. The results of the data search undertaken as part of the 2022 phase I survey indicate that a number of bat species are known to be active within 1.5km of the site.

Further updated survey work will be required before the current use of the site by bats can be fully ascertained. Bat activity and tree emergence surveys have been commissioned and will and will be concluded during summer 2022.

5.2.1.3 Dormouse

The species rich, over mature hedgerows bordering the railway and trackway provide habitat suitable for use by the hazel dormouse (*Muscardinus avellanarius*). The interior hedgerow system is generally species poor and in poor condition and is currently sub optimal for use by dormice. The hedgerow system around the site periphery has links to the wider countryside forming part of an extensive hedgerow system and with links to the scrub associated with the adjacent road system and railway line.

Previous surveys of the site (Capita 2004-2007) did not find dormice within the site boundary. No records for dormouse were found relating directly to the site or any immediately adjacent habitat. However due to the nature of hedgerows associated with the public trackway further survey work will be required in order to ascertain if dormice are present within the site. Such surveys have been commissioned and will be completed during summer 2022.

5.3 Reptiles

The semi-improved fields have a limited potential for use by reptiles. In contrast the areas of vegetation along the base of the hedgerow system bordering the periphery of the track afford excellent basking and hunting areas for reptiles, as does the immediate boundary with the railway embankment at the southern site boundary. The remnant hedge banks also provide potential refuge and hibernation sites for reptiles.

A reptile survey (TerrAqua Ecological Services, 2022) of the site has confirmed that reptiles are present within the site boundary with slow worm and common lizard, confirmed as present within the site notably along the track way and adjacent to the railway embankment.

Surveys undertaken between 2004-2007 (Capita) also confirmed a slow worm presence within the site.

The data search results undertaken as part of this preliminary ecological assessment show that reptiles including slow worm and adder have been recorded within a 600m radius of the site, notably at Rhoose point south of the railway embankment.

As reptiles have been confirmed as present an appropriate strategy to protect reptiles both prior to, during and post development will be required. This should include and appropriate methodology for the translocation of reptiles to areas outside the construction zone, receptor

area selection, location of reptile exclusion fencing and where required habitat manipulation and enhancement measures.

5.4 Amphibians

No ponds are located within the site boundary therefore the site has no potential for use by breeding amphibian species. The hedgerow banks, and railway embankment located immediately south do afford some potential for use by amphibians during their terrestrial life stages. Overall, the site is considered to be of limited value to amphibian species.

Records for amphibian species including great crested newt (*Triturus cristatus*) were found relating to locations within 800m of the site. The species is also known to be prevalent across the Rhoose area. However, these known locations are separated from the proposed development site by housing development to the west and main highways through Rhoose to the north and the main Rhoose point access road to the east. As a result, it is considered unlikely that that the development will have a significant impact on the movement of great crested newt around the area or result in disturbance to any breeding habitats.

5.5 Birds

The hedgerows and trees provide habitats for common bird species both as feeding areas for resident, summer migrant and winter migrant species and providing nest sites for breeding. Chaffinch (*Fringilla coelebs*), blackbird (*Turdus merula*), wood pigeon (*Columba palumbus*), great tit (*Parus major*), carrion crow (*Corvus corone*), magpie (*Pica pica*), blue tit (*Cyanistes caeruleus*), robin (*Erithacus rubecula*), long tailed tit (*Aegithalos caudatus*), song thrush (*Turdus philomelos*), wren (*Troglodytes troglodytes*), blackcap (*Sylvia atricapilla*), dunnock (*Prunella modularis*), whitethroat (*Sylvia communis*), house sparrow (*Passer domesticus*), skylark (*Alauda arvensis*), starling (*Sturnus vulgaris*), greenfinch (*Chloris chloris*), goldfinch (*Carduelis carduelis*) were all recorded feeding within the site during the extended phase I survey. The semi-improved grasslands are potentially suitable for use by ground nesting species such as skylark.

The habitats present are unlikely to support breeding populations of any Wildlife and Countryside Act 1981 Schedule 1 bird species although the grasslands would be considered suitable for feeding barn owl.

The data search results confirm that barn owl are known to forage around the general area with records for locations within 1km of the site returned. Lapwing (*Vanellus vanellus*)have been recorded within the site boundary; however these records are confined to two individuals recorded during 2003, and old records for birds recorded some 1km from the site. No suitable nesting habitat for lapwing is present within the site. Red kite have been recorded flying over the site but no suitable breeding habitat for the species is present.

5.6 Invertebrates

The hedgerows and trees all have an intrinsic value to a very wide range of invertebrate species affording potential feeding, and breeding areas. The structural diversity of the habitats along the track also afford excellent habitats for invertebrate species. The semi improved fields and un-improved grassland of the track have the potential to be important for common butterfly and moth species.

No records were found relating directly to the site, however large numbers of invertebrate records were found for locations south of the railway (Rhoose Point) and for locations within 1.5km. A large number of these records were of some age many over twenty years ago.

Based on the habitats present, predominantly arable and poor semi improved grassland, and assuming that the vegetation bordering the public right of way/track is retained post development, it is considered unlikely that future development would have a significant impact in the long term on any invertebrate species.

6 Conclusions

No part of the site is designated for its importance to nature conservation at a national, regional or local level. The Cliffwood-Golden Stairs Site of Special Scientific Interest is located some 1.5km north-east of the site boundary, with a total of ten locally designated SINCs located within a 1.5km radius of the site. The nearest such site is located some 350m south of the southern site boundary (Rhoose Point).

The semi-improved grasslands have been assessed as having a poor degree of floristic diversity with all fields confirmed as representing MG6 (or sub communities) grassland types. The relatively small areas of unimproved grasslands are located along the boundary of the public footpath/track. These areas are slightly more floristically diverse but still represent species poor grassland swards. Overall the grasslands are considered to be of low ecological value with none of the swards reaching SINC qualifying criteria.

Within the large arable field F1 cropping is undertaken up to the hedgerow boundary and no valuable field margins remain. These extensive areas of land managed for arable agriculture have been assessed as being of low ecological value and the least valuable habitats within the site.

The hedgerow system has been identified as being of high ecological value both in a site context and at a local level affording connectivity to the wider countryside and have some potential to support the hazel dormouse and as potential for use as commuting and foraging routes for bats. The hedgerow system appears to be of some age with evidence of historic management and the

remnants of banks visible along some sections. Some of the hedgerows have been identified as species rich, in particular those bordering the public footpath/track. The main field system hedgerows are generally species poor and in poor condition with gaps at the base and very limited ground and field layers. Five of the hedgerows have been assessed in 2022 as "Important" under the 1997 Hedgerow Regulations. (TerrAqua Ecological Services 2022). Further work is required to ascertain the importance of these habitats to dormouse and bat species.

A small number of mature trees are present within or lie adjacent to the site boundary and these have been assessed for their potential use by roosting bats. A total of two trees/group of trees has been assessed as Category 2 (some potential for use by individual bats) using Bat Conservation Trust Guidelines. Survey work undertaken between 2004-2007 has previously identified the use of the site by small numbers of common pipistrelle bats. Further survey work will be required in order to ascertain the current use being made of the site by bats. Such surveys have been commissioned and will be completed during summer 2022.

As previously discussed, previous surveys of the site completed between 2004-2007 did not identify the presence of dormouse within the site. However, due to the presence of suitable habitats and the time elapsed since previous survey work a survey of all hedgerows will be required before assumptions can be made as to the potential impact of future development on dormice. A full survey has been commissioned and will be completed by Autumn 2022.

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The mosaic of habitats within the survey boundary, notably along the track, affords good habitats for reptiles. Reptiles were confirmed as present within the site between 2004-2007 with the species recorded confined to slow worm. (TerrAqua). Due to the removal of grazing the habitats within the site the potential for use by reptiles has increased, therefore further survey work was undertaken in spring 2022 (TerrAqua Ecological Services), in order to identify any areas of the site important to reptile species and to inform the need for a reptile mitigation strategy for the site. The results show that both slow worm and common lizard are present within the site, notably along the old trackway, and along the perimeter of the railway line fence and hedgerow system. A full mitigation strategy detailing how reptiles will be protected both during and after construction will be required prior to any groundworks commencing. This is likely to require the translocation of reptiles to a receptor area within the current site boundary.

A badger survey of the site was commissioned and completed in April 2022 (TerrAqua Ecological Services). The results of the survey show that badger do periodically enter the southern boundary of the site while foraging. This was confirmed by the identification of badger runs and latrines along the boundary with the railway line. No evidence was found to suggest badger have a permanent presence within the site and no sets were found. The survey results would indicate that badger use the adjacent railway line as a commuting area and enter

the site on an occasional basis. Based on the survey results it is considered unlikely that badger will be directly affected by any future development.

The loss of dense scrub and hedgerows, or sections of hedgerow, would lead to the loss of feeding and nesting areas for birds. Nesting birds are protected by law. Any clearance work must be undertaken outside the bird breeding season March-August inclusive or ecological advice sought and areas to be removed checked for nesting birds by an ecologist no earlier than 48 hours before removal works commence. If nesting birds are found, then works must stop and no works on that area of hedgerow/habitat can be undertaken until all chicks have fledged and the nest abandoned

The old track running through the site provides a very diverse semi natural green corridor which should be retained, if possible, along with its features such as hedgerows, post development. The retention intact of the track will provide potential commuting routes through the site for bats, nesting opportunities for birds and a mosaic of habitats suitable for small mammals, and reptiles, known to be present within the mosaic of habitats afforded by the track, and provide foraging areas for invertebrate species including butterflies.

In conclusion further survey work will be required to ascertain the full ecological importance of the site to a number of different species (Bats and Dormice) for which suitable habitats have been identified.

No proposed layout or masterplan for any land use change was available during preparation of this report (April 2022) and therefore the full extent of the impact of any such change cannot be fully assessed at this stage. It is not possible at this stage to ascertain the degree of loss of varying habitats within the site. The results of the recommended species-specific surveys will also be required prior to any such assessment being made.

7 Recommendations

The extended phase I survey/preliminary ecological assessment identified a number of features and habitats present that may support both European and UK protected, rare or uncommon species or habitats and species that require consideration as part of any future planning application. In order that a full understanding of the ecological importance of the site can be fully understood further species-specific survey work will be required.

Dormouse- Suitable habits for dormice are present and extensive within the site and therefore a survey for dormouse will be required. Any such survey work should be undertaken using a nest tube methodology and undertaken between April and November.

Bats-It is recommended that further survey work is undertaken to establish the use being made of the trees within the site by bats. Any trees identified as having a high potential to support

roosting bats should be surveyed using an appropriate methodology i.e., emergence and dawn re-entry surveys. Activity surveys should also be undertaken to identify any potentially important commuting and feeding areas for bats in order to further understand the impacts of habitat loss and the impacts of increased lighting etc. on bat movements.

Birds- The clearance or management of the scrub and woodland has the potential to cause damage or disturbance to nesting birds. It is therefore recommended that all scrub clearance is undertaken outside the bird breeding season normally considered to be between April and July. If clearance within these parameters cannot be avoided, then working areas should be checked by an ecologist a maximum of forty-eight hours before work commences to ensure no nesting birds are present. Should nesting birds or nest with eggs be found then a 20m cordon should be placed around the nest site and works avoided within that area until the chicks have fledged.

The reptile survey has confirmed that reptiles are present within the site. A mitigation strategy should be produced detailing how reptiles will be protected both during and after construction. This should include the methodology for translocation to a safe area, methodology of clearance, reptile fence specification and the selection of a suitable receptor area and associated habitat improvements and enhancements as required.

No proposed site layout or masterplan was available at the time of this preliminary assessment. Any future design should incorporate the requirements of any ecological constraints highlighted during the completed and ongoing survey work. All future landscaping should be undertaken using native species as far as possible. Ecological advice should be sought as to appropriate seed mixes and trees/shrubs suitable for the site.

7.1 Development Considerations

Recommendations for further updating of ecological survey work have been made within this report and are in progress or have been completed. The results of these detailed surveys will assist in highlighting any ecological constraints that may affect the future use of the site. However, the following ecological features of the site have been identified within the report as being of high intrinsic ecological value and should be considered during any future plans for the site:

- The hedgerows and trees have been identified as having a high ecological value at a site and/or local level. It is recommended that any proposed access routes into the site and general site layout take into consideration the value of these features and where possible the route selected to minimise the amount of hedgerow and/or tree removal undertaken.

- The old track running through the site provides a very diverse semi natural green corridor. It is recommended that where possible the track should be retained along with its features such as hedgerows, walls and trees. The retention intact of the track will provide potential commuting routes for bats, nesting opportunities for birds and a mosaic of habitats suitable for small mammals, reptiles and invertebrates including butterflies and provide a wildlife haven on completion of the development.

- Ongoing site layout and design should take into consideration any ecological constraints highlighted during the ongoing survey work, in particular those related to bats and dormice.

Table 2 Survey Requirements Land north of railway line, Rhoose point, VOG Optimal Survey Period and Constraints

Survey Required	Reason	Timing
Bats- An assessment of all standard trees should be undertaken to identify any features suitable for use by bats and identify any such trees with a high potential for use by roosting bats. .	To ensure that any licences and permissions required can be obtained prior to any felling or tree works commence and all legal obligations with regard to bats are met	May-Sept Inclusive (*Commissioned for summer 2022*)
Bats- The hedgerows, grasslands, and woodlands have the potential to be used by commuting and foraging bats. It is recommended that a bat activity survey is undertaken across the site.	This will allow for an understanding as to the importance of individual features and areas of the site with regard to bats and allow for appropriate landscaping, and lighting design to protect any important areas of bat activity.	May-Sept Inclusive *(Commissioned for summer 2022)*
Reptiles- Habitats suitable for a number of different reptile species have been identified within the survey boundary. It is recommended that a survey of the site is undertaken using a recognised methodology in order to establish what use is being made of the site by reptile.	This will allow for an appropriate methodology to be produced where required, to ensure the protection of reptiles prior to, during and after construction.	April-October (weather dependant survey may be limited in August if temperatures are very high) *(Completed in 2022 survey season)*
Reptiles- reptiles have been confirmed as present within the site. requirement for reptile mitigation strategy	This will ensure reptiles are protected by appropriate methodologies both during and after construction	All year
Dormouse- The hedgerows and broadleaf plantation have habitats suitable for use by the hazel dormouse. It is recommended that a survey using a nut search and nest tube methodology is undertaken to establish if dormouse are suing the site	This will allow for a full understanding of the use, if any, being made of the site by dormouse and allow for appropriate NRW licences and consents to be obtained ensuring all legal obligations are met	March-September (inclusive) *(In Progress April 2022 to be completed by October 2022)*
Hedgerows-. It is recommended that a hedgerow survey is undertaken using the Hedgerow regulations 1997 to ascertain the importance of the	To ensure compliance with planning regulations. The Phase I Survey has identified that a number of the mature hedgerows are species rich and contain features such as banks and ditches.	All year but preferably between April and October when trees are in leaf

hedgerow system and inform if and what permissions may be required before any hedgerow or length of hedgerow is removed.	Initial inspection of the hedgerow system would indicate that a number of the hedgerows may be considered “Important” under the 1997 Hedgerow Regulations	*(Completed April 2022)*

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Environmental Statement Volume 1: Main Text Land to the North of the Railway Line, Rhoose, Vale of Glamorgan The National Assembly for Wales Bellway plc Persimmon Homes (Wales) Ltd 2008

APPENDIX I

Extended Phase I Map Showing Habitats Present and Targeted Ecological Features

TerrAqua Ecological Services Ltd

Land off Pentir y De, Rhoose

for Persimmon East Wales

Preliminary Ecological Assessment (PEA)

SCALE : 1 : 1500 @ A2	DATE : 4/22/2022	N
MAP FILENAME : TQ/Pers: Rhoose PEA. v1		

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Legend

- Bare Earth/Footpath
- Semi-improved Grassland
- Tall Herb
- Scrub: Dense continious
- A Arable
- Hedgerow H1 - H10
- Target Note TN1 - TN2
- Site Boundary

Appendix II

Data Search Results (Public) SEWBReC Supplied through Aderyn

Aderyn

LRC Wales' Biodiversity Information & Reporting Database

Customer Report: Cae Mawr Crescent Point, Vale of Glamorgan

LRC Reference: 2022-0000-1

Date: 04-Apr-2022 13:16

Search Results Summary

Postcode: CF62 3AZ Radius (km): 2.0 (Search centre: 306900,169400)

Total Records: 1,000,000 **Total Species:** 1,000,000

Data Group	Count
Birds	1,000,000
Butterfly	1,000,000
Dragonfly	1,000,000
Fish	1,000,000
Flowering Plant	1,000,000
Fungus and Lichen	1,000,000
Grasshopper and Cricket	1,000,000
Invertebrate	1,000,000
Land Mammal	1,000,000
Marine Mammal	1,000,000
Mollusc and Crustacean	1,000,000
Other Species	1,000,000
Reptile and Amphibian	1,000,000
Tree	1,000,000
Vascular Plant	1,000,000

Location

Grid Ref: ST1000 7000
Lat/Long: 51.4000, -3.3000
Radius: 2.0 km

Additional Access Names (Open Data)

Name	Organisation
Cae Mawr Crescent Point	Welsh Government
Cardiff Airport	Welsh Government
Cardiff Airport Extension	Welsh Government
Cardiff Airport Extension Phase 2	Welsh Government
Cardiff Airport Phase 2	Welsh Government

Important Dates

Current Unitary Authority	Vale of Glamorgan
Current Community	Rhoose
Date of Data Download	04-Apr-2022

Important Issues

- Cae Mawr Crescent Point is within or near to the following key landscapes and designations: Glamorgan Heritage Coast (Protected Area).
- Cae Mawr Crescent Point is in or near to the following Ancient Woodland: Cwm Nant Llwyd (Ancient Semi-Natural Woodland).
- Cae Mawr Crescent Point is in or near to the following Local Nature Reserve: Cosmeston Lakes.
- Cae Mawr Crescent Point is in or near to the following Site of Importance for Nature Conservation: Cosmeston Lakes.
- Cae Mawr Crescent Point is in or near to the following Local Nature Reserve: Porthkerry Country Park.

Notes

- Cae Mawr Crescent Point is within or near to the following Local Biodiversity Action Plan priorities: Coastal Saltmarsh, Coastal Sand Dune, Coastal Vegetated Shingle, Lowland Calcareous Grassland, Lowland Dry Acid Grassland, Lowland Fen, Lowland Heathland, Lowland Meadow, Lowland Mixed Deciduous Woodland, Reedbed, Saline Lagoon, Curlew (breeding), Hedgehog, Hornet Spp., Lesser Horseshoe Bat, Marsh Fritillary, Otter, Pipistrelle Bat, Reptiles, Small Pearl-bordered Fritillary, Water Vole, Wych Elm, Yellow Meadow Ant.
- Cae Mawr Crescent Point is within or near to the following Local Biodiversity Action Plan Habitats: Coastal Saltmarsh, Coastal Sand Dune, Coastal Vegetated Shingle, Lowland Calcareous Grassland, Lowland Dry Acid Grassland, Lowland Fen, Lowland Heathland, Lowland Meadow, Lowland Mixed Deciduous Woodland, Reedbed, Saline Lagoon.
- Cae Mawr Crescent Point is within or near to the following Local Biodiversity Action Plan Species: Curlew (breeding), Hedgehog, Hornet Spp., Lesser Horseshoe Bat, Marsh Fritillary, Otter, Pipistrelle Bat, Reptiles, Small Pearl-bordered Fritillary, Water Vole, Wych Elm, Yellow Meadow Ant.
- Cae Mawr Crescent Point is within or near to the following Local Authority Priority Habitats: Ancient Woodland, Coastal Saltmarsh, Coastal Sand Dune, Coastal Vegetated Shingle, Lowland Calcareous Grassland, Lowland Dry Acid Grassland, Lowland Fen, Lowland Heathland, Lowland Meadow, Lowland Mixed Deciduous Woodland, Reedbed, Saline Lagoon, Traditional Orchard.
- Cae Mawr Crescent Point is within or near to the following Local Authority Priority Species: Curlew (breeding), Hedgehog, Hornet Spp., Lesser Horseshoe Bat, Marsh Fritillary, Otter, Pipistrelle Bat, Reptiles, Small Pearl-bordered Fritillary, Water Vole, Wych Elm, Yellow Meadow Ant.
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- Cae Mawr Crescent Point is within or near to the following Local Authority Priority Species: Curlew (breeding), Hedgehog, Hornet Spp., Lesser Horseshoe Bat, Marsh Fritillary, Otter, Pipistrelle Bat, Reptiles, Small Pearl-bordered Fritillary, Water Vole, Wych Elm, Yellow Meadow Ant.

Data Description

- **Aderyn:** Aderyn is the Welsh for a bird(s). Aderyn has all records of bird sightings and breeding bird data from the last ten years for the Wales region.
- **Bats:** Bats has all records of bat sightings and roost data from the last ten years for the Wales region.
- **Species:** Species has other species records from the last ten years, including: Amphibian, Butterfly, Dragonfly, Fish, Fungi, Grasshopper and Cricket, Invertebrate, Land Mammal, Marine Mammal, Mollusc and Crustacean, Reptile and Other Species.

Abbreviations

- Ecos Cymru Ecological Ltd
- ERAP Ltd - Ecological Research Partnership, Bangor
- GGAT - Clwyd-Powys Archaeology, Welshpool (Ymddiriedolaeth Archaeoleg Clwyd-Powys)
- GMEC - Gwynedd & Môn Environmental Centre, Bangor
- GWT - Gwent Wildlife Trust, Monmouth
- NRW - Natural Resources Wales, Bangor
- PCNPA - Pembrokeshire Coast National Park Authority, Pembroke
- RSPB - Royal Society for the Protection of Birds, Sandy
- Trinity - Trinity College Dublin, Ireland
- UoB - Department of Zoology, University of Oxford, Tinsley Building, Oxford
- UoL - School of Biological Sciences, University of Liverpool, Biosciences, Liverpool
- UoM - Department of Zoology, The Manchester Museum, University of Manchester, Oxford Road, Manchester
- UoS - School of Biological Sciences, University of Bristol, Bristol
- WBS - Independent Ecological Services
- WCC - Countryside Council for Wales, Bangor
- WTA - Wildlife Trust of South and West Wales, Pontyclun
- WWT - Wildfowl & Wetlands Trust, Slimbridge

Abbreviations (cont.)

- ACP - Association of Consultant Ecologists, Taunton
- ALGE - Association of Local Government Ecologists, Taunton
- BCAS - Bristol Conservation and Nature Trust
- BCT - Bat Conservation Trust, London
- BTO - British Trust for Ornithology, Thetford
- CIEEM - Chartered Institute of Ecology and Environmental Management, Winchester
- CPM - Chartered Institute of Environmental Management & Assessment, Lincoln
- EcoMeth - Ecological Methods Group, Chartered Institute of Ecology and Environmental Management, Winchester
- FSC - Field Studies Council, Oxford
- IEA - Institute of Ecology and Applied Ecology, Oxford
- IoE - Institute of Environmental Management & Assessment, Lincoln
- LWT - Lincolnshire Wildlife Trust, Lincoln
- PTES - People's Trust for Endangered Species, London
- RHS - Royal Horticultural Society, Wisley
- SCC - Scottish Natural Heritage, Inverness
- SEPA - Scottish Environmental Protection Agency, Stirling
- SOC - Scottish Ornithologists' Club, Edinburgh
- SWT - Scottish Wildlife Trust, Edinburgh
- UoE - Department of Ecology and Evolutionary Biology, University of Edinburgh, Edinburgh
- UoG - Department of Zoology, University of Glasgow, Graham Kerr Building, Glasgow
- UoL - School of Biological Sciences, University of Leeds, Leeds
- UoS - School of Biological Sciences, University of Stirling, Stirling
- UoSA - School of Biological Sciences, University of Aberdeen, Aberdeen
- UoSt - School of Biology, University of St Andrews, St Andrews

Local Biodiversity Action Plan abbreviations

- Anc Wd - Ancient Woodland
- Bat - Bats (all species except Lesser Horseshoe Bat)
- BCN - Bryophyte Conservation
- Bee - Bees
- Bird - Breeding Birds
- Cst Hb - Coastal Heathland
- Cst Mh - Coastal Meadow
- Cst Sd - Coastal Sand Dune
- Cst Sm - Coastal Saltmarsh
- Cst Vg - Coastal Vegetated Shingle
- Dor Bt - Dormouse
- Eel - Eel
- FCN - Fungi Conservation
- Fly - Flies (Diptera)
- GCN - Great Crested Newt
- Hed - Hedgehog
- Hrn Sp - Hornet Spp.
- Lbf - Lowland Bracken Fern
- Lcg - Lowland Calcareous Grassland
- Lcp - Lowland Calcareous Pasture
- Ldh - Lowland Dry Acid Grassland
- Lfn - Lowland Fen
- Lhe - Lowland Heathland
- Lmd - Lowland Meadow
- Lmx - Lowland Mixed Deciduous Woodland
- Lpb - Lowland Peat Bog
- Lrd - Lowland Raised Bog
- Lsl - Lowland Scrub
- Lwd - Lowland Wood Pasture
- Mol - Molluscs
- Otter - Otter
- Pip - Pipistrelle Bat
- Rbd - Reedbed
- Rep - Reptiles
- Rhd - Rhododendron
- Sbl - Saline Lagoon
- Sbp - Small Blue Butterfly
- Spb - Small Pearl-bordered Fritillary
- Tcv - Traditional Orchard
- Wch - Wych Elm
- Wvl - Water Vole
- Ym - Yellow Meadow Ant

LRC Wales Advice Commercial Contacts

Ecos Cymru Ecological Ltd, Unit 2, Bryn Eirlan, Llandegfan, Menai Bridge, Anglesey, LL59 5QG, Contact: Ian Lea

Email: ian@ecoscymru.co.uk

Species Map

Species

Species records from the Aderyn, Bats and Species datasets within a 2.0 km radius of the search centre (306900,169400). Species with a conservation status, non-native/alien species and species on the Welsh Government Section 7 list are highlighted. Species with no Common Name are shown in italics.

Algae

Common Name	Sci Name	Scientific Name	Species Group	Date	Conservation	Status	Site Name	Grid Reference	Distance
Chlorophyta		*Chlorophyta*	Algae	1 Jan 1900			Cardiff Bay	ST1800 7500	1.0 km
Chlorophyta		*Chlorophyta*	Algae	1 Jan 1900			Cardiff Bay	ST1800 7500	1.0 km
Chlorophyta		*Chlorophyta*	Algae	1 Jan 1900			Cardiff Bay	ST1800 7500	1.0 km
Chlorophyta		*Chlorophyta*	Algae	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Chlorophyta		*Chlorophyta*	Algae	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Chlorophyta		*Chlorophyta*	Algae	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km

Birds

Common Name	Sci Name	Scientific Name	Species Group	Date	Conservation	Status	Site Name	Grid Reference	Distance
Greylag Goose		Anser anser	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Mute Swan		Cygnus olor	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Teal		Anas crecca	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Pheasant		Phasianus colchicus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Great Crested Grebe		Podiceps cristatus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Little Egret		Egretta garzetta	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Coot		Fulica atra	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Black-headed Gull		Chroicocephalus ridibundus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Gull		Larus canus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Lesser Black-backed Gull		Larus fuscus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Herring Gull		Larus argentatus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Great Black-backed Gull		Larus marinus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Tern		Sterna hirundo	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Feral Pigeon		Columba livia	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Collared-Dove		Streptopelia decaocto	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Wood-Pigeon		Columba palumbus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Swift		Apus apus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Wigeon		Mareca penelope	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Oystercatcher		Haematopus ostralegus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Ring-billed Gull		Larus delawarensis	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Jay		Garrulus glandarius	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Magpie		Pica pica	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Blackbird		Turdus merula	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Blackcap		Sylvia atricapilla	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Blue Tit		Cyanistes caeruleus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Bullfinch		Pyrrhula pyrrhula	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Carrion Crow		Corvus corone	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Chaffinch		Fringilla coelebs	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Chiffchaff		Phylloscopus collybita	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Collared-Dove		Streptopelia decaocto	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Common Cuckoo		Cuculus canorus	Birds	1 Jan 1900			Cardiff Bay (Inner Harbour)	ST1800 7500	1.0 km
Eurasian Dunlin		Calidris alpina

1	1	Ford, Henry	US	Industrialist			Ford Motor Co	Detroit	Michigan
2	2	Ford, Edsel	US	Industrialist			Ford Motor Co	Detroit	Michigan
3	3	Ford, Henry II	US	Industrialist			Ford Motor Co	Detroit	Michigan
4	4	Ford, William Clay	US	Industrialist			Ford Motor Co	Detroit	Michigan
5	5	Ford, William Clay, Jr.	US	Industrialist			Ford Motor Co	Detroit	Michigan
6	6	Ford, Henry III	US	Industrialist			Ford Motor Co	Detroit	Michigan
7	7	Ford, Alfred	US	Industrialist			Ford Motor Co	Detroit	Michigan
8	8	Ford, Anne Cristiana	US	Industrialist			Ford Motor Co	Detroit	Michigan
9	9	Ford, Anne Cristiana	US	Industrialist			Ford Motor Co	Detroit	Michigan
10	10	Ford, Anne Cristiana	US	Industrialist			Ford Motor Co	Detroit	Michigan

1.0	1.0	Ficus benjamina	Tree	Evergreen	Ficus benjamina var. comosa (Roxb.) Miq.	Ficus benjamina var. comosa (Roxb.) Miq.	Ficus benjamina var. comosa (Roxb.) Miq.	Indonesia	Native

Number	Code	Scientific Name	Common Name	Date	Observers	Notes	Publication	Details
1	1	Tachycineta bicolor	Tree Swallow	1-Jun-2014			Ontario Birds	Checklist
2	2	Pandion haliaetus	Osprey	1-Jun-2014			Ontario Birds	Checklist
3	3	Ardea herodias	Great Blue Heron	1-Jun-2014			Ontario Birds	Checklist
4	4	Cathartes aura	Turkey Vulture	1-Jun-2014			Ontario Birds	Checklist
5	5	Sterna hirundo	Common Tern	1-Jun-2014			Ontario Birds	Checklist
6	6	Larus delawarensis	Ring-billed Gull	1-Jun-2014			Ontario Birds	Checklist
7	7	Larus argentatus	Herring Gull	1-Jun-2014			Ontario Birds	Checklist
8	8	Larus marinus	Great Black-backed Gull	1-Jun-2014			Ontario Birds	Checklist
9	9	Sterna caspia	Caspian Tern	1-Jun-2014			Ontario Birds	Checklist
10	10	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
11	11	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
12	12	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
13	13	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
14	14	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
15	15	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
16	16	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
17	17	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
18	18	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
19	19	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
20	20	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
21	21	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
22	22	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
23	23	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
24	24	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
25	25	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
26	26	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
27	27	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
28	28	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
29	29	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
30	30	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
31	31	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
32	32	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
33	33	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
34	34	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
35	35	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
36	36	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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39	39	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
40	40	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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42	42	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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44	44	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
45	45	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
46	46	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
47	47	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
48	48	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
49	49	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
50	50	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
51	51	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
52	52	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
53	53	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
54	54	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
55	55	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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57	57	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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63	63	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
64	64	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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70	70	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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76	76	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
77	77	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
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79	79	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
80	80	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
81	81	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
82	82	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
83	83	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
84	84	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
85	85	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
86	86	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
87	87	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
88	88	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
89	89	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
90	90	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
91	91	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
92	92	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
93	93	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
94	94	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
95	95	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
96	96	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
97	97	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
98	98	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
99	99	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist
100	100	Chordeiles minor	Common Nighthawk	1-Jun-2014			Ontario Birds	Checklist

Invertebrates (other marine or freshwater)

Number	Code	Scientific Name	Common Name	Date	Observers	Notes	Publication	Details
101	101	Cicindela ancocisconensis	Ancocisco Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
102	102	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
103	103	Cicindela lepida	Lepidus Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
104	104	Cicindela lunulata	Crescent-marked Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
105	105	Cicindela sexguttata	Six-spotted Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
106	106	Cicindela tranquebarica	Oblique-lined Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
107	107	Cicindela vulgaris	Vulgar Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
108	108	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
109	109	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
110	110	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
111	111	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
112	112	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
113	113	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
114	114	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
115	115	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
116	116	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
117	117	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
118	118	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
119	119	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
120	120	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
121	121	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
122	122	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
123	123	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
124	124	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
125	125	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
126	126	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
127	127	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
128	128	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
129	129	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
130	130	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
131	131	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
132	132	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
133	133	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
134	134	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
135	135	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
136	136	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
137	137	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
138	138	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
139	139	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
140	140	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
141	141	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
142	142	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
143	143	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
144	144	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
145	145	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
146	146	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
147	147	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
148	148	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
149	149	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
150	150	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
151	151	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
152	152	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
153	153	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
154	154	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
155	155	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
156	156	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
157	157	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
158	158	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
159	159	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
160	160	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
161	161	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
162	162	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
163	163	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
164	164	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
165	165	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
166	166	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
167	167	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
168	168	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
169	169	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
170	170	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
171	171	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
172	172	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
173	173	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
174	174	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
175	175	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
176	176	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
177	177	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
178	178	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
179	179	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
180	180	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
181	181	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
182	182	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
183	183	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
184	184	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
185	185	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
186	186	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
187	187	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
188	188	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
189	189	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
190	190	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
191	191	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
192	192	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
193	193	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
194	194	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
195	195	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
196	196	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
197	197	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
198	198	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
199	199	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist
200	200	Cicindela sp.	Tiger Beetle	1-Jun-2014			Ontario Odonata	Checklist

Lichens

Number	Code	Scientific Name	Common Name	Date	Observers	Notes	Publication	Details
201	201	Cladonia chlorophaea	Cup Lichen	1-Jun-2014			Ontario Lichens	Checklist
202	202	Cladonia cristatella	British Soldiers	1-Jun-2014			Ontario Lichens	Checklist
203	203	Cladonia fimbriata	Trumpet Lichen	1-Jun-2014		Cup lichen with a long, hollow stem. Cup is fringed with small lobes. Cup is brown and stem is white. Cup is 1-3 cm wide and stem is 2-5 cm long. Found on rotting wood, bare soil, and mossy stumps.	Ontario Lichens	Checklist
204	204	Cladonia macilenta	Lipstick Lichen	1-Jun-2014		Cup lichen with a long, hollow stem. Cup is fringed with small lobes. Cup is red and stem is white. Cup is 1-3 cm wide and stem is 2-5 cm long. Found on rotting wood, bare soil, and mossy stumps.	Ontario Lichens	Checklist
205	205	Cladonia pyxidata	Pixie Cup	1-Jun-2014		Cup lichen with a short, hollow stem. Cup is fringed with small lobes. Cup is white and stem is white. Cup is 1-3 cm wide and stem is 1-2 cm long. Found on rotting wood, bare soil, and mossy stumps.	Ontario Lichens	Checklist
206	206	Cladonia rangiformis	Pixie Pipes	1-Jun-2014		Cup lichen with a long, hollow stem. Cup is fringed with small lobes. Cup is white and stem is white. Cup is 1-3 cm wide and stem is 2-5 cm long. Found on rotting wood, bare soil, and mossy stumps.	Ontario Lichens	Checklist
207	207	Cladonia sp.	Cup Lichen	1-Jun-2014			Ontario Lichens	Checklist

Mammals (marine)

Number	Code	Scientific Name	Common Name	Date	Observers	Notes	Publication	Details
208	208	Delphinapterus leucas	Beluga Whale	1-Jun-2014			Ontario Mammals	Checklist
209	209	Balaenoptera musculus	Blue Whale	1-Jun-2014			Ontario Mammals	Checklist
210	210	Balaenoptera physalus	Fin Whale	1-Jun-2014			Ontario Mammals	Checklist
211	211	Megaptera novaeangliae	Humpback Whale	1-Jun-2014			Ontario Mammals	Checklist

Mammals (terrestrial)

Number	Code	Scientific Name	Common Name	Date	Observers	Notes	Publication	Details
212	212	Sorex cinereus	Cinereus Shrew	1-Jun-2014			Ontario Mammals	Checklist
213	213	Sorex dispar	Long-tailed Shrew	1-Jun-2014			Ontario Mammals	Checklist
214	214	Sorex fumeus	Smoky Shrew	1-Jun-2014			Ontario Mammals	Checklist
215	215	Sorex palustris	Water Shrew	1-Jun-2014			Ontario Mammals	Checklist
216	216	Blarina brevicauda	Northern Short-tailed Shrew	1-Jun-2014			Ontario Mammals	Checklist
217	217	Blarina sp.	Short-tailed Shrew	1-Jun-2014			Ontario Mammals	Checklist
218	218	Cryptotis parva	Mole Shrew	1-Jun-2014			Ontario Mammals	Checklist
219	219	Scalopus aquaticus	Eastern Mole	1-Jun-2014			Ontario Mammals	Checklist
220	220	Condylura cristata	Star-nosed Mole	1-Jun-2014			Ontario Mammals	Checklist
221	221	Myotis lucifugus	Little Brown Bat	1-Jun-2014			Ontario Mammals	Checklist
222	222	Myotis septentrionalis	Northern Bat	1-Jun-2014			Ontario Mammals	Checklist
223	223	Myotis leibii	Eastern Small-footed Bat	1-Jun-2014			Ontario Mammals	Checklist
224	224	Lasionycteris noctivagans	Silver-haired Bat	1-Jun-2014			Ontario Mammals	Checklist
225	225	Pipistrellus subflavus	Eastern Pipistrelle	1-Jun-2014			Ontario Mammals	Checklist
226	226	Eptesicus fuscus	Big Brown Bat	1-Jun-2014			Ontario Mammals	Checklist
227	227	Lasiurus borealis	Eastern Red Bat	1-Jun-2014			Ontario Mammals	Checklist
228	228	Lasiurus cinereus	Hoary Bat	1-Jun-2014			Ontario Mammals	Checklist
229	229	Myotis spp.	Bats	1-Jun-2014			Ontario Mammals	Checklist
230	230	Tamias striatus	Eastern Chipmunk	1-Jun-2014			Ontario Mammals	Checklist
231	231	Marmota monax	Woodchuck	1-Jun-2014			Ontario Mammals	Checklist
232	232	Sciurus carolinensis	Eastern Gray Squirrel	1-Jun-2014			Ontario Mammals	Checklist
233	233	Sciurus niger	Fox Squirrel	1-Jun-2014			Ontario Mammals	Checklist
234	234	Tamiasciurus hudsonicus	Red Squirrel	1-Jun-2014			Ontario Mammals	Checklist
235	235	Glaucomys sabrinus	Northern Flying Squirrel	1-Jun-2014			Ontario Mammals	Checklist
236	236	Glaucomys volans	Southern Flying Squirrel	1-Jun-2014			Ontario Mammals	Checklist
237	237	Castor canadensis	Beaver	1-Jun-2014			Ontario Mammals	Checklist
238	238	Peromyscus maniculatus	Deer Mouse	1-Jun-2014			Ontario Mammals	Checklist
239	239	Peromyscus leucopus	White-footed Mouse	1-Jun-2014			Ontario Mammals	Checklist
240	240	Peromyscus sp.	Mouse	1-Jun-2014			Ontario Mammals	Checklist
241	241	Clethrionomys gapperi	Red-backed Vole	1-Jun-2014			Ontario Mammals	Checklist
242	242	Microtus pennsylvanicus	Meadow Vole	1-Jun-2014			Ontario Mammals	Checklist
243	243	Microtus pinetorum	Woodland Vole	1-Jun-2014			Ontario Mammals	Checklist
244	244	Ondatra zibethicus	Muskrat	1-Jun-2014			Ontario Mammals	Checklist
245	245	Zapus hudsonius	Meadow Jumping Mouse	1-Jun-2014			Ontario Mammals	Checklist
246	246	Zapus sp.	Jumping Mouse	1-Jun-2014			Ontario Mammals	Checklist
247	247	Erethizon dorsatum	North American Porcupine	1-Jun-2014			Ontario Mammals	Checklist
248	248	Canis latrans	Coyote	1-Jun-2014			Ontario Mammals	Checklist
249	249	Canis lupus	Gray Wolf	1-Jun-2014			Ontario Mammals	Checklist
250	250	Vulpes vulpes	Red Fox	1-Jun-2014			Ontario Mammals	Checklist
251	251	Urocyon cinereoargenteus	Gray Fox	1-Jun-2014			Ontario Mammals	Checklist
252	252	Ursus americanus	Black Bear	1-Jun-2014			Ontario Mammals	Checklist
253	253	Procyon lotor	Raccoon	1-Jun-2014			Ontario Mammals	Checklist
254	254	Mustela erminea	Ermine	1-Jun-2014			Ontario Mammals	Checklist
255	255	Mustela frenata	Long-tailed Weasel	1-Jun-2014			Ontario Mammals	Checklist
256	256	Mustela nivalis	Least Weasel	1-Jun-2014			Ontario Mammals	Checklist
257	257	Mustela vison	Mink	1-Jun-2014			Ontario Mammals	Checklist
258	258	Lontra canadensis	Northern River Otter	1-Jun-2014			Ontario Mammals	Checklist
259	259	Mephitis mephitis	Striped Skunk	1-Jun-2014			Ontario Mammals	Checklist
260	260	Spilogale putorius	Eastern Spotted Skunk	1-Jun-2014			Ontario Mammals	Checklist
261	261	Felis silvestris catus	Domestic Cat	1-Jun-2014			Ontario Mammals	Checklist
262	262	Lynx rufus	Bobcat	1-Jun-2014			Ontario Mammals	Checklist
263	263	Odocoileus virginianus	White-tailed Deer	1-Jun-2014			Ontario Mammals	Checklist
264	264	Alces alces	Moose	1-Jun-2014			Ontario Mammals	Checklist
265	265	Rangifer tarandus	Caribou	1-Jun-2014			Ontario Mammals	Checklist

Reptiles and Amphibians

Number	Code	Scientific Name	Common Name	Date	Observers	Notes	Publication	Details
266	266	Chelydra serpentina	Common Snapping Turtle	1-Jun-2014			Ontario Herps	Checklist
267	267	Chrysemys picta	Painted Turtle	1-Jun-2014			Ontario Herps	Checklist
268	268	Emydoidea blandingii	Blanding's Turtle	1-Jun-2014			Ontario Herps	Checklist
269	269	Glyptemys insculpta	Wood Turtle	1-Jun-2014			Ontario Herps	Checklist
270	270	Graptemys geographica	Common Map Turtle	1-Jun-2014			Ontario Herps	Checklist
271	271	Pseudemys rubriventris	Northern Red-bellied Turtle	1-Jun-2014			Ontario Herps	Checklist
272	272	Sternotherus odoratus	Stinkpot	1-Jun-2014			Ontario Herps	Checklist
273	273	Apalone spinifera	Spiny Softshell	1-Jun-2014			Ontario Herps	Checklist
274	274	Apalone mutica	Smooth Softshell	1-Jun-2014			Ontario Herps	Checklist
275	275	Apalone sp.	Softshell	1-Jun-2014			Ontario Herps	Checklist
276	276	Chelydra sp.	Snapping Turtle	1-Jun-2014			Ontario Herps	Checklist
277	277	Chrysemys sp.	Painted Turtle	1-Jun-2014			Ontario Herps	Checklist
278	278	Emydoidea sp.	Blanding's Turtle	1-

1/1/2020	1/31/2020	1/1/2020	1/31/2020	Medicaid Fee-for-Service	1/1/2020	1/31/2020	Vaccine Administration Fee - Intranasal	90474	Administration of influenza virus vaccine, live, intranasal, 2 dose(s)	Medicaid

0.00	0.00	Ceratocystis fimbriata	Ascomycota	Sordariomycetes	Ceratocystidales	Ceratocystidaceae

Crystal Sightings	Cayman Dart	Hesperiidae (LEPI)	LC (IUCN 3.1)
Cuban Sphinx	Cuban Sphinx	Sphingidae (LEPI)	RDB (GB) - NE
Dark Kidney Stonefly	Dark Kidney Stonefly	Leuctridae Nemoura (EPH)	LC (IUCN 3.1)
Dartford Warbler	Dartford Warbler	Sylviidae (AVES)	LC (IUCN 3.1)
Dartford Warbler (Subspecies)	Dartford Warbler	Sylviidae (AVES)	LC (IUCN 3.1)
Dartford Warbler (Sylvia undata)	Dartford Warbler	Sylviidae (AVES)	LC (IUCN 3.1)
Dawn Bee Mimic	Dawn Bee Mimic	Sphecidae (HYM)	RDB (GB) - NE