

Tillbridge Solar Project EN010142

Volume 6 Environmental Statement

Appendix 9-4: Baseline Report for Terrestrial invertebrates Document Reference: EN010142/APP/6.2

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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Executive Summary

- ES-1. In July 2022, AECOM (on behalf of Tillbridge Solar Limited) undertook a Preliminary Ecological Appraisal (PEA) for the proposed Tillbridge Solar Project (hereafter the Scheme). This PEA identified that some areas of habitat within the developable areas of the Order limits of the Scheme may be of greater value to terrestrial invertebrates and that surveys were required to assess the potential value of the habitats present within the Order limits for species and assemblages of terrestrial invertebrates of conservation value.
- ES-2. The PEA for the Scheme is incorporated within the Environmental Statement (ES) for the DCO application.
- ES-3. A walkover survey, focussed on arable margins and grassland habitats within the Principal Site, was undertaken in May 2023, to evaluate the potential of habitats to support species and assemblages of terrestrial invertebrates. Areas that were identified as being of potentially greater importance for species and assemblages of terrestrial invertebrates were then subject to sample surveying, to appraise the broad level of terrestrial invertebrate interest within such areas.
- ES-4. The walkover survey identified ten areas within the Principal Site (less than 5 hectares, amounting to less than 1% of the potential developable areas within the Order limits) that, due to their habitat, were considered to have potentially more value to terrestrial invertebrates.
- ES-5. Sample surveying of these areas, in May 2023, identified 298 terrestrial invertebrate species (not including aggregates of species, species complexes and unresolved species pairs). No species that are afforded full protection under UK or International legislation were recorded during the survey. However, three notable species (Stenolophus teutonus, Mottled Umber Erannis defoliaria and Latticed Heath Chiasmia clathrata) were recorded during the survey.
- ES-6. Based on the largely arable habitats that exist within the Principal Site, the limited availability of habitats of potentially greater value to terrestrial invertebrates within the developable areas of the Principal Site and the small number of terrestrial invertebrates of conservation interest that were recorded (although the Applicant acknowledges that this was derived from a single spring visit only) the value of the Survey Area to terrestrial invertebrates, is of Local value only.
- ES-7. No surveys were undertaken for terrestrial invertebrates within the Cable Route Corridor as the temporary nature of construction within the Cable Route Corridor means that construction activity will not significantly impact upon any terrestrial invertebrates, or their habitats, in these areas.

1. Introduction

1.1 Background

- 1.1.1 This report forms a technical appendix to the Environmental Statement (ES), specifically to accompany **Chapter 9: Ecology and Nature Conservation** of this ES **[EN010142/APP/6.1]**. The report characterises the terrestrial invertebrate baseline conditions within the Order limits of the Tillbridge Solar project, hereafter referred to as the Scheme, reporting on a desk study and a scoping assessment (and targeted sampling) undertaken in the field.
- 1.1.2 Results of aquatic invertebrate surveys are presented separately in **Appendix 9-2** of the ES **[EN010142/APP/6.2]**.

1.2 Site Description

- 1.2.1 The Scheme is located approximately 5 kilometres (km) to the east of Gainsborough, Lincolnshire and approximately 13km to the north of Lincoln. The Scheme comprises two distinct parcels, which are:
 - a. 'the Principal Site', which is the location where ground mounted solar PV panels, electrical sub-stations, and BESS will be installed; and
 - b. 'the Cable Route Corridor', which will comprise the underground electrical infrastructure required to connect the Principal Site to National Grid Cottam Substation.
- 1.2.2 The Principal Site is located within the administrative district of West Lindsey. The Cable Route Corridor tracks south of the Principal Site, to the east of Willingham by Stow before tracking west towards the River Trent and to the south of Gate Burton. The Cable Route Corridor crosses into Nottinghamshire (within the administrative district of Bassetlaw) before connecting to the Cottam Power Station.
- 1.2.3 This report is based on the administrative county of Lincolnshire whilst recognising that key aspects of biodiversity are coordinated and managed within the geography of Greater Lincolnshire, for example the Nature Strategy for the Greater Lincolnshire Nature Partnership.
- 1.2.4 The Order limits covers an area of approximately 1,670 hectares (ha) and is dominated by arable fields (which form a minimum of 80% of the Order limits). There are numerous mature trees and hedges within the Order limits, with woodlands and small wooded copses. It is surrounded by mainly arable and improved grassland livestock fields.
- 1.2.5 The location of the Scheme is presented in Figure 9-4-1, included in Appendix A of this report.

1.3 Aims and Objectives

- 1.3.1 The aim of this report is to set out the terrestrial invertebrate baseline conditions within the Order limits. This was achieved through a combination of desk study data and surveys for terrestrial invertebrates, with the aim to assess the potential value of the habitats present within the Order limits for terrestrial invertebrate species and assemblages of conservation value. The results from this assessment were then used to inform the design of the Scheme, to enable the Scheme to proceed without potential impact to protected or notable terrestrial invertebrates and assemblages.
- 1.3.2 The objectives, therefore, are to:
 - a. review existing ecological data to identify any records of terrestrial invertebrates occurring within the Study Area; and
 - b. identify areas of potentially suitable terrestrial habitat (such as grassland) for terrestrial invertebrates and undertake an assessment to determine whether such areas are of greater importance to notable terrestrial invertebrate species and assemblages.
- 1.3.3 Combined, this is being used to:
 - a. inform the decision as to whether any more detailed and, or, focussed surveys were needed;
 - b. determine the nature conservation value of the Order limits for terrestrial invertebrates; and
 - c. inform the design of the Scheme, with regards to avoidance of areas deemed of greater importance for terrestrial invertebrates.

2. Relevant Legislation, Policy and Guidance

2.1 Wildlife and Countryside Act 1981 (as amended) Schedule 5

2.1.1 Schedule 5 of the Wildlife and Countryside Act (WCA), 1981 (as amended) (Ref 1) lists animals and species that are protected under Section 9, which prohibits the intentional killing, injuring or taking of the species listed in Schedule 5 and also prohibits their possession and the trade in the wild animals listed. The species listed, of which there are 55 terrestrial invertebrate species (Ref 2), are also further protected from disturbance by prohibiting actions that affect places they use for shelter.

2.2 Conservation of Habitats and Species Regulations 2017 (as amended)

- 2.2.1 The Conservation of Habitats and Species Regulations 2017 (as amended) (Ref 3) transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) (Ref 4), into English law, making it an offence to deliberately capture, kill or disturb wild animals listed under Schedule 2 of the Regulations.
- 2.2.2 Three invertebrate species are protected within the UK under these regulations:
 - a. Fisher's Estuarine Moth Gortyna borelii lunata,
 - b. Large Blue Butterfly Phengaris arion; and
 - c. Lesser Whirlpool Ramshorn Snail Anisus vorticulus.
- 2.2.3 For these species, it is illegal to capture, kill, disturb or injure them; damage or destroy their breeding or resting places or obstruct access to their resting or sheltering places (either deliberately or accidentally).

2.3 **Priority Species**

- 2.3.1 The Natural Environment and Rural Communities (NERC) list of Species of Principal Importance (Ref 5) is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act (in this context, the Secretary of State). Under Section 40 every public authority (e.g., a local authority or local planning authority) must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity, including restoring or enhancing a population or a habitat.
- 2.3.2 The UK Biodiversity Action Plan (UK BAP) (Ref 6) was launched in 1994 and established a framework and criteria for identifying species (and habitat types) of conservation concern. From this list, action plans for Priority Species of conservation concern were published and have subsequently been succeeded by the UK Post-2010 Biodiversity Framework (July 2012) (Ref 7), which is relevant in the context of Section 40 of the NERC Act.

These species are identified as those of conservation concern, due to their rarity or a declining population trend.

2.3.3 In the region of 400 invertebrate species are listed as Priority Species under Section 41 (S41) of the NERC Act, 2006 (Ref 5) and the presence of any of these on a development site is therefore of material consideration in the determination of planning decisions.

2.4 Local Biodiversity Action Plan

- 2.4.1 The Scheme is located within the counties of Lincolnshire and Nottinghamshire. Formerly, the Lincolnshire Biodiversity Action Plan (3rd edition) (Lincolnshire BAP) (Ref 8) provided context to inform identification of threatened or uncommon species of local relevance, alongside priorities for conservation and enhancement targeted at a local level in Lincolnshire. However, under the Environment Act 2021 (Ref 9), these are being replaced by Local Nature Recovery Strategies (LNRSs), which are a system of spatial strategies for nature which will support delivery of biodiversity net gain (BNG) and provide more focussed action for nature recovery. Whilst this is still being developed for Lincolnshire and with no specific habitat or species plans currently in place, this report references the Lincolnshire BAP, however, there are no action plans for invertebrate species on the Lincolnshire BAP.
- 2.4.2 The Nottinghamshire Biodiversity Action Plan (Nottinghamshire BAP) (Ref 10) continues to provide context to inform identification of threatened or uncommon species of local relevance and identifies priorities for conservation and enhancement. It is a mechanism for enabling national targets at a local level, however, the Nottinghamshire BAP confers no particular legislative or policy protection to the species identified, although in some cases this is provided through related legislation and local planning policy. The Nottinghamshire BAP (Ref 10) has prepared species action plans for three species of terrestrial invertebrate: Dingy Skipper *Erynnis tages*, Green Hairstreak *Callophrys rubi* and Grizzled Skipper *Pyrgus malvae*.

3. Methods

3.1 Characterising the baseline

- 3.1.1 Within this report, the following terminology is used when referring to the geographic areas within which assessments were made:
 - a. Study Area the area within the Order limits and the area within a 2km radius from the Order limits which were subject to collection of background information e.g., desk study records for terrestrial invertebrates to supplement the findings of the survey work;
 - b. Zone of Influence (ZoI) the area over which terrestrial invertebrates may be affected by the Scheme which, using the criteria below, will not extend beyond 100m from the Order limits (see Section 3.1.2). The results of the desk study and review of likely impacts of the Scheme were then used to define the scope of field surveys; and
 - c. Survey Area this is the area within which survey work was undertaken (the Principal Site, as explained in 3.3.2).
- 3.1.2 The Zol is based on:
 - a. the nature of the project (a solar farm scheme), project activities, and the potential for effects at all development stages (construction, operation and decommissioning);
 - b. the nature of the land use (minimum 80% arable) and habitats in the vicinity (majority being arable), their connectivity (e.g. through hedgerows, grassland margins), and how they may be used by terrestrial invertebrates;
 - c. the assemblage of terrestrial invertebrate species which may be in the area based on the location of the Order limits and desk study data; and
 - d. the different habitat preferences of different terrestrial invertebrate species that could be affected, and whether these were within the developable areas of the Scheme.

3.2 Desk Study

- 3.2.1 A desk study was undertaken as part of the Preliminary Ecological Appraisal in July 2022 (Ref 11). Records of protected or notable terrestrial invertebrates (including beetles, flies and butterflies) were obtained from the Study Area through Greater Lincolnshire Nature Partnership (GLNP) and Nottinghamshire Biological and Geological Records Centre (NBGRC).
- 3.2.2 Only records up to ten years old were considered within the assessment, as any records older than ten years are unlikely to still be representative of terrestrial invertebrate presence in the local area.
- 3.2.3 Aerial imagery and the Phase 1 Habitat map were used to inform deskbased preparation for scoping 'routes' around each of the accessible land parcels within the Order limits.

3.3 Field Survey

- 3.3.1 A walk-over of the Survey Area was undertaken by an independent consultant entomologist with over 25 years' experience, to evaluate the habitats that were present and to identify potential habitats likely to support notable terrestrial invertebrates, or assemblages of invertebrates. This survey was carried out on 17th and 18th May 2023.
- 3.3.2 The Survey Area included the Principal Site only and excluded the Cable Route Corridor, acknowledging that any habitat with potential to support notable terrestrial invertebrate species (or assemblages) that may be permanently impacted upon (i.e., lost) by the Scheme, is within the Principal Site.
- 3.3.3 Therefore, the walkover survey focussed on arable margins and grassland habitats within the Principal Site as the majority of boundary features, such as isolated trees, hedgerows, copses and plantation blocks will be retained and not impacted by the Scheme.
- 3.3.4 A route was devised which allowed a sufficiently close approach to all parts of the Principal Site to assess the likely relative importance of each area for invertebrate diversity. Whilst this involved walking over the majority of the Principal Site, it did not necessitate walking over all habitats, as some areas could be assessed from a greater distance (including with binoculars). This particularly applied to large areas of arable crops and the more common boundary features, such as species-poor, defunct hedgerows.
- 3.3.5 During the walkover survey, any visually obvious and readily identified invertebrate species were noted at the time, but no active specimen capture (e.g., with a net) was undertaken.
- 3.3.6 All features and species of interest were recorded using a geo-referenced dictaphone application. Photos were also taken, as deemed relevant, throughout the survey.
- 3.3.7 Areas that were identified as being of potentially greater importance for species and assemblages of terrestrial invertebrates were then subject to targeted sampling on 17th and 18th May 2023, to appraise the broad level of terrestrial invertebrate interest within such areas.
- 3.3.8 Each of the areas sampled (see Table 1 and Figure 9-4-1 in Appendix A) were actively searched for a 60-minute period, through a combination of:
 - a. suction-sampling, which detects a range of ground-dwelling invertebrates;
 - b. sweep-netting, which detects invertebrates on taller grasses and herbs;
 - a. beating, which detects invertebrates in shrubs and trees; and
 - b. aerial-netting, which detects flying invertebrates.
- 3.3.9 Similar effort was given to each of these approaches, although this varied slightly depending on the habitats present in each area.
- 3.3.10 Most specimens collected on each survey were transferred directly to alcohol, although a few were tubed separately where this would aid

subsequent identification, and some species were simply identified directly in the field where possible.

3.4 Assessment Criteria

- 3.4.1 Since 2010, International Union for the Conservation of Nature (IUCN) reviews have been produced for many invertebrate groups and the recent IUCN review (Ref 12) assesses the restricted distribution categories, standardised to 'Nationally Rare' (NR) and 'Nationally Scarce' (NS) without further subdivision. The Great Britain (GB) system of assessing rarity based solely on distribution is used alongside IUCN criteria which (Ref 12), although also using measures of geographical extent, are primarily concerned with assessing National and International Threat in terms of decline of species populations.
- 3.4.2 In this report, for the taxa found within the Study Area, the IUCN criteria (Ref 12) has been used. Otherwise, where no such IUCN reviews yet exist for the species recorded, they are referred to, in this Appendix only, to the older categorisations of Nationally Scarce (NS) 'Notable Nb', 'Notable Na' and 'Notable' and for Red Data Book (RDB) species, 'RDB' categories.

3.5 Biodiversity Importance

- 3.5.1 An essential prerequisite step to allow an ecological impact assessment of the Scheme was an evaluation of the relative biodiversity importance of the Order limits for terrestrial invertebrates. This is necessary to set the terms of reference for the subsequent ecological impact assessment.
- 3.5.2 The method of evaluation that was utilised has been developed with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines (Ref 13). This gives guidance on scoping and carrying out environmental assessments and places appraisal in the context of relevant policies and at a geographical scale at which feature matters (i.e. international, national, regional, county, district, local or site). Data received through desk study and field-based surveys were used to identify the importance of the habitats within the Order limits for terrestrial invertebrates and, using professional judgement, the likelihood of those habitats supporting notable terrestrial invertebrate species and assemblages. Any relevant published national and local guidance and criteria was also referred to, where available, to inform the assessment of biodiversity importance and to assist consistency in evaluation.

3.6 Assumptions and Limitations

Desk Study

3.6.1 The aim of a desk study is to help characterise the baseline context of the Scheme and provide valuable background information that would not be captured by site surveys alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for terrestrial invertebrates (as is the case here) does not necessarily mean that

these do not occur in the study area. Likewise, the presence of records for species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Scheme.

Field Survey

- 3.6.2 The level of assessment and survey effort was determined based on the findings of the walkover survey and with consideration to the Scheme design. Whilst it is acknowledged that the approach, reported in this document, will have only detected a subset of the total range of invertebrate interest in selected areas of perceived greater importance for terrestrial invertebrates, the scoping assessment and targeted sampling, undertaken in May 2023, is adequate for determining the invertebrate interest within the Order limits, in consideration of the Scheme's retention and avoidance of existing boundary features.
- 3.6.3 No surveys were undertaken for terrestrial invertebrates within the Cable Route Corridor as the temporary nature of the construction of the cable corridor will not significantly impact upon any terrestrial invertebrates, or their habitats, in these areas.

4. Results

4.1 Desk Study

4.1.1 No records of terrestrial invertebrates were returned from GLNP and NBGRC.

4.2 Field Survey

Walkover Survey

- 4.2.1 The walkover survey identified ten areas within the Principal Site that, due to the habitat, were considered to have potentially greater value to terrestrial invertebrates and at the time of survey were, or had the potential to be, within the developable areas of the Scheme.
- 4.2.2 A summary of these ten areas is presented in Table 1 and their locations presented in Figure 9-4-1 (Appendix A).

Table	1.	Summary	description	of	areas	of	potential	greater	value	to
terres	tria	l invertebr	ates.							

Survey Area (see Figure 9- 4-1)	Area (hectares)	Overview of habitat present
Area A	0.9	Tussocky grassland, apparently longer continuity of habitat than elsewhere. Fringed by hedge of mostly Hawthorn <i>Crataegus monogyna</i> as well as larger Oak <i>Quercus robur</i> and Ash <i>Fraxinus excelsior</i> trees.
Area B	0.3	Grass margin between Peter's Wood and field of winter wheat. Water-filled ditch with <i>Typha</i> at northern end.
Area C	0.2	Broad roadside verge backed by mature hedges.
Area D	0.2	Grass margin between a clover ley and a narrow strip of trees / woodland (with connectivity to larger Harpswell and Peter's Woods nearby).
Area E	0.2	Grass margin between relatively standard Hawthorn hedge and spring cereal, ground flora slightly more diverse than elsewhere.
Area F	0.3	Damp grass margin between Larch plantation and recently ploughed field, backed by water-filled vegetated ditch.
Area G	0.5	Grass margin between spring cereal and field margin comprising of overgrown ditch and scattered Hawthorns.

Survey Area (see Figure 9- 4-1)	Area (hectares)	Overview of habitat present
Area H	0.8	Grass and ruderal margin between mature hedge and winter wheat, with nearby pond surrounded by extensive Brambles <i>Rubus fruticosis</i> ; including sallows in hedge line.
Area I	0.4	Grass margin between tall Hawthorn hedge and fallow field, with several taller trees.
Area J	0.7	Grass margin between Blythe Close and winter wheat, with associated broad ditch and some Blackthorn <i>Prunus spinosa</i> .

Sample Surveying

4.2.3 The targeted sampling, undertaken on the 17th and 18th May 2023, identified 298 terrestrial invertebrate species within the ten areas visited (see Appendix A). Additionally, two butterfly species - Small Copper Lycaena phlaeas and Large White Pieris brassicae were recorded whilst moving between areas. The invertebrate species recorded, included: 34 species of Arachnidae (Spiders and their allies), 131 Coleoptera (Beetles), four Crustaceans, 34 Diptera (Flies), 38 Hemiptera (True Bugs), 29 Hymenoptera (Bees, Wasps, Sawflies and Ants), 16 Lepidoptera (Butterflies and Moths), two Mollusca (Slugs and Snails), two Myriapods, two Odonata (Dragonflies), three Orthoptera (Grasshoppers and Crickets) and three 'other insects' (see Appendix B for full results).

5. Evaluation

- 5.1.1 The scoping survey for terrestrial invertebrates identified ten areas that, due to the habitat, were considered to be of potentially greater value to terrestrial invertebrates than the remainder of the Principal Site. These areas amounted to <5 ha, less than 1%, of habitat of potentially greater value to terrestrial invertebrates within the potential developable areas of the Principal Site.
- 5.1.2 These areas were subject to targeted sampling between the 17th and 18th May 2023 to appraise their invertebrate interest and 298 invertebrate species were recorded during this survey.
- 5.1.3 No species that are afforded full protection under UK or International legislation were recorded during the survey. However, three notable species (the ground beetle *Stenolophus teutonus*, and moths, Mottled Umber *Erannis defoliaria* and Latticed Heath *Chiasmia clathrata*) were recorded during the survey.
- 5.1.4 The ground beetle, *Stenolophus teutonus* is Nationally Scarce (including 'Notable A', 'Notable B', 'Notable', 'NS') and was recorded within Survey Area I (see Figure 9-4-1).
- 5.1.5 Mottled Umber is a species listed as 'Vulnerable' IUCN status and this species of moth was recorded in Survey Area E (see Figure 9-4-1).
- 5.1.6 Latticed Heath, another species of moth, is listed as 'Near Threatened' IUCN status and this species was recorded in Survey Area D (see Figure 9-4-1).

6. Conclusion

- 6.1.1 The primary purpose of this report is to provide an assessment of the habitats within the Order limits and the likely presence or absence of that habitat supporting protected or notable species and assemblages of terrestrial invertebrates, to determine the biodiversity importance within the Zol and inform **Chapter 9: Ecology and Nature Conservation** of the ES **[EN010142/APP/6.1].**
- 6.1.2 The walkover survey, undertaken in May 2023, identified ten areas of potentially higher value habitat to terrestrial invertebrates, amounting to less than 1% of the potential developable areas of the Principal Site.
- 6.1.3 Three species of conservation interest were recorded in Survey Areas A, E and I (see Figure 9-4-1). Survey Areas E and I are grass margins and Survey Area A is tussocky grassland.
- 6.1.4 Based on the largely arable habitats within the Principal Site, limited availability of habitats of potentially greater value to terrestrial invertebrates within the developable areas of the Principal Site and the small number of terrestrial invertebrates of conservation interest that were recorded (although acknowledging that this was derived from a single spring visit only) the value of the Survey Area to terrestrial invertebrates, is of Local value only. In particular, fauna relating to bark and sapwood decay is of most significance, emphasising the likely importance of retaining and buffering older trees and/or woodland blocks in the area of interest.
- 6.1.5 Furthermore, the conversion of intensively managed arable farmland (which makes up more than 80% of the Order limits) to grassland and the retention and avoidance of the majority of other habitats (as above) is likely to have an overall beneficial impact on terrestrial invertebrates.

7. References

- Ref 1 His Majesty's Stationary Office (HMSO) (1981). Wildlife & Countryside Act 1981 (as amended). HMSO, London. Available at: https://www.legislation.gov.uk/ukpga/1981/69.
- Ref 2 Buglife (2014). Policy and Legislation Summary. Available at: https://cdn.buglife.org.uk/2019/07/Policy-and-legislation-summary-final-2014_0.pdf
- Ref 3 HMSO (2017). The Conservation of Habitats and Species Regulations 2017 (as amended). HMSO, London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents/made.
- Ref 4 European Council (EC) (1992). Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. EC, Brussels. Available at:
- Ref 5 HMSO (2006). Natural Environment and Rural Communities Act 2006. HMSO, London. Available at: https://www.legislation.gov.uk/ukpga/2006/16/contents.
- Ref 6 HMSO (1994). Biodiversity The UK Action Plan. HMSO, London. Available at: https://data.jncc.gov.uk/data/cb0ef1c9-2325-4d17-9f87-a5c84fe400bd/UKBAP-BiodiversityActionPlan-1994.pdf.
- Ref 7 Joint Nature Conservation Committee (JNCC) and Department for Environment, Food and Rural Affairs (DEFRA) (2012). UK Post-2010 Biodiversity Framework. Available at: http://incc.defra.gov.uk/pdf/UK Post2010 Bio-Fwork.pdf.
- Ref 8 Lincolnshire Biodiversity Partnership (2011). Lincolnshire Biodiversity Action Plan 2011-2020 (3rd edition).
- Ref 9 HMSO (2021). The Environment Act 2021. Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted
- Ref 10 Nottinghamshire Biodiversity Action Group (2008). Local Biodiversity Action Plan. Available at:
- Ref 11 AECOM (2022). Tillbridge Solar Farm Preliminary Ecological Appraisal.
- Ref 12 IUCN (2020). The IUCN Red List of Threatened Species.
- Ref 13 CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester
- Ref 14 Colin Plant Associates (2016). Rail Central Site, Northampton: Terrestrial Invertebrate Survey Report.

Appendix A Figures

Figure 9-4-1: Locations of Habitat Most Suitable for Terrestrial Invertebrates



Appendix B Terrestrial Invertebrate Species Recorded in May 2023

Species Name			Sı	ırvey	Area	(see	Table	1)			Conservation Status
	Α	В	С	D	Е	F	G	н	Т	J	
Arachnida (Spiders and allies)											
Agyneta saxatilis	-	-	Y	-	-	-	-	Y	-	Y	-
Alopecosa pulverulenta	-	-	Y	-	-	-	-	-	-	Y	-
Anelosimus vittatus	Y	Y	-	-	Υ	Y	Y	Y	-	-	-
Araneus triguttatus	-	-	Y	-	-	-	-	-		-	-
Araniella opisthographa	Y	-	-	-	Υ	-	Y	-	Υ	Y	-
Bathyphantes gracilis	Y	-	-	-	-	-	-	Y	-	-	-
Clubiona brevipes	-	-	-	-	-	-	Y	-	-	-	-
Clubiona reclusa	-	-	Y	-	-	-	-	-	-	-	-
Dictyna arundinacea	Y	-	Y	-	-	-	-	-	-	-	-
Dictyna uncinata	-	-	-	Y	-	-	-	-	-	-	-
Diplostyla concolor	-	-	-	Y	-	-	-	-		Y	-
Erigone atra	-	-	-	-	-	-	Y	-	-	-	-
Euophrys frontalis	Y	-	-	-	-	-	Y	-	-	-	-
Gnathonarium dentatum	-	-	Y	-	-	-	-	-	-	-	-
Hypsosinga pygmaea	-	-	-	-	-	-	-	-	-	-	-
Larinioides cornutus	-	-	Y	-	-	-	Y	Υ	-	-	-
Lathys humilis	-	-	-	-	Y	-	-	-	-	-	-
Mangora acalypha	-	-	Y	Y	Y	-	Y	Y	-	Y	-
Metellina mengei	-	Y	-	-	-	Y	-	-	-	Y	-
Microlinyphia pusilla	Y	Y	-	-	-	-	-	-	-	-	-

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Species Name			Sι	irvey	Conservation Status						
	Α	В	С	D	Е	F	G	Н	I	J	
Oedothorax apicatus	-	-	-	-	-	-	-	-	-	-	-
Oedothorax fuscus	-	-	-	-	-	-	-	-	-	-	-
Ozyptila praticola	-	-	-	-	-	-	-	-	Y	-	-
Pachygnatha degeeri	-	Y	-	Y	Y	-	-	-	Y	Y	-
Pardosa palustris	-	-	-	Y	-	-	-			-	-
Pardosa prativaga	-	-	Y	Y	-	-	-	Y	Y	-	-
Pardosa pullata	-	Y	Y	-	Y	-	-	-	-	Y	-
Pisaura mirabilis	-	-	Y	Y	-	-	-	-	-	Y	-
Pocadicnemis juncea	Y	-	Y	Y	-	-	-	-	-	-	-
Savignia frontata	-	-	-	-	-	-	-	Y	-	-	-
Tenuiphantes tenuis	-	-	Y	-	Y	-	Y	Y	Y	-	-
Tetragnatha montana	-	-	-	-	-	-	-	-	-	Y	-
Tibellus oblongus	-	-	Y	Y	-	Υ	-	-	-	-	-
Xysticus cristatus	-	-	-	Y	-	-	Υ	-	-	Y	-
Coleoptera (Beetles)											
Anthicus antherinus	-	-	-	-	-	-	-	Y	-	-	-
Apion frumentarium	-	Y	Y	-	-	-	-	-	-	-	-
Ceratapion gibbirostre	-	-	-	-	-	-	-	-	-	Y	-
Ceratapion onopordi	-	-	-	-	-	-	-	-	-	Y	-
Omonadus formicarius	-	-	-	-	-	-	-	-	-	Y	-
Eutrichapion ervi	-	Y	Y	-	-	Y	-	-	-	-	-
Eutrichapion vorax	-	Y	-	-	-	-	-	-	-	-	-
Holotrichapion pisi	-	-	-	Y	-	-	-	-	-	-	-
Ischnopterapion loti	-	Y	Y	-	-	Y	-	-	-	-	-

Species Name			Su	rvey	Area	(see	Table	1)			Conservation Status
	Α	В	С	D	Е	F	G	Н	I.	J	
Malvapion malvae	-	-	-	-	-	-	Y	-	-	-	-
Perapion violaceum	-	-	-	-	-	-	-	Y	-	-	-
Protapion apricans	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
Protapion assimile	-	Y	-	-	-	-	-	-	-	Y	-
Protapion fulvipes	-	Y	-	Y	Y	Y	-	-	-	-	-
Protapion nigritarse	-	Y	-	-	Y	Y	-	-	-	-	-
Protapion trifolii	Y	-	Y	Y	-	Y	Y	-	-	-	-
Byrrhus pilula	-	-	-	-	-	-	-	-	-	Y	-
Byturus ochraceus	-	-	-	Y	Y	-	-	Y	-	Y	-
Cantharis figurata	-	Y	-	-	-	-	-	-	-	-	-
Cantharis nigricans	-	Y	-	-	-	-	-	-	-	-	-
Cantharis rustica	-	-	-	-	-	-	-	-	-	Y	-
Malthodes marginatus	-	Y	-	-	-	-	-	-	-	-	-
Rhagonycha nigriventris	-	-	-	-	Y	-	-	-	-	-	-
Rhagonycha testacea	-	Y	-	-	-	-	-	-	-	-	-
Acupalpus dubius	Y	-	-	-	-	-	-	Y	-	-	-
Amara lunicollis	Y	-	-	-	-	-	-	-	-	-	-
Amara plebeja	-	-	-	-	-	-	-	-	Y	-	-
Anchomenus dorsalis	-	-	-	-	-	-	-	-	Y	-	-
Bembidion guttula	Y	-	-	-	-	-	-	Y	-	Y	-
Bembidion lampros	-	Y	-	-	-	-	-	-	Y	-	-
Bembidion quadrimaculatum	-	-	-	-	-	-	-	-	-	Y	-
Demetrias atricapillus	-	-	-	Y	Y	-	-	-	-	Y	-
Harpalus affinis	-	-	-	-	-	-	-	-	-	Y	-

Tillbridge Solar Project Environmental Statement Appendix 9-4: Baseline Report for Terrestrial Invertebrates

Species Name			Sı	ırvey	Area	(see	Table	1)			Conservation Status
	Α	В	С	D	Е	F	G	н	I	J	
Microlestes minutulus	-	-	-	-	-	-	-	-	Y	-	-
Notiophilus biguttatus	-	-	-	-	-	-	-	Y	Y	Y	-
Oxypselaphus obscurus	-	-	-	-	-	Y	-	-	-	-	-
Paradromius linearis	-	-	-	-	-	Y	-	-	-	-	-
Poecilus versicolor	-	-	-	-	-	-	-	-	-	Y	-
Pterostichus vernalis	-	Y	-	-	-	-	-	-	-	Y	-
Stenolophus teutonus	-	-	-	-	-	-	-	-	Y	-	Nationally Scarce
Trechus quadristriatus	-	-	-	-	-	-	-	-	-	Y	-
Anaglyptus mysticus	-	-	-	-	Y	-	-	-	-	-	-
Grammoptera ruficornis	Y	Y	Y	Y	Y	-	-	-	-	Y	-
Agelastica alni	-	-	-	Y	-	-	-	Y	Y	-	-
Aphthona euphorbiae	Y	Y	-	-	-	-	Y	-	-	-	-
Bruchidius varius	-	-	-	Y	-	-	Y	Y	-	-	-
Bruchus atomarius	-	-	-	-	Y	-	-	-	Y	-	-
Bruchus loti	-	-	-	-	-	Y	-	-		-	-
Bruchus rufimanus	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
Cassida rubiginosa	-	-	Y	-	-	-	-	-	-	-	-
Chaetocnema concinna	-	-	-	-	-	Y	-	-	-	-	-
Chaetocnema hortensis	-	-	-	-	-	Y	-	-	-	Y	-
Lochmaea caprea	-	-	-	-	-	-	-	-	Y	-	-
Longitarsus dorsalis	-	-	-	-	Y	-	-	-	-	-	-
Longitarsus gracilis	-	-	-	-	-	-	-	-	-	-	-
Longitarsus luridus	-	-	-	-	-	-	-	-	Y	-	-
Oulema duftschmidi	-	-	-	-	Y	-	-	-	-	-	-

Species Name			Sı	irvey	Area	(see ˈ	Table	1)			Conservation Status
	Α	в	С	D	Е	F	G	Н	Т	J	
Oulema obscura	-	-	-	-	-	-	-	Y	-	-	-
Phaedon tumidulus	-	Y	Y	-	Y	-	-	-	Y	Y	-
Phyllotreta nemorum	-	-	-	Y	-	-	-	-	-	-	-
Phyllotreta nigripes	-	-	-	-	Υ	-	-	-	-	-	-
Psylliodes chrysocephala	-	Y	-	-	-	-	-	-	-	-	-
Psylliodes dulcamarae	-	-	-	-	-	-	Y	-	-	-	-
Thanasimus formicarius	-	-	-	-	-	-	-	-	-	Y	-
Adalia bipunctata	-	-	-	-	-	-	Y	-	-		-
Adalia decempunctata	Y	-	-	-	-	-	-	-	-	Υ	-
Coccinella septempunctata	-	-	Y	-	Y	-	Y	Y	-	-	-
Exochomus quadripustulatus	-	-	-	-	-	-	-	Y	-	Y	-
Propylea quattuordecimpunctata	Y	-	Y	-	-	Y	-	-	Y	-	-
Rhyzobius litura	Y	-	-	-	Y	Y	-	Y	-	-	-
Tytthaspis sedecimpunctata	Y	Υ	Y	Y	Y	-	Y	Y	Y	-	-
Anthonomus rubi	Y	-	Y	Y	Y	-	Y	-	-	-	-
Archarius pyrrhoceras	-	-	-	-	-	-	-	-	Y	-	-
Ceutorhynchus pallidactylus	-	-	-	Y	-	-	-	Y	-	-	-
Curculio glandium	-	-	-	-	-	-	-	-	-	Y	-
Exomias pellucidus	-	-	Y	Y	-	-	-	Y	-	-	-
Hypera nigrirostris	-	-	-	-	-	-	Y	-	-	-	-
Leiosoma deflexum	-	-	-	-	-	-	-	-	-	Y	-
Mecinus pascuorum	-	-	Y	-	-	-	-	-	-	-	-
Mogulones asperifoliarum	-	Y	-	-	-	-	-	-	-	-	-
Nedyus quadrimaculatus	-	-	-	-	-	-	-	Y	-	Y	-

Species Name			Su	Conservation Status							
	Α	в	С	D	Е	F	G	н	I	J	
Phyllobius oblongus	Y	-	-	-	-	-	-	-	-	-	-
Phyllobius pomaceus	-	-	-	-	-	-	-	-	-	Y	-
Rhinoncus pericarpius	-	-	-	-	Y	Y	-	-	Y	-	-
Sciaphilus asperatus	-	-	Y	-	-	-	-	-	-	-	-
Sitona lineatus	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
Tychius picirostris	-	-	Y	Y	-	-	-	-	-	-	-
Agriotes acuminatus	-	-	-	Y	-	Y	Y	Y	-	-	-
Agriotes obscurus	-	-	-	-	-	-	-	-	-	Y	-
Agriotes pallidulus	-	Y	Y	-	-	-	-	-	-	Y	-
Agriotes sputator	-	-	-	-	-	-	-	-	-	Y	-
Aplotarsus incanus	-	-	Y	Y	Y	-	-	-	-	-	-
Athous haemorrhoidalis	-	Y	Y	-	-	-	-	Y	-	Y	-
Endomychus coccineus	-	-	-	Y	-	-	-	-	-	-	-
Grypus equiseti	-	Y	-	-	-	-	-	-	-	-	-
Margarinotus purpurascens	-	-	-	-	-	-	-	-	-	Y	-
Cartodere bifasciata	-	-	-	-	Y	-	-	-	-	Y	-
Choleva angustata	-	-	-	-	Y	-	-	-	Y	Y	-
Dasytes aeratus	Y	Y	Y	Y	Y	-	Y	-	Y	-	-
Malachius bipustulatus	-	-	Y	Y	-	Y	-	-	-	-	-
Epuraea aestiva	-	Y	-	Y	-	-	Y	-	Y	-	-
Glischrochilus hortensis	-	-	-	-	-	Y	-	-	Y	-	-
Meligethes aeneus	Y	-	-	Y	Y	-	Y	Y	-	Y	-
Oedemera lurida	-	-	-	-	-	-	-	-	Y	-	-
Oedemera nobilis	-	-	Y	-	-	_	-	-	-	-	-

Species Name			Su	irvey	Area	(see ˈ	Table	1)			Conservation Status
	Α	В	С	D	Е	F	G	Н	I.	J	
Grynobius planus	-	-	-	-	-	-	-	-	-	Y	-
Ptinomorphus imperialis	-	-	-	-	-	Y	-	-	-	-	-
Pyrochroa serraticornis	-	Y	-	Y	-	-	-	-	-	Y	-
Tatianaerhynchites aequatus	-	-	Y	Y	Υ	-	Y	Y	-	-	-
Calomosternus granarius	-	-	-	-	-	-	-	-	Y	-	-
Microcara testacea	-	Y	-	-	-	-	-	-	-	-	-
Anaspis frontalis	-	Y	Y	-	-	Y	-	-	-	-	-
Anaspis maculata	Y	Y	-	Y	-	Y	Y	Y	Y	-	-
Anotylus rugosus	-	-	-	-	Y	-	-	-	-	-	-
Astenus lyonessius	Y	-	-	Y	-	-	Y	-	-	-	-
Drusilla canaliculata	-	-	-	-	-	-	-	Y	-	-	-
Lathrobium fulvipenne	-	-	-	-	Y	-	-	-	-	-	-
Metopsia clypeata	-	-	-	-	-	Y	-	-	-	-	-
Stenus aceris	-	-	-	-	-	Y	-	-	-	-	-
Stenus brunnipes	-	Y	Y	-	-	Υ	-	-	Y	Y	-
Stenus flavipes	Y	-	-	-	-	-	-	-	-	-	-
Stenus formicetorum	Y	-	-	-	-	-	-	-	-	-	-
Stenus fulvicornis	Y	-	Y	-	-	-	-	-	-	-	-
Stenus impressus	-	-	-	-	Y	-	-	-	-	-	-
Stenus nitidiusculus	-	-	-	Y	-	-	-	-	-	-	-
Stenus ossium	Y	-	-	-	-	Y	Y	Y	Y	Y	-
Stenus picipes	-	-	-	-	-	-	-	-	-	Y	-
Tachyporus chrysomelinus	-	Y	-	-	-	-	-	-	-	-	-
Tachyporus dispar	-	Y	-	Y	Y	-	-	Y	-	Y	-

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Species Name			Sı	ırvey	Conservation Status						
	Α	В	С	D	Е	F	G	Н	Т	J	
Tachyporus hypnorum	-	-	-	Y	-	-	Y	-	Y	Y	-
Tachyporus nitidulus	-	-	Y	-	-	-	-	-	-	-	-
Crustaceans (Woodlouse)											
Armadillidium vulgare	-	-	Y	Y	Y	-	Y	Y	Y	-	-
Oniscus asellus	-	-	Y	-	-	-	-	-	-	-	-
Philoscia muscorum	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
Porcellio scaber	Y	Y	-	-	Y	Y	-	Y	-	Y	-
Diptera (Flies)											
Aedes cinereus	-	Y	Y	Y	-	-	-	-	-	-	-
Bicellaria vana	-	Y	-	-	-	-	-	-	-	-	-
Bombylius major	-	-	Y	-	-	-	-	-	-	-	-
Chlorops pumilionis	Y	Y	-	-	-	-	Y	-	Y	-	-
Dilophus femoratus	Y	Y	-	Y	-	-	Y	-	-	-	-
Dolichopus campestris	-	-	-	-	-	Y	-	-	-	-	-
Elachiptera brevipennis	Y	-	-	-	-	-	-	-	-	-	-
Empis caudatula	-	-	Y	-	-	-	-	Y	-	-	-
Empis nigripes	Y	Y	-	-	-	Y	-	-	-	-	-
Empis nuntia	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	-
Empis praevia	-	-	-	-	-	-	-	-	Y	Y	-
Empis scutellata	Y	-	Y	Y	Y	-	Υ	Y	-	-	-
Empis tessellata	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
Epistrophe eligans	-	-	-	-	Y	-	-	-	-	-	-
Euphylidorea dispar	Y	Y	-	-	-	-	-	-	-	-	-
Limnia unguicorniS	-	-	Y	-	-	-	-	-	-	-	-

Species Name			Sı	irvey	Conservation Status						
	Α	В	С	D	Е	F	G	Н	Т	J	
Lonchoptera bifurcata	-	-	-	-	-	Y	-	-	-	-	-
Nephrotoma appendiculata	-	Y	-	Y	Y	Y	Y	Y	Y	-	-
Ormosia nodulosa	-	-	-	-	-	Y	-	-	-	-	-
Platycheirus albimanus	-	-	Y	-	-	-	-	-	-	-	-
Psila merdaria	-	-	-	-	-	Y	-	-	-	-	-
Rhagio scolopaceus	-	-	-	-	-	Y	-	-	-	-	-
Scathophaga stercoraria	Y	Y	Y	Y	Y	-	Y	-	Y	-	-
Sepsis orthocnemis	-	-	-	-	-	-	Y	-	-	-	-
Sphaerophoria scripta	-	-	-	-	-	-	-	-	Y	-	-
Syrphus ribesii	-	-	-	Y	-	-	-	-	-	-	-
Syrphus vitripennis	-	-	-	-	-	-	-	-	Y	-	-
Tephritis formosa	-	-	-	-	-	-	-	Y	-	-	-
Tephritis vespertina	-	-	-	-	-	Y	Y	-	-	-	-
Tipula lunata	-	-	-	-	-	-	-	-	Y	-	-
Tipula maxima	-	-	-	-	-	-	-	-	-	Y	-
Tipula oleracea	-	Y	-	-	-	-	-	-	-	-	-
Tipula vernalis	Y	-	Y	Y	Y	Y	Y	Y	-	-	-
Volucella bombylans	-	Y	Y	-	-	Y	-	-	-	-	-
Hemiptera (True Bugs)											
Acanthodelphax denticauda	Y	-	-	-	-	-	-	-	-	-	-
Aelia acuminata	Y	-	-	-	-	-	Y	-	-	-	-
Anthocoris nemoralis	-	-	-	Y	-	Y	Y	Y	-	-	-
Berytinus minor	-	-	-	-	-	-	-	-	-	Y	-
Capsus ater	-	Y	Y	-	Y	-	-	-	-	Y	-

Species Name			Su	irvey	Conservation Status						
	Α	В	С	D	Е	F	G	Н	Т	J	
Cercopis vulnerata	Y	Y	Y	-	Y	Y	Y	Y	-	-	-
Cixius nervosus	-	-	-	-	Y	-	-	-	-	-	-
Coreus marginatus	-	-	Y	-	-	-	-	-	-	-	-
Criomorphus albomarginatus	-	-	Y	-	-	-	-	-	-	Y	-
Cymus melanocephalus	Y	-	-	-	Y	Y	-	-	-	-	-
Dolycoris baccarum	-	-	-	Y	-	Y	Y	-	-	-	-
Drymus sylvaticus	-	-	-	-	-	-	-	Y	-	-	-
Eremocoris podagricus	-	-	-	-	Y	-	-	-	-	-	-
Eurybregma nigrolineata	Y	-	-	-	-	-	-	-	-	-	-
Euscelis incisus	-	-	-	-	Y	-	Y	-	Y	-	-
Eysarcoris venustissimus	-	Y	-	-	-	-	-	-	-	Y	-
Harpocera thoracica	Y	Y	Y	Y	-	-	-	-	-	-	-
Heterogaster urticae	-	-	-	-	-	-	-	Y	-	-	-
lschnodemus sabuleti	-	-	-	-	-	-	-	Y	-	-	-
Javesella dubia	-	-	-	-	-	Y	-	-	Y	-	-
Legnotus limbosus	-	-	-	Y	-	-	-	-	-	-	-
Liocoris tripustulatus	-	-	-	-	-	-	-	Y	-	Y	-
Lygus pratensis	-	-	-	Y	-	-	-	-	-	-	-
Miris striatus	-	-	-	-	-	Y	-	-	-	Y	-
Mocydia crocea	-	-	-	Y	-	-	-	Y	-	-	-
Palomena prasina	Y	-	-	Y	-	Y	-	-	-	-	-
Physatocheila dumetorum	-	-	-	-	-	-	-	Y	Y	-	<u> </u>
Pinalitus cervinus	-	-	-	-	-	-	-	-	-	Y	-
Podops inuncta	Y	-	Y	-	Y	Y	-	-	-	-	-

Species Name			Sı	irvey	Conservation Status						
	Α	в	С	D	Е	F	G	Н	I	J	
Rhopalus subrufus	-	-	Y	-		Y	-	-	-	-	-
Scolopostethus affinis	-	-	-	Y	-	-	-	Y	-	-	-
Scolopostethus thomsoni	-	-	Y	-	-	-	-	Y	-	-	-
Stenodema calcarata	-	-	-	Y	-	-	-	-	-	-	-
Stenodema laevigata	-	Y	Y	Y	Y	Y	Y	-	Y	Y	-
Stictopleurus punctatonervosus	-	-	-	Y	-	-	-	-	-	-	-
Tachycixius pilosus	Y	Y	Y	-	-	Y	-	-	-	-	-
Tingis ampliata	-	-	-	-	-	-	-	Y	-	Y	-
Tingis cardui	-	-	-	-	Y	-	-	-	-	-	-
Hymenoptera (Bees, Wasps, Sa	wflies	and A	Ants)								
Aglaostigma aucupariae	-	-	-	-	-	Y	-	-	-	-	-
Allantus cinctus	Y	-	-	-	-	-	-	-	-	-	-
Andrena chrysosceles	-	-	-	Y	Y	-	-	-	-	-	-
Andrena fulva	-	Y	Y	-	-	-	-	-	-	-	-
Andrena haemorrhoa	Y	-	Y	-	-	-	-	-	-	-	-
Andrena scotica	-	-	Y	-	-	-	-	Y	-	-	-
Athalia cordata	-	-	Y	-	-	Y	-	-	-	-	-
Bombus pascuorum	-	-	Y	Y	Y	-	-	-	-	-	-
Bombus terrestris	-	-	-	-	-	-	-	-	Y	-	-
Cephus pygmeus	-	Y	Y	-	Y	Y	-	Y	Y	Y	-
Cephus spinipes	-	-	-	-	Y	-	-	-	-	-	-
Collyria coxator	-	Y	-	Y	Y	-	Y	-	Y	Y	-
Dineura stilata	-	-	Y	-	-	-	-	-	-	-	-
Dolerus gonager	-	Y	-	-	-	-	-	-	-	Y	-

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Species Name			Sı	ırvey	Conservation Status						
	Α	В	С	D	Е	F	G	н	I	J	
Dolerus haematodes	-	-	-	-	Y	-	-	-	-	-	-
Dolerus nigratus	-	Y	Y	-	-	-	-	-	Y	-	-
Endelomyia aethiops	-	-	-	Y	-	-	-	-	-	-	-
Hoplocampa crataegi	Y	-	-	-	Y	Y	-	-	Y	-	-
Macrocentrus nitidus	-	-	-	-	-	-	-	-	Y	-	-
Myrmica rubra	-	-	-	-	-	Y	Y	Y	-	Y	-
Myrmica ruginodis	Y	Y	Y	Y	Y	Y	-	-	Y	-	-
Nematus lucidus	-	Y	Y	-	-	-	-	-		-	-
Nomada flava	Y	Y	Y	Y	Y	-	Y	-	Y	-	-
Nomada goodeniana	-	-	-	-	-	-	-	Y	-	-	-
Nomada ruficornis	-	-	-	-	-	Y	-	-	-	-	-
Pristiphora armata	Y	-	Y	-	-	-	-	-	-	-	-
Pristiphora biscalis	-	-	-	-	-	-	-	-	-	Y	-
Pristiphora monogyniae	Y	-	-	-	-	-	-	-	-	-	-
Sphecodes ephippius	-	-	-	Y	-	-	-	-	Y	-	-
Lepidoptera (Butterflies and M	loths)										
Aglais io	-	-	-	-	-	-	-	Y		Y	-
Allophyes oxyacanthae	-	-	-	-	Y	-	-	-	-	-	-
Ancylis badiana	Y	-	-	-	-	-	-	-	-	-	-
Anthocharis cardamines	-	-	Y	-	-	Y	-	-	-	Y	-
Anthophila fabriciana	-	-	-	-	-	-	-	-	-	Y	-
Autographa gamma	-	-	-	-	-	-	Y	-	-	-	-
Cauchas rufimitrella	-	-	-	-	-	Y	-	-	-	-	-
Celastrina argiolus	-	-	Y	-	-	Y	-	-	-	-	-

Species Name			Sı	ırvey	Conservation Status						
	Α	В	С	D	Е	F	G	Н	Ι	J	
Chiasmia clathrata	-	-	-	Y	-	-	-	-	-	-	Near Threatened (British Rarity Status)
Colostygia pectinataria	Y	-	Y	-	-	-	-	-	-	-	-
Epirrhoe alternata	-	-	-	-	-	-	-	-	-	Y	-
Erannis defoliaria	Y	-	-	-	Y	-	-	-	-	-	Vulnerable (IUCN)
Euproctis similis	-	-	Y	-	-	-	-	-	-	-	-
Glyphipterix simpliciella	-	Y	Y	Y	-	Υ	Υ	Υ	Υ	Y	-
Gonepteryx rhamni	Y	-	-	-	-	-	-	-	Υ	-	-
Pieris napi	-	Y	-	-	-	-	-	Y	-	Y	-
Mollusca (Slugs and Snails)											
Trochulus hispidus	-	-	-	-	-	-	-	-	-	Y	-
Vertigo pygmaea	-	Υ	Y	-	-	-	-	-	-	-	-
Myriapods (Centipedes and Mi	llipede	s)									
Lithobius forficatus	-	-	-	-	-	-	-	-	-	Y	-
Tachypodoiulus niger	Y	-	-	-	-	-	-	-	-	-	-
Odanata (Dragonflies)	-	-	-	-	-	-	-	-	-	-	-
Coenagrion puella	-	-	-	-	-	Y	-	-	-	-	-
Pyrrhosoma nymphula	-	-	-	-	-	Y	-	-	-	-	-
Orthoptera (Grasshoppers and	l Cricke	ets)									
Forficula auricularia	-	Υ	Y	-	Y	-	-	Y	Y	-	-
Tetrix undulata	-	-	-	-	-	-	-	Y	-	-	-
Roeseliana roeselii	-	Y	-	Y	Y	Y	Y	-	-	-	-
Miscellaneous insect orders											
Limnephilus auricula	-	Y	-	-	-	-	-	-	-	-	-

Species Name			Sı	irvey	Conservation Status						
-	Α	В	С	D	Е	F	G	Н	I	J	
Sialis lutaria	-	-	-	-	-	-	Y	-	-	-	-
Xanthostigma xanthostigma	-	-	-	Y	-	-	-	-	-	Y	-