INVERTEBRATE SURVEY OF CRANE PARK NORTH,

MIDDLESEX

2025

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EXECUTIVE SUMMARY

Invertebrate surveys were conducted at Crane Park in Middlesex were carried out in 2025 on the following dates ;- 22nd April, 9th May, 2nd July and 23rd September.

In all 281 species were recorded in 2025. Full species list is given in appendix 1. Of these 14 had conservation statuses as follows: -

Species	Family	Order	Conservation status
Ero aphana	Mimetidae	Araneae	NS
Ballus chalybeius	Salticidae	Araneae	NS
Salticus zebraneus	Salticidae	Araneae	NS
Platyrhinus resinosus	Anthribidae	Coleoptera	[Nb]
Diplocoelus fagi	Biphyllidae	Coleoptera	Nb
Opilo mollis	Cleridae	Coleoptera	NS
Kissophagus vicinus	Curculionidae	Coleoptera	Nb
Ampedus rufipennis	Elateridae	Coleoptera	RDB 2; Section 41 Priority Species
Enicmus brevicornis	Latridiidae	Coleoptera	Notable
Dasytes plumbeus	Melyridae	Coleoptera	NS
Pseudotriphyllus suturalis	Mycetophagidae	Coleoptera	NS; NT (European); NT (Global)
Gyrophaena manca	Staphylinidae	Coleoptera	Notable
Raglius alboacuminatus	Lygaeidae	Hemiptera	Nb
Lasius brunneus	Formicidae	Hymenoptera	[Na]

INTRODUCTION

The author was commissioned to carry out baseline invertebrate surveys of **Crane Park, Twickenham** in Middlesex.

SITE VISITS

The sites were sampled on the following occasions; - 22nd April, 9th May, 2nd July and 23rd September.

METHODOLOGY

Standard field techniques were employed to sample the invertebrate fauna throughout the wood. These included sweeping vegetation with a wide mouthed sweep net, beating trees and bushes over a beating tray, and grubbing amongst tussocks and key host plant rosettes etc.

Because it is impracticable to survey all the potential invertebrates within any given site, only specific groups of species were examined during fieldwork. These groups are sufficiently well known as to allow meaningful comparisons to be made with other sites, both locally and nationally. They are also important as indicators of the quality of a site and the habitats present (see Brooks 1993).

Groups covered during the survey were:

- Mollusca (slugs and snails)
- Arachnida (spiders, harvestmen & pseudoscorpions)
- Isopoda (woodlice)
- Ephemeroptera (mayflies)
- Odonata (dragonflies & damselflies)
- Plecoptera (stoneflies)
- Orthoptera (grasshoppers & crickets)
- Dictyoptera (cockroaches)
- Dermaptera (earwigs)
- Hemiptera-Heteroptera (true-bugs)
- Hemiptera-Homoptera (hoppers)
- Neuroptera (lace-wings)
- Mecoptera (scorpion-flies)
- Lepidoptera (butterflies & moths)
- Trichoptera (caddis flies)

- Diptera (true flies)
- Aculeate Hymenoptera (ants, bees & wasps)
- Coleoptera (beetles)

RESULTS

In all 280 species were recorded in 2025, Full species list is given in appendix 1. Of these 14 had conservation statuses as follows: -

Species	Family	Order	Conservation status
Ero aphana	Mimetidae	Araneae	NS
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Salticus zebraneus	Salticidae	Araneae	NS
Platyrhinus resinosus	Anthribidae	Coleoptera	[Nb]
Diplocoelus fagi	Biphyllidae	Coleoptera	Nb
Opilo mollis	Cleridae	Coleoptera	NS
Kissophagus vicinus	Curculionidae	Coleoptera	Nb
Ampedus rufipennis	Elateridae	Coleoptera	RDB 2; Section 41 Priority Species
Enicmus brevicornis	Latridiidae	Coleoptera	Notable
Dasytes plumbeus	Melyridae	Coleoptera	NS
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Raglius alboacuminatus	Lygaeidae	Hemiptera	Nb
Lasius brunneus	Formicidae	Hymenoptera	[Na]

The saproxylic fauna included nationally scarce beetles with *Ampedus rufipennis* the standout (a red click beetle which is listed in the BAP series (though it seems to be spreading in recent years) *Kissophagus vicinus* develops in dead ivy, *Opilo mollis* is predatory on woodworms *Anobium spp*. *Gyrophaena manca* is a scarce rove betle associated with bracket fungi and was found on Dryad's saddle in May.

The rove beetle *Thinodromus arcuatus* is only the second county record for a species mainly associated with stream edges but which was found recently on edge of Broadwater lake in the Colne Valley (Denton, 2023)

The assemblage included several recent arrivals in Greater London including the spiders *Philodromus buxi* and *P.rufus* which are spreading rapidly.

Ero aphana should be demoted as it has already very widespread.

HABITAT ASSESSMENT

USING PANTHEON AND ISIS TO MEASURE SITE QUALITY

Explanation of the underlying invertebrate assemblage framework.

PANTHEON is a computer spreadsheet application for recognising invertebrate assemblage types in species lists collected at scales ranging from management compartment to landscape character area. This has been developed into an online programme called Pantheon. The assemblage types are labelled in terms that relate to their favoured habitats in order to make them accessible to non-specialists. However, they are defined by lists of characteristic species that are generally found together in nature. Two levels are recognised in the classification. Broad assemblage types (BATs) are a comprehensive series of assemblage types that are characterised by more widespread species. They can be expressed in lists from a wide range of sites. Specific assemblage types (SATs) are characterised by ecologically restricted species and are generally only expressed in lists from sites with conservation value. Since 2008 there has also been a third category of assemblage types that cut across this classification. They are mainly defined by lists of species dependent on a particular environmental resource, such as flowers as a source of pollen and nectar. The assemblage type classification is given below. Textual descriptions of each assemblage type and its habitats have been prepared for incorporation into a web-based database.

Two SATs were in favourable condition bark and sapwood decay and heartwood decay (see table 1). Reflecting the abundance of dead fallen and standing timber.

Table 1. SAT scores generated for Crane Park in 2025

Code	SAT	No. of species	Reported condition
A212	**bark & sapwood decay**	**26**	**Favourable (26 species, 19 required)**
A211	**heartwood decay**	**9**	**Favourable (9 species, 6 required)**
F002	rich flower resource	8	Unfavourable (8 species, 15 required)
A213	fungal fruiting bodies	6	Unfavourable (6 species, 7 required)
F001	scrub edge	5	Unfavourable (5 species, 11 required)
F003	scrub-heath & moorland	2	Unfavourable (2 species, 9 required)
F112	open short sward	2	Unfavourable (2 species, 13 required)

LIMITATIONS OF SURVEY

Clearly, diurnal surveys will miss the vast majority of night flying species (moths, many Ichneumons etc.).

REFERENCES

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Brooks, S.J. 1993. Joint Committee for the Conservation of British Invertebrates: Guidelines for Invertebrate Surveys. British Wildlife 4(5) 283-287

Denton, J. (2023) *Thinodromus arcuatus* (Stephens) (Col., Staphylinidae) in Middlesex *British Journal of Entomology & Natural History* **36**, *112.*

Webb, J., Heaver, D., Lott, D., Dean, H.J., van Breda, J., Curson, J., Harvey, M.C., Gurney, M., Roy, D.B., van Breda, A., Drake, M., Alexander, K.N.A. and Foster, G. (2018). *Pantheon - database version 3.7.6*

APPENDIX 1. SPECIES RECORDED IN 2025

Species	Family	Order	Conservation status
Amaurobius fenestralis	Amaurobiidae	Araneae	common
Anyphaena numida	Anyphaenidae	Araneae	local
Anyphaena sabina	Anyphaenidae	Araneae	local
Araneus diadematus	Araneidae	Araneae	common
Nuctenea umbratica	Araneidae	Araneae	common
Clubiona brevipes	Clubionidae	Araneae	common
Clubiona phragmitis	Clubionidae	Araneae	common
Harpactea hombergi	Dysderidae	Araneae	common
Ero aphana	Mimetidae	Araneae	NS
Philodromus buxi	Philodromidae	Araneae	local
Philodromus cespitum	Philodromidae	Araneae	common
Philodromus rufus sens. str.	Philodromidae	Araneae	local
Ballus chalybeius	Salticidae	Araneae	NS
Salticus zebraneus	Salticidae	Araneae	NS
Metellina merianae	Tetragnathidae	Araneae	common
Metellina segmentata	Tetragnathidae	Araneae	common
Paidiscura pallens	Theridiidae	Araneae	common
Platnickina tincta	Theridiidae	Araneae	common
Diaea dorsata	Thomisidae	Araneae	common
Ozyptila praticola	Thomisidae	Araneae	common
Platyrhinus resinosus	Anthribidae	Coleoptera	[Nb]
Biphyllus lunatus	Biphyllidae	Coleoptera	local
Diplocoelus fagi	Biphyllidae	Coleoptera	Nb
Agrilus sinuatus	Buprestidae	Coleoptera	common
Cantharis rustica	Cantharidae	Coleoptera	common
Bembidion articulatum	Carabidae	Coleoptera	common
Bembidion biguttatum	Carabidae	Coleoptera	common
Bembidion dentellum	Carabidae	Coleoptera	common
Bembidion tetracolum	Carabidae	Coleoptera	common
Calodromius spilotus	Carabidae	Coleoptera	common
Paradromius linearis	Carabidae	Coleoptera	common
Paranchus albipes	Carabidae	Coleoptera	common
Grammoptera ruficornis	Cerambycidae	Coleoptera	common
Agelastica alni	Chrysomelidae	Coleoptera	common
Altica lythri	Chrysomelidae	Coleoptera	common
Cassida viridis	Chrysomelidae	Coleoptera	common
Donacia simplex	Chrysomelidae	Coleoptera	common
Gastrophysa viridula	Chrysomelidae	Coleoptera	common
Lilioceris lilii	Chrysomelidae	Coleoptera	common
Lochmaea caprea	Chrysomelidae	Coleoptera	common
Clambus simsoni	Clambidae	Coleoptera	local
Opilo mollis	Cleridae	Coleoptera	NS

Adalia decempunctata	Coccinellidae	Coleoptera	common
Coccinella septempunctata	Coccinellidae	Coleoptera	common
Exochomus quadripustulatus	Coccinellidae	Coleoptera	common
Halyzia sedecimguttata	Coccinellidae	Coleoptera	common
Harmonia axyridis	Coccinellidae	Coleoptera	common
Nephus quadrimaculatus	Coccinellidae	Coleoptera	local
Propylea quattuordecimpunctata	Coccinellidae	Coleoptera	common
Rhyzobius chrysomeloides	Coccinellidae	Coleoptera	common
Acalles misellus	Curculionidae	Coleoptera	common
Anthonomus rubi	Curculionidae	Coleoptera	common
Curculio glandium	Curculionidae	Coleoptera	common
Hylesinus crenatus	Curculionidae	Coleoptera	common
Hylesinus varius	Curculionidae	Coleoptera	common
Kissophagus vicinus	Curculionidae	Coleoptera	Nb
Phyllobius pyri	Curculionidae	Coleoptera	common
Scolytus multistriatus	Curculionidae	Coleoptera	common
Trichosirocalus troglodytes	Curculionidae	Coleoptera	common
Ampedus rufipennis	Elateridae	Coleoptera	RDB 2; Section 41 Priority Species
Notaris acridulus	Erirhinidae	Coleoptera	common
Dacne bipustulata	Erotylidae	Coleoptera	local
Enicmus brevicornis	Latridiidae	Coleoptera	Notable
Dorcus parallelipipedus	Lucanidae	Coleoptera	common
Malachius bipustulatus	Malachiidae	Coleoptera	common
Dasytes plumbeus	Melyridae	Coleoptera	NS
Mycetophagus quadripustulatus	Mycetophagidae	Coleoptera	common
Pseudotriphyllus suturalis	Mycetophagidae	Coleoptera	NS; NT (European)
Epuraea aestiva	Nitidulidae	Coleoptera	common
Meligethes aeneus	Nitidulidae	Coleoptera	common
Ischnomera cyanea	Oedemeridae	Coleoptera	common
Oedemera lurida	Oedemeridae	Coleoptera	common
Oedemera nobilis	Oedemeridae	Coleoptera	common
Anobium inexspectatum	Ptinidae	Coleoptera	local
Ochina ptinoides	Ptinidae	Coleoptera	local
Ptilinus pectinicornis	Ptinidae	Coleoptera	common
Pyrochroa coccinea	Pyrochroidae	Coleoptera	common
Pyrochroa serraticornis	Pyrochroidae	Coleoptera	common
Salpingus planirostris	Salpingidae	Coleoptera	common
Anaspis fasciata	Scraptiidae	Coleoptera	common
Anaspis maculata	Scraptiidae	Coleoptera	common
Anaspis regimbarti	Scraptiidae	Coleoptera	common
Psammoecus bipunctatus	Silvanidae	Coleoptera	common
Atheta graminicola	Staphylinidae	Coleoptera	common

Atheta laticollis	Staphylinidae	Coleoptera	common
Atheta xanthopus	Staphylinidae	Coleoptera	common
Bisnius fimetarius	Staphylinidae	Coleoptera	common
Gyrophaena manca	Staphylinidae	Coleoptera	Notable
Hygronoma dimidiata	Staphylinidae	Coleoptera	common
Lesteva sicula	Staphylinidae	Coleoptera	common
Lithocharis ochracea	Staphylinidae	Coleoptera	common
Megarthrus depressus	Staphylinidae	Coleoptera	common
Myrmecocephalus concinnus	Staphylinidae	Coleoptera	common
Philonthus politus	Staphylinidae	Coleoptera	common
Proteinus brachypterus	Staphylinidae	Coleoptera	common
Quedius cinctus	Staphylinidae	Coleoptera	common
Sepedophilus lusitanicus	Staphylinidae	Coleoptera	common
Stenus boops	Staphylinidae	Coleoptera	common
Stenus cicindeloides	Staphylinidae	Coleoptera	common
Stenus juno	Staphylinidae	Coleoptera	common
Stenus picipes	Staphylinidae	Coleoptera	common
Tachyporus hypnorum	Staphylinidae	Coleoptera	common
Thinodromus arcuatus	Staphylinidae	Coleoptera	local
Lagria hirta	Tenebrionidae	Coleoptera	common
Prionychus ater	Tenebrionidae	Coleoptera	local
Bitoma crenata	Zopheridae	Coleoptera	common
Synchita undata	Zopheridae	Coleoptera	local
Forficula auricularia	Forficulidae	Dermaptera	
Eustalomyia festiva	Anthomyiidae	Diptera	common
Dilophus febrilis	Bibionidae	Diptera	common
Bombylius major	Bombyliidae	Diptera	common
Calliphora vomitoria	Calliphoridae	Diptera	common
Lucilia sericata	Calliphoridae	Diptera	common
Macrodiplosis pustularis	Cecidomyiidae	Diptera	common
Macrodiplosis roboris	Cecidomyiidae	Diptera	common
Anepsiomyia flaviventris	Dolichopodidae	Diptera	common
Campsicnemus curvipes	Dolichopodidae	Diptera	common
Drosophila suzukii	Drosophilidae	Diptera	common
Empis livida	Empididae	Diptera	common
Empis tessellata	Empididae	Diptera	common
Neolimonia dumetorum	Limoniidae	Diptera	common
Neria cibaria	Micropezidae	Diptera	common
Graphomya maculata	Muscidae	Diptera	common
Opomyza germinationis	Opomyzidae	Diptera	common
Pollenia angustigena	Polleniidae	Diptera	common
Chrysopilus cristatus	Rhagionidae	Diptera	common
Scathophaga stercoraria	Scathophagidae	Diptera	common
Chloromyia formosa	Stratiomyidae	Diptera	common
Pachygaster atra	Stratiomyidae	Diptera	common

Brachyopa scutellaris	Syrphidae	Diptera	local
Criorhina berberina	Syrphidae	Diptera	local
Epistrophe eligans	Syrphidae	Diptera	common
Episyrphus balteatus	Syrphidae	Diptera	common
Eristalis arbustorum	Syrphidae	Diptera	common
Eristalis pertinax	Syrphidae	Diptera	common
Eristalis tenax	Syrphidae	Diptera	common
Eupeodes corollae	Syrphidae	Diptera	common
Helophilus pendulus	Syrphidae	Diptera	common
Merodon equestris	Syrphidae	Diptera	common
Myathropa florea	Syrphidae	Diptera	common
Platycheirus albimanus	Syrphidae	Diptera	common
Sphaerophoria scripta	Syrphidae	Diptera	common
Syritta pipiens	Syrphidae	Diptera	common
Syrphus ribesii	Syrphidae	Diptera	common
Syrphus vitripennis	Syrphidae	Diptera	common
Lydella stabulans	Tachinidae	Diptera	common
Tephritis neesii	Tephritidae	Diptera	common
Urophora cardui	Tephritidae	Diptera	common
Tipula oleracea	Tipulidae	Diptera	common
Tipula irrorata	Tipulidae	Diptera	common
Tomocerus minor	Tomoceridae	Entomobryomorpha	common
Tomocerus vulgaris	Tomoceridae	Entomobryomorpha	common
Acanthosoma haemorrhoidale	Acanthosomatidae	Hemiptera	common
Anthocoris confusus	Anthocoridae	Hemiptera	common
Anthocoris nemorum	Anthocoridae	Hemiptera	common
Pemphigus spyrothecae	Aphididae	Hemiptera	common
Tuberolachnus salignus	Aphididae	Hemiptera	common
Aphrophora alni	Aphrophoridae	Hemiptera	common
Philaenus spumarius	Aphrophoridae	Hemiptera	common
Edwardsiana candidula	Cicadellidae	Hemiptera	common
Empoasca vitis	Cicadellidae	Hemiptera	common
Euscelis incisus	Cicadellidae	Hemiptera	common
Ledra aurita	Cicadellidae	Hemiptera	common
Populicerus albicans	Cicadellidae	Hemiptera	common
Tremulicerus distinguendus	Cicadellidae	Hemiptera	common
Zonocyba bifasciata	Cicadellidae	Hemiptera	common
Coreus marginatus	Coreidae	Hemiptera	common
Hydrometra stagnorum	Hydrometridae	Hemiptera	common
Issus coleoptratus	Issidae	Hemiptera	common
Ischnodemus sabuleti	Lygaeidae	Hemiptera	common
Kleidocerys resedae	Lygaeidae	Hemiptera	common
Peritrechus geniculatus	Lygaeidae	Hemiptera	common
Raglius alboacuminatus	Lygaeidae	Hemiptera	Nb
Scolopostethus affinis	Lygaeidae	Hemiptera	common

Scolopostethus thomsoni	Lygaeidae	Hemiptera	common
Amblytylus nasutus	Miridae	Hemiptera	common
Campyloneura virgula	Miridae	Hemiptera	common
Closterotomus trivialis	Miridae	Hemiptera	common
Deraeocoris lutescens	Miridae	Hemiptera	common
Europiella artemisiae	Miridae	Hemiptera	common
Harpocera thoracica	Miridae	Hemiptera	common
Leptopterna dolabrata	Miridae	Hemiptera	common
Macrotylus horvathi	Miridae	Hemiptera	local
Megalocoleus molliculus	Miridae	Hemiptera	common
Pantilius tunicatus	Miridae	Hemiptera	common
Himacerus (Aptus) mirmicoides	Nabidae	Hemiptera	common
Eurydema (Eurydema) oleracea	Pentatomidae	Hemiptera	common
Pentatoma rufipes	Pentatomidae	Hemiptera	common
Podops inuncta	Pentatomidae	Hemiptera	common
Cacopsylla melanoneura	Psyllidae	Hemiptera	common
Stictopleurus abutilon	Rhopalidae	Hemiptera	common
Andrena dorsata	Andrenidae	Hymenoptera	common
Andrena haemorrhoa	Andrenidae	Hymenoptera	common
Anthophora plumipes	Apidae	Hymenoptera	common
Bombus hypnorum	Apidae	Hymenoptera	common
Bombus lapidarius	Apidae	Hymenoptera	common
Bombus pascuroum	Apidae	Hymenoptera	common
Bombus terrestris	Apidae	Hymenoptera	common
Nomada flava	Apidae	Hymenoptera	common
Bethylus fuscicornis	Bethylidae	Hymenoptera	common
Trichrysis cyanea	Chrysididae	Hymenoptera	common
Colletes hederae	Colletidae	Hymenoptera	common
Ectemnius cavifrons	Crabronidae	Hymenoptera	common
Pemphredon lugubris	Crabronidae	Hymenoptera	common
Trypoxylon attenuatum	Crabronidae	Hymenoptera	common
Andricus kollari	Cynipidae	Hymenoptera	common
Andricus quercuscalicis	Cynipidae	Hymenoptera	common
Biorhiza pallida	Cynipidae	Hymenoptera	common
Neuroterus numismalis	Cynipidae	Hymenoptera	common
Neuroterus quercusbaccarum	Cynipidae	Hymenoptera	common
Lasius brunneus	Formicidae	Hymenoptera	[Na]
Lasius flavus	Formicidae	Hymenoptera	common
Lasius fuliginosus	Formicidae	Hymenoptera	local
Lasius platythorax	Formicidae	Hymenoptera	common
Myrmica rubra	Formicidae	Hymenoptera	common
Temnothorax nylanderi	Formicidae	Hymenoptera	local
Hoplocampa crataegi	Tenthredinidae	Hymenoptera	common
Hoplocampa pectoralis	Tenthredinidae	Hymenoptera	common

Vespa crabro	Vespidae	Hymenoptera	local
Vespula germanica	Vespidae	Hymenoptera	common
Vespula vulgaris	Vespidae	Hymenoptera	common
Gelis areator	Geliidae	Hymenoptera	common
Armadillidium vulgare	Armadillidiidae	Isopoda	common
Asellus aquaticus	Asellidae	Isopoda	common
Oniscus asellus	Oniscidae	Isopoda	common
Philoscia muscorum	Philosciidae	Isopoda	common
Porcellio scaber	Porcellionidae	Isopoda	common
Tachypodoiulus niger	Julidae	Julida	common
Anania hortulata	Crambidae	Lepidoptera	common
Agonopterix alstromeriana	Depressariidae	Lepidoptera	common
Cameraria ohridella	Gracillariidae	Lepidoptera	common
Phyllocnistis unipunctella	Gracillariidae	Lepidoptera	common
Phyllocnistis xenia	Gracillariidae	Lepidoptera	local
Phyllonorycter comparella	Gracillariidae	Lepidoptera	common
Phyllonorycter corylifoliella	Gracillariidae	Lepidoptera	common
Phyllonorycter esperella	Gracillariidae	Lepidoptera	common
Phyllonorycter tenerella	Gracillariidae	Lepidoptera	common
Phyllonorycter viminiella	Gracillariidae	Lepidoptera	common
Incurvaria masculella	Incurvariidae	Lepidoptera	common
Celastrina argiolus	Lycaenidae	Lepidoptera	common
Stigmella assimilella	Nepticulidae	Lepidoptera	common
Stigmella confusella	Nepticulidae	Lepidoptera	common
Stigmella malella	Nepticulidae	Lepidoptera	common
Stigmella microtheriella	Nepticulidae	Lepidoptera	common
Stigmella salicis	Nepticulidae	Lepidoptera	common
Stigmella trimaculella	Nepticulidae	Lepidoptera	common
Nonagria typhae	Noctuidae	Lepidoptera	common
Aglais io	Nymphalidae	Lepidoptera	common
Pararge aegeria	Nymphalidae	Lepidoptera	common
Anthocharis cardamines	Pieridae	Lepidoptera	common
Gonepteryx rhamni	Pieridae	Lepidoptera	common
Pieris rapae	Pieridae	Lepidoptera	common
Gypsonoma dealbana	Tortricidae	Lepidoptera	common
Pammene regiana	Tortricidae	Lepidoptera	common
Lithobius forficatus	Lithobiidae	Lithobiomorpha	common
Sialis lutaria	Sialidae	Megaloptera	common
Calopteryx splendens	Calopterygidae	Odonata	common
Ischnura elegans	Coenagrionidae	Odonata	common
Pyrrhosoma nymphula	Coenagrionidae	Odonata	common
Nemastoma bimaculatum	Nemastomatidae	Opiliones	common
Elipsocus hyalinus	Elipsocidae	Psocodea	common
Ectopsocus briggsi sensu stricto	Ectopsocidae	Psocoptera	common
Ectopsocus petersi	Ectopsocidae	Psocoptera	common

Graphopsocus cruciatus	Stenopsocidae	Psocoptera	common
Deroceras reticulatum	Agriolimacidae	Pulmonata	common
Arion rufus	Arionidae	Pulmonata	common
Arion intermedius	Arionidae	Pulmonata	common
Arion subfuscus	Arionidae	Pulmonata	common
Cepaea hortensis	Helicidae	Pulmonata	common
Cepaea nemoralis	Helicidae	Pulmonata	common
Cornu aspersum	Helicidae	Pulmonata	common
Hygromia cinctella	Hygromiidae	Pulmonata	common
Monacha cantiana	Hygromiidae	Pulmonata	common
Limacus flavus	Limacidae	Pulmonata	common
Limax maximus	Limacidae	Pulmonata	common
Aegopinella nitidula	Oxychilidae	Pulmonata	common
Oxyloma elegans	Succineidae	Pulmonata	common
Mystacides longicornis	Leptoceridae	Trichoptera	common
Aceria campestricola	Eriophyidae	Trombidiformes	common
Aceria erinea	Eriophyidae	Trombidiformes	common
Eriophyes inangulis (galls)	Eriophyidae	Trombidiformes	common

APPENDIX 2. Status categories for Rare and Notable species

Red Data Book Category 1 (RDB 1) – Endangered

Definition.
Taxa in danger of extinction *in Great Britain* and whose survival is unlikely if the causal factors continue operating.

Included are those taxa whose numbers have been reduced to a critical level or whose habitats have been so dramatically reduced that they are deemed to be in immediate danger of extinction. Also included are *some* taxa that are *possibly* extinct.

Criteria.
Species which are known *or believed to occur* as only a single population within one 10 km square of the National Grid.

Species which only occur in habitats known to be especially vulnerable.

Species which have shown a rapid or continuous decline over the last twenty years and are now *estimated* to exist in five or fewer 10 km squares.

Species which are *possibly* extinct *but have been recorded this century* and if rediscovered would need protection.

Red Data Book Category 2 (RDB 2) - Vulnerable

Definition.
Taxa *believed* likely to move into the endangered category in the near future if the causal factors continue operating.

Included are taxa of which most or all of the populations are decreasing because of *over-exploitation*, extensive destruction of habitat or other environmental disturbance; taxa with populations that have been seriously depleted and whose ultimate security is not yet assured; and taxa with populations that are still abundant but are under threat from serious adverse factors throughout their range.

Criteria.
Species declining throughout their range.

Species in vulnerable habitats.

Red Data Book Category 3 (RDB 3) – Rare

Definition.
Taxa with small populations *in Great Britain* that are not at present endangered or vulnerable, but are at risk.

These taxa are usually localised within restricted geographical areas or habitats or are thinly scattered over a more extensive range.

Criterion.
Species which are estimated to exist in only fifteen or fewer 10 km squares. *This criterion may be relaxed where populations are likely to exist in over fifteen 10 km squares but occupy small areas of especially vulnerable habitat*

Nationally Scarce Category A - Notable A (Na)

Definition.
Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in 30 or fewer 10 km squares of the National Grid or, for less well recorded groups, within seven or fewer vice-counties.

Nationally Scarce Category B - Notable B (Nb)

Definition.
Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in between 31 and 100 10 km squares of the National Grid or, for less well recorded groups, within eight and twenty vice-counties.

Nationally Scarce - Notable (N)

Definition.
Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in between 16 to 100 10 km squares of the National Grid. Species within this category are often too poorly known for their status to be more precisely estimated.

Summary of the IUCN categories and criteria.

- **REGIONALLY EXTINCT (RE)**

A taxon is Extinct when there is no reasonable doubt that the last individual has died. In this review the last date for a record is set at fifty years before publication.

- **CRITICALLY ENDANGERED (CR)**

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered.

- **ENDANGERED (EN)**

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered.

- **VULNERABLE (VU)**

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable.

- **NEAR THREATENED (NT)**

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

- **LEAST CONCERN (LC)**

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

- **DATA DEFICIENT (DD)**

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well

known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate.

- **NOT EVALUATED (NE)**

A taxon is Not Evaluated when it is has not yet been evaluated against the criteria.

GB Rarity Status categories and criteria

- **Nationally Rare (NR)**

Native species which have not been recorded from more than 15 British hectads since 31st December 1979 and where there is reasonable confidence that exhaustive recording would not find them in more than 15 hectads. This category includes species which are probably extinct.

- **Nationally Scarce (NS)**

Native species which are not regarded as Nationally Rare AND which have not been recorded from more than 100 British hectads since 31st December 1979 and where there is reasonable confidence that exhaustive recording would not find them in more than 100 hectads.

Other species status terminology.

- **Local**. Species that are restricted in distribution either geographically or by habitat. Also used for species that are widespread but infrequently encountered, e.g. encountered in no more than 300 10km squares of the national Ordnance Survey grid since 1970. Or those species listed as such, based upon modern geographical data, by ISIS (2010) and/or relevant recording schemes.
- **Widely Scattered.** Generally distributed but at low densities.
- **Southern.** Mainly or completely confined to southern England and/or its westerly or easterly regions – as indicated.
- **Common.** Generally widespread throughout the UK.
- **Unknown**. Usually indicates a lack of available data for difficult taxa but may also imply recent taxonomic confusion.