

INVERTEBRATE SURVEY AT WOOLSTON EYES SSSI – 2022

INTRODUCTION

During 2022 the author carried out a brief invertebrate survey on No.3 bed at Woolston Eyes SSSI. This was done using volunteer effort as part of a scheme called “Green Letter Days” that the author’s employer, Natural England allow, to enable NE staff to participate in work to support nature conservation and conservation organisations. Though Woolston Eyes SSSI is designated for its bird interest only, there is the potential for invertebrates to be identified in their own right as having potentially important assemblages during this time of biodiversity crisis, where they are currently unrecognised.

METHODS & MATERIALS

A Malaise trap (Fig.1) was set up on No.3 bed (Fig, 2) and left over the following time periods – 06/06/22 to 15/06/22 and 04/07/22 to 18/07/22. It acts as an insect flight interception trap and collects and preserves the catch. Sweep netting was also undertaken on visits to set up and take down the trap, and casual records of easily identifiable species noted. The weather was a little mixed during the June survey, but hot during the July survey. Identification was carried out by the author, Nick Button, Krisz Fekete, Vicky Gilson, Keith Fowler, and Peter Chandler.



Figure 1 – Malaise trap set up along scrub edge on Bed No.3, Woolston Eyes SSSI (Pete Boardman)

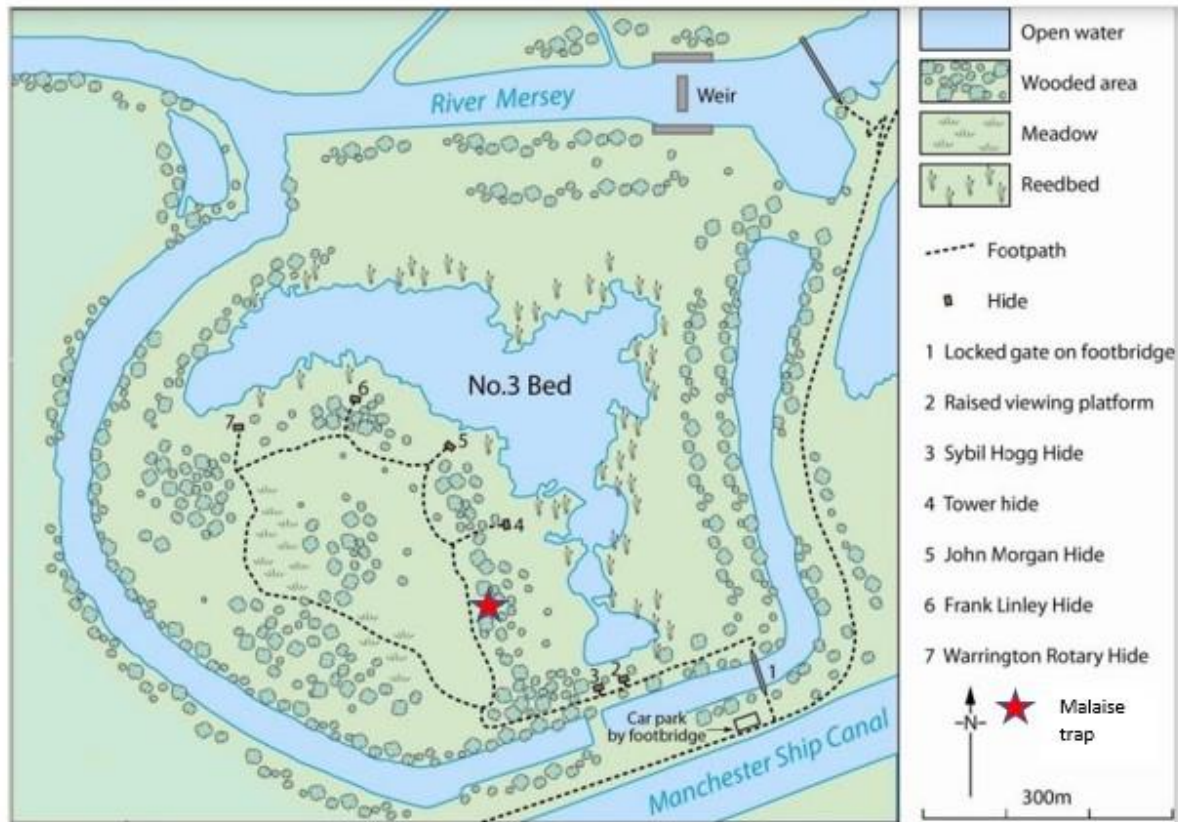


Fig. 2. Location of Malaise trap on Bed No.3.

RESULTS

A total of 195 species were identified, including one species noted as new to Great Britain. This was a species of *Glischrochilus* beetle (Fig. 3), which belongs to the Nitidulidae or sap beetles, and was only known previously from Eastern Europe. The species specifically isn't mentioned here, as an article is being prepared for publication in *The Coleopterist* and should not be prejudiced until formally published. The largest group identified were flies (76), followed by beetles (36), true bugs (36), butterflies and moths (14), bees, wasps, sawflies, and parasitic wasps (12), spiders and harvestman, (12), damselflies and dragonflies (3), springtails (2), and singletons of earwing species, barkflies, molluscs, and caddisflies. A full list of species encountered are listed in the Appendix of this report



Fig. 3 – *Glischrochilus* sp. (<https://baza.biomap.pl/>)

Interesting species

Coleoptera (Beetles)

Agelastica alni Alder Leaf Beetle – formally nationally rare but almost ubiquitous where there is alder.

Anaspis thoracica – a nationally scarce silk beetle associated with flowers and decaying wood.

Gliscrochilus sp. – new to Great Britain, associated with decaying oak and birch trees.

Hallomenus binotatus – a nationally scarce polyphore fungus beetle

Diptera (True flies)

Dioxya bidentis a nationally scarce picture-winged fly associated with bur marigold.

Seioptera vibrans a local species of ulidiid or picture-winged fly.

Solva marginata Drab Wood Soldierfly – locally widespread in the south but uncommon in the north and west.

Hemiptera (True Bugs)

Tropidosteptes pacificus is a true bug native to the USA and a recent arrival in Britain, first recorded in 2012 from the London area. It is likely to be a horticultural introduction. UK distribution unknown.

Araneae (Spiders)

Episinus angulatus is a tangle web spider. It is widespread in southern Britain but becomes very locally distributed in the north.

DISCUSSION

A good array of invertebrate species were found during this survey. Particularly of interest was the discovery of a new species of *Gliscrochilus* sap beetle to Britain, which perhaps illustrates the dynamic nature of the surrounding area with a motorway and ship canal adjacent carrying goods from many parts of the world. Further new species to Britain of this genus are known to be in the process of publication (Nick Button pers. comm) so it has been timely to be able to add to this process and contribute towards an update of the British identification key of this group with the Woolston Eyes discovery.

The site has had a history of invertebrate surveys over the years with contributions from Bill Hardwick, Clive Washington, Philip Baldwin, John McGaw, Steve Priestley, Phil Brighton, Jonathan Guest, and others. The author plans to combine all of these records and comment further on the Woolston fauna in the future as part of 2023 allowance of Green Letter Days, therefore discussion is limited here.

Pete Boardman. Natural England Field Unit. 27/01/23

APPENDIX

APPENDIX I – full list of species encountered in 2022.

Species	Family	Order	Habitat
<i>Araniella cucurbitina</i> sensu stricto	Araneidae	Araneae	various vegetation
<i>Araniella opisthographa</i>	Araneidae	Araneae	arboreal
<i>Linyphia hortensis</i>	Linyphiidae	Araneae	shaded woodland floor
<i>Neriene peltata</i>	Linyphiidae	Araneae	arboreal
<i>Metellina menzei</i>	Tetragnathidae	Araneae	ubiquitous
<i>Tetragnatha extensa</i>	Tetragnathidae	Araneae	acid & sedge peats
<i>Tetragnatha montana</i>	Tetragnathidae	Araneae	acid & sedge peats
<i>Enoplognatha ovata</i> sensu stricto	Theridiidae	Araneae	ubiquitous
<i>Episinus angulatus</i>	Theridiidae	Araneae	tall sward & scrub
<i>Xysticus cristatus</i>	Thomisidae	Araneae	open habitats
<i>Byturus ochraceus</i>	Byturidae	Coleoptera	tall sward & scrub
<i>Cantharis cryptica</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Cantharis decipiens</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Cantharis figurata</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Rhagonycha fulva</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Rhagonycha testacea</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Amara plebeja</i>	Carabidae	Coleoptera	tall sward & scrub
<i>Pterostichus melanarius</i>	Carabidae	Coleoptera	tall sward & scrub
<i>Clytus arietis</i>	Cerambycidae	Coleoptera	decaying wood
<i>Agelastica alni</i>	Chrysomelidae	Coleoptera	arboreal
<i>Crepidodera aurata</i>	Chrysomelidae	Coleoptera	arboreal
<i>Crepidodera aurea</i>	Chrysomelidae	Coleoptera	arboreal
<i>Gastrophysa viridula</i>	Chrysomelidae	Coleoptera	tall sward & scrub
<i>Neocrepidodera transversa</i>	Chrysomelidae	Coleoptera	tall sward & scrub
<i>Phaedon tumidulus</i>	Chrysomelidae	Coleoptera	tall sward & scrub
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera	ubiquitous
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera	ubiquitous
<i>Propylea quattuordecimpunctata</i>	Coccinellidae	Coleoptera	ubiquitous
<i>Phyllobius pomaceus</i>	Curculionidae	Coleoptera	tall sward & scrub
<i>Polydrusus formosus</i>	Curculionidae	Coleoptera	arboreal
<i>Adrastus pallens</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Agriotes acuminatus</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Athous haemorrhoidalis</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Denticollis linearis</i>	Elateridae	Coleoptera	decaying wood
<i>Hemicrepidius hirtus</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Brachypterus glaber</i>	Kateretidae	Coleoptera	tall sward & scrub
<i>Gliscrochilus</i> sp.	Nitidulidae	Coleoptera	decaying wood
<i>Meligethes aeneus</i>	Nitidulidae	Coleoptera	decaying wood
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera	tall sward & scrub
<i>Acrotrichis henrici</i>	Ptiliidae	Coleoptera	decaying wood

<i>Anaspis frontalis</i>	Scraptiidae	Coleoptera	decaying wood
<i>Anaspis maculata</i>	Scraptiidae	Coleoptera	decaying wood
<i>Anaspis thoracica</i>	Scraptiidae	Coleoptera	decaying wood
<i>Philonthus succicola</i>	Staphylinidae	Coleoptera	tall sward & scrub
<i>Lagria hirta</i>	Tenebrionidae	Coleoptera	tall sward & scrub
<i>Hallomenus binotatus</i>	Tetratomidae	Coleoptera	decaying wood
<i>Forficula auricularia</i>	Forficulidae	Dermaptera	vegetated places
<i>Sylvicola cinctus</i>	Anisopodidae	Diptera	shaded woodland floor
<i>Leptogaster cylindrica</i>	Asilidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Sicus ferrugineus</i>	Conopidae	Diptera	short sward & bare ground
<i>Argyra diaphana</i>	Dolichopodidae	Diptera	running water; wet woodland
<i>Dolichopus popularis</i>	Dolichopodidae	Diptera	wetland sites
<i>Sciapus platypterus</i>	Dolichopodidae	Diptera	shaded woodland floor
<i>Dolichocephala irrorata</i>	Empididae	Diptera	running water; wet woodland
<i>Empis livida</i>	Empididae	Diptera	tall sward & scrub
<i>Empis stercorea</i>	Empididae	Diptera	shaded woodland floor
<i>Empis tessellata</i>	Empididae	Diptera	tall sward & scrub
<i>Hybos culiciformis</i>	Hybotidae	Diptera	shaded woodland floor
<i>Orfelia nemoralis</i>	Keroplastidae	Diptera	decaying wood
<i>Meiosimyza rorida</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Minettia inusta</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Peplomyza litura</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Sapromyza sexpunctata</i>	Lauxaniidae	Diptera	woodland
<i>Tricholauxania praeusta</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Austrolimnophila ochracea</i>	Limoniidae	Diptera	decaying wood; shaded woodland floor
<i>Dicranomyia autumnalis</i>	Limoniidae	Diptera	acid & sedge peats
<i>Dicranomyia chorea</i>	Limoniidae	Diptera	running water; shaded woodland floor; scrub
<i>Epiphragma ocellare</i>	Limoniidae	Diptera	decaying wood
<i>Helius longirostris</i>	Limoniidae	Diptera	marshland
<i>Limonia flavipes</i>	Limoniidae	Diptera	shaded woodland floor
<i>Limonia nubeculosa</i>	Limoniidae	Diptera	decaying wood; shaded woodland floor
<i>Limonia phragmitidis</i>	Limoniidae	Diptera	shaded woodland floor
<i>Molophilus griseus</i>	Limoniidae	Diptera	acid & sedge peats; marshland; wet woodland
<i>Ormosia nodulosa</i>	Limoniidae	Diptera	shaded woodland floor
<i>Phylidorea ferruginea</i>	Limoniidae	Diptera	acid & sedge peats; marshland
<i>Phaonia subventa</i>	Muscidae	Diptera	shaded woodland floor
<i>Anatella unguigera</i>	Mycetophilidae	Diptera	decaying wood
<i>Coelosia flava</i>	Mycetophilidae	Diptera	decaying wood
<i>Sciophila fenestella</i>	Mycetophilidae	Diptera	decaying wood
<i>Opomyza germinationis</i>	Opomyzidae	Diptera	tall sward & scrub
<i>Palloptera quinquemaculata</i>	Pallopteridae	Diptera	tall sward & scrub
<i>Rivellia syngenesiae</i>	Platystomatidae	Diptera	tall sward & scrub
<i>Boreoclytocerus ocellaris</i>	Psychodidae	Diptera	decaying vegetation
<i>Rhagio lineola</i>	Rhagionidae	Diptera	shaded woodland floor
<i>Rhagio scolopaceus</i>	Rhagionidae	Diptera	tall sward & scrub
<i>Scathophaga suilla</i>	Scathophagidae	Diptera	running water; tall sward & scrub

<i>Limnia unguicornis</i>	Sciomyzidae	Diptera	acid & sedge peats; marshland; running water
<i>Sepsis violacea</i>	Sepsidae	Diptera	tall sward & scrub
<i>Beris geniculata</i>	Stratiomyidae	Diptera	acid & sedge peats; wet woodland
<i>Beris morrisii</i>	Stratiomyidae	Diptera	shaded woodland floor
<i>Beris vallata</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Chorisops tibialis</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Microchrysa polita</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Baccha elongata</i>	Syrphidae	Diptera	shaded woodland floor
<i>Cheilosia pagana</i>	Syrphidae	Diptera	shaded woodland floor
<i>Episyrphus balteatus</i>	Syrphidae	Diptera	tall sward & scrub
<i>Eristalis nemorum</i>	Syrphidae	Diptera	acid & sedge peats
<i>Eristalis tenax</i>	Syrphidae	Diptera	rich flower resource
<i>Helophilus pendulus</i>	Syrphidae	Diptera	acid & sedge peats
<i>Melanostoma scalare</i>	Syrphidae	Diptera	tall sward & scrub
<i>Myathropa florea</i>	Syrphidae	Diptera	decaying wood
<i>Neoscasia podagrica</i>	Syrphidae	Diptera	flowery places
<i>Parhelophilus frutetorum</i>	Syrphidae	Diptera	acid & sedge peats
<i>Sphaerophoria scripta</i>	Syrphidae	Diptera	tall sward & scrub
<i>Syrphus ribesii</i>	Syrphidae	Diptera	flowery places
<i>Tropidia scita</i>	Syrphidae	Diptera	acid & sedge peats
<i>Xylota segnis</i>	Syrphidae	Diptera	decaying wood
<i>Prosenia siberita</i>	Tachinidae	Diptera	woodland edge
<i>Campiglossa misella</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Chaetostomella cylindrica</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Dioxyna bidentis</i>	Tephritidae	Diptera	acid & sedge peats; marshland
<i>Tephritis neesii</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Urophora quadrifasciata</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Xyphosia miliaria</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Nephrotoma flavipalpis</i>	Tipulidae	Diptera	shaded woodland floor
<i>Nephrotoma quadrifaria</i>	Tipulidae	Diptera	shaded woodland floor
<i>Tipula fascipennis</i>	Tipulidae	Diptera	shaded woodland floor
<i>Tipula oleracea</i>	Tipulidae	Diptera	acid & sedge peats
<i>Tipula scripta</i>	Tipulidae	Diptera	shaded woodland floor
<i>Tipula unca</i>	Tipulidae	Diptera	running water; wet woodland
<i>Seioptera vibrans</i>	Ulidiidae	Diptera	shaded woodland floor
<i>Solva marginata</i>	Xylomyidae	Diptera	decaying wood
<i>Entomobrya intermedia</i>	Entomobryidae	Entomobryomorpha	ground layer vegetation
<i>Pogonognathellus longicornis</i>	Tomoceridae	Entomobryomorpha	decaying ground layer vegetation
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera	vegetated places
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera	woodland and scrub
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera	tall vegetation
<i>Aphrodes makarovi</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Errastunus ocellaris</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Eupteryx aurata</i>	Cicadellidae	Hemiptera	nettles, well vegetated places
<i>Eupteryx cyclops</i>	Cicadellidae	Hemiptera	shaded woodland floor

<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Kybos butleri</i>	Cicadellidae	Hemiptera	arboreal
<i>Populicerus nitidissimus</i>	Cicadellidae	Hemiptera	arboreal
<i>Ribautiana debilis</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Ribautiana tenerrima sensu stricto</i>	Cicadellidae	Hemiptera	tall sward
<i>Cixius nervosus</i>	Cixiidae	Hemiptera	arboreal
<i>Tachycixius pilosus</i>	Cixiidae	Hemiptera	tall sward
<i>Ditropis pteridis</i>	Delphacidae	Hemiptera	tall sward & scrub
<i>Javesella obscurella</i>	Delphacidae	Hemiptera	tall sward & scrub
<i>Kleidocerys resedae</i>	Lygaeidae	Hemiptera	arboreal
<i>Campyloneura virgula</i>	Miridae	Hemiptera	arboreal
<i>Capsus ater</i>	Miridae	Hemiptera	tall sward & scrub
<i>Closterotomus norwegicus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Deraeocoris (Deraeocoris) ruber</i>	Miridae	Hemiptera	tall sward & scrub
<i>Grypocoris (Lophyromiris) stysi</i>	Miridae	Hemiptera	tall sward & scrub
<i>Leptopterna dolabrata</i>	Miridae	Hemiptera	tall sward & scrub
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Lygocoris (Lygocoris) pabulinus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Lygus rugulipennis</i>	Miridae	Hemiptera	tall sward & scrub
<i>Megaloceroea recticornis</i>	Miridae	Hemiptera	tall sward & scrub
<i>Neolygus viridis</i>	Miridae	Hemiptera	arboreal
<i>Plagiognathus (Plagiognathus) arbustorum</i>	Miridae	Hemiptera	tall sward & scrub
<i>Stenotus binotatus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Tropidosteptes pacificus</i>	Miridae	Hemiptera	vegetated places
<i>Dolycoris baccarum</i>	Pentatomidae	Hemiptera	tall sward & scrub
<i>Piezodorus lituratus</i>	Pentatomidae	Hemiptera	Gorse
<i>Chamaepsylla hartigi</i>	Psyllidae	Hemiptera	Birch
<i>Tingis (Tingis) ampliata</i>	Tingidae	Hemiptera	tall sward & scrub
<i>Trioza urticae</i>	Trioziidae	Hemiptera	Nettles
<i>Apis mellifera</i>	Apidae	Hymenoptera	Flowery places
<i>Bombus hypnorum</i>	Apidae	Hymenoptera	shaded woodland floor; tall scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera	tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera	tall sward & scrub
<i>Bombus pratorum</i>	Apidae	Hymenoptera	shaded woodland floor; scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera	tall sward & scrub
<i>Bethylus cephalotes</i>	Bethylidae	Hymenoptera	tall sward & scrub
<i>Crossocerus podagricus</i>	Crabronidae	Hymenoptera	decaying wood
<i>Passaloecus singularis</i>	Crabronidae	Hymenoptera	decaying wood
<i>Colpotrochia cincta</i>	Ichneumonidae	Hymenoptera	vegetated habitats
<i>Rhogogaster viridis</i>	Tenthredinidae	Hymenoptera	poplars
<i>Tenthredopsis nassata</i>	Tenthredinidae	Hymenoptera	grasses
<i>Nemophora degeerella</i>	Adelidae	Lepidoptera	shaded woodland floor
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera	tall sward & scrub
<i>Pleuroptya ruralis</i>	Crambidae	Lepidoptera	nettles
<i>Hypena proboscidalis</i>	Erebidae	Lepidoptera	tall sward & scrub

<i>Epirrhoe alternata</i>	Geometridae	Lepidoptera	tall sward & scrub
<i>Idaea aversata</i>	Geometridae	Lepidoptera	tall sward & scrub
<i>Ochlodes sylvanus</i>	Hesperiidae	Lepidoptera	tall sward & scrub
<i>Micropterix calthella</i>	Micropterigidae	Lepidoptera	arboreal
<i>Stigmella aurella</i>	Nepticulidae	Lepidoptera	tall sward & scrub
<i>Maniola jurtina</i>	Nymphalidae	Lepidoptera	tall sward & scrub
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera	tall sward & scrub
<i>Polygonia c-album</i>	Nymphalidae	Lepidoptera	tall sward & scrub
<i>Vanessa atalanta</i>	Nymphalidae	Lepidoptera	ubiquitous
<i>Pammene aurana</i>	Tortricidae	Lepidoptera	tall sward & scrub
<i>Coenagrion puella</i>	Coenagrionidae	Odonata	marshland
<i>Enallagma cyathigerum</i>	Coenagrionidae	Odonata	marshland
<i>Ischnura elegans</i>	Coenagrionidae	Odonata	marshland
<i>Dicranopalpus ramosus</i> (post 2015)	Phalangiidae	Opiliones	ubiquitous
<i>Leiobunum rotundum</i>	Phalangiidae	Opiliones	arboreal
<i>Atlantopsocus adustus</i>	Psocidae	Psocoptera	deciduous trees; alder
<i>Cepaea (Cepaea) hortensis</i>	Helicidae	Pulmonata	tall sward & scrub
<i>Limnephilus decipiens</i>	Limnephilidae	Trichoptera	acid & sedge peats; lake