

CONEY GREEN FARM & CROWTREES FARM PRIORITY HABITAT LOWLAND MEADOW & CHEGD GRASSLAND INVERTEBRATE SURVEY 2023 + 2021.

By Dave Bentley Entomology and Ecology Services

04/01/2024

Methods

Survey work commenced on 31/08/2023 after prolonged rain over the summer which had delayed hay harvesting. A canvas bag was used to sweep vegetation and the samples were sorted in the bag and on a tray. Given the grass was still damp and spoiled the results a second visit was made the day before harvest (03/09/2023) in a now dry habitat with more plentiful insects in flight. A vacuum survey and a repeat canvas bag survey were conducted. The species list includes results from 2021 when a litterpick was conducted along the brook and an invertebrate survey was conducted at the same time. A few casual records of Odonata, butterflies, bees and beetles are added in to the results. The table below is a summary of the spreadsheet records. The survey missed the high summer and spring invertebrate activity. The survey represents a fraction of what could be present. The dung beetle fauna was not examined (after the hay is cropped the farmer grazes sheep until the spring). The canal water and fen strip were NOT surveyed.

The site

The Priority Habitat and CHEGD grasslands are bisected by Withins Brook which has a river and fen scrub habitat, and several huge veteran Sycamore trees. It also has a patch of failing Elm trees (which could not be identified) which have their own leaf hopper species.

** Brown Hare have been recorded in the adjacent meadow to the northwest. Otters spraints are known from the bridge at the north apex of the site and Otters are recorded on the canal. Reed Bunting, Lapwing and Skylark have been recorded breeding here during the life of the current project.

Both the large hay meadows have permanent wet areas, seepage lines, inundation areas and waterside habitats and have hedgerows adjacent.

The survey shows the value of the Lowland Meadow Priority Habitat and CHEGD grassland for invertebrates. Indicator plants, Waxcap CHEGD, mammals, birds and invertebrates are all of high value.

Results

400 taxa were recorded:

The six Nationally Scarce species (**red** on the species list below):

<i>Hypera meles</i> *	Furrow-nosed Red Clover Weevil	Nationally Notable A
<i>Aphrophora major</i> *	Largest Fen Froghopper	Nationally Notable B
<i>Hippodamia variegata</i>	Adonis Ladybird	
<i>Catapion pubescens</i> *	Low-foreheaded Apion Weevil	Nationally Notable B
<i>Oxystoma cerdo</i>	Pinch-nosed Apion Weevil	Nationally Notable B
<i>Isotoma riparia</i> *	1-striped Springtail	Notable

*4 of the above are Greater Manchester first site records,

52 additional taxa are Greater Manchester first records only so far recorded in Elton Reservoir area (amber on the species list), with some of these being Vice-county first records. NB 3 of these are woefully unrecorded Aphids and can be ignored. NB two of the Planthopper bugs indicated have pre 1960 Greater Manchester records.

77 additional taxa have to date been recorded in 1-4 other Greater Manchester sites (green on the species list). Just one other known site shifts the record to green.

The national status, Greater Manchester status from records, and for comparison, Cheshire status from records are given. NBN Atlas, iRecord, rECOrd, JNCC Taxon List, taxa websites and own dataset was consulted.

Additionally the habitat requirements of all species is given.

Discussion

The species list has plenty of species associated with the flower meadow and rough habitat of the grasslands.

The grasslands have several wet and damp bits within them and these attract plenty of wetland species. Some records show that the meadow is the terrestrial habitat of fly species breeding in the canal. The canal alongside is filled with the Red-data listed Whorled Milfoil, told from turions. We know it is present and abundant for we found much when taking out Water-soldier plants along this length.

Several of the species are vice county firsts, or North West first records. One is a national first record for the Finnish expert who is preparing a paper on why the Minute Flower Bug *Orius horvathi* had been hiding an undescribed species. There are a mere handful of UK records of *O horvathi* and ours, he says, is the undescribed species so a UK first.

The weevils *Stenopeterapion tenue* is a VC59 first, with 4 other records in Cheshire.

The spot-winged fly *Geomyza hackmani* is a VC59 first, with two Cheshire records, and still described in the 2020 Dipterist course booklet as rare and southern in marshes. Verified with Martin Drake.

Sminthurinus elegans and *S aureus* are now added to the NW list having escaped the recording recent Springtail recording effort of Ben Deed.

One of the Orange and White-striped Leafhoppers (we have both) *Mocydiopsis parvicauda* is the only record in the NW region. Verified by national recorder Alan Stewart. There are around 60 GB records, mostly southern but some in North Shropshire and Sheffield. "Local" on British Bugs website. Ours is the most northern record.

The NA Weevil *Hypera meles* and the NB *Catapion pubescens* have each one other modern NW England recorded site at Woolston Eyes SSSI. Both verified by Mark Gurney the national weevil recorded. *Catapion pubescens* is on Old Hall Farm Lowland Meadow Priority Habitat too.

The Australian Ladybird *Rhyzobius lophanthae* excited the national recorder Peter Brown, being the first NW record, and most northern record but to us this is just an alien.

True Bug *Tytthus pygmaeus*, not more than 70 known GB sites, the fourth in NW England.

Liminia unguicornis, a Snail-killing Fly, the third GM record, and the first for 30 years, known from the wetland at Moss Shaw Farm Radcliffe where the GMEU walked the site and reported to Bury Council

that there was probably insufficient wildlife to stop an opencast coal mine. Within weeks 17 Great Crested Newt ponds were recorded as well as breeding Snipe, Redshank and great invertebrates and local recorders stopped the coal mine development.

The Withins Brook deserves mention as it is a lowland stream with characteristics more associated with generally cleaner Greater Manchester foothills streams. The species present include Stonefly *Leuctra fusca* (Score 10), the River Limpet, Mayfly *Baetis vernus* (2 GM records), the Riffle Beetle *Elmis aenea* and a number of caddisfly species including *Sericostoma personatum* (Score 10) and several 7 scoring species. The score is the BMWP Score and 10 indicates pollution intolerant species.

CONEY GREEN FARM & CROWTREES FARM, RADCLIFFE, BURY - INVERTEBRATE SURVEY 2023 - DAVE BENTLEY

PRIORITY HABITAT LOWLAND MEADOW & WAXCAP CHEGD MEADOWS SOUTH OF WITHINS LANE

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Methods include direct canvas bag netting, vacuuming, beating, shaking, hand-searching. Pond net used in stream +pond in 2021 - results added in.

Explanatory notes at foot of table

TOTAL INVERTEBRATE TAXA: 400 taxa

Broad	Eng/ W	GM	Ches h	Habitat	Habitat per literature	No of plots / sam ples
Habi- tat	Sta- tus	Sta- tus	Sta- tus	simplified		

PROTOZOA:

<i>Ephydatia fluviatilis</i>	Green Sponge	A		NC	NC	Wetland	Canal/river/lake on hard substrate	1
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LUMBRICIDAE: EARTHWORM : 2 species:

<i>Lumbricus rubellus</i>	Red Worm	T	C	C	C	Wood edge	Least habitat specific Earthworm	1
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<i>Lumbriculus variegatus</i>	Oligochaete Worm	W	C	C	C	Wetland	Wetland shallows	1
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HIRUDINEA: LEECHES:

<i>Glossiphonia complanata</i>	Grey Mollusc Leech	A	C	C	C	Wetland	Streams, ponds, swamps with molluscs	1
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TRICLADIDA: FLATWORMS:

<i>Dendrocoelum lacteum</i>	Milky Flatworm	A	C	C	C	Wetland	Ponds, slow streams	1
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<i>Polycelis nigra</i>	Black Flatworm	A	C	C	C	Wetland	Lowland streams, lakes, ponds	1
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MOLLUSCA: SNAILS, MUSSELS & SLUGS: species:

<i>Aegopinella nitidula</i>	Smooth Glass Snail	T	C	C	C	Wood edge	Woods, hedges, gardens, roughs, waste	1
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<i>Cepaea hortensis</i>	White-lipped Banded Snail	T	C	C	C	Wood edge	Many habitats, wetter than nemoralis	1
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<i>Cepaea sp</i>								
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<i>Cornu aspersum</i>	Garden Snail	T	A	C	C	Wood edge	Woods, hedges, gardens	2
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<i>Monacha cantiana</i>	Pink Kentish Snail	T	A	L	C	Roughs	Roadside, railways, rough ground	1
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<i>Nesovitrea hammonis</i>	Rayed Glass Snail	T	C	C?	C?	Wood edge	Widespread + acid woods	1
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<i>Oxyloma elegans</i>	Pfeiffer's Amber Snail	W	C	C	C	Wetland	Wetlands	1
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<i>Ancylus fluviatilis</i>	River Limpet	A	C	C	C	Streams	Clean, stony streams	1
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<i>Bithynia tentaculata</i>	Operculate Snail	A	C	C	C	Wetland	Permanent ponds, canals, lakes	1
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<i>Planorbis carinatus</i>	Keeled Ramshorn	A	C	C	C	Wetland	Streams, river, ponds, lakes	1
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<i>Ampullaceana balthica</i> (Lym per)	Wandering Snail	A	C	C	C	Wetland	Ponds	1
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<i>Sphaerium corneum</i>	Horny Orb Mussel	A	C	C	C	Wetland	Ponds and lakes	1
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<i>Arion subfuscus</i>	Yellow-slimed Dusky Slug	T	C	C	C	Roughs	All habitats, disturbed or natural	1
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<i>Arion sp</i>	[Large Arion not determined]							1
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<i>Deroceras reticulatum</i>	Netted Field Slug	T	C	C	C	Roughs	All open habitats (not big wetlands)	1
<i>Deroceras invadens</i>	Tramp Slug (pale pore)	T	A	C	C	Roughs	Disturbed habitats	2
<i>Deroceras laeve</i>	Marsh Slug	W	C	C	C	Wetland Wood edge	Wetlands, also mountains	1
<i>Limax maximus</i>	Leopard Slug	T	C	C	C	Wood edge	Everywhere, BL woodland preferred	1
HYMENOPTERA:		BEES, WASPS, ANTS, SAWFLIES: taxa:						
Ant species:								
<i>Lasius niger</i>	Common Hairy-faced Black Ant	T	C	L	C/L	Roughs	Open habitats	4
<i>Myrmica ruginodis</i>	Long-spined Red Ant	T	C	C/L	C	Roughs	Most habitats, rural or urban	2
<i>Myrmica scabrinodis</i>	Right-angle-antennaed Red Ant	W+	C/L	L	L	Wetlands	Many natural habitats, bogs.	3
Bee species:								
<i>Andrena sp</i>	Horizontal mines					Flower meadows	Vertical cliffs of clay	1
<i>Apis mellifera</i>	Honey Bee	T	A	C	C	Flower meadows	Domesticated; some feral colonies	3
<i>Bombus lapidarius</i>	Large Red-tailed Bumblebee	T	C	C	C	Flower meadows	Gardens, open countryside, woodland	4
<i>Bombus lucorum (stricto)</i>	White-tailed Bumblebee	T	C	C/L	C	Flower meadows	Most habitats except uplands	4
<i>Bombus pascuorum</i>	Common Carder Bee	T	C	C	C	Flower meadows	Wide variety of habitats	2
<i>Bombus terrestris</i>	Buff-tailed Bumblebee	T	C	C	C	Flower meadows	Most habitats inc urban, not montane	4
<i>Halictus tumulorum</i>	Bronze Furrow Bee	T	C/I	VL	VL	Flower meadows	Miners in bareish horizontal ground	3
other Hymenoptera taxa:								
<i>Vespula vulgaris</i>	Common Wasp	T	C	C	C	Wood edge	Open habitats/urban. Burrows, buildings, trees.	2
<i>Acrodactyla quadrisculpta larva</i>	<i>Tetragnatha montana</i> spider parasite as larvae	T	?	NC	NC	Wood edge	Parasite of common spider named	1
<i>Achaisus oratorius</i>	Black & White Ichneumon	T	L	VL	VL	Wood edge	Hedges/ copses. Attacks Lepidoptera	1
<i>Ichneumon</i> (numerous species)		T						7
<i>Micro wasps</i> (numerous species)		T						8
<i>Symphata</i> (caterpillars)	Sawfly caterpillar	T						7
MYRIAPODA:		CENTIPEDES & MILLIPEDES: species:						
<i>Lamytetes emarginatus</i>	Australian One-eyed Centipede	T	A	NC	NC	Roughs	Damp habitats, arable, heath, moor, riverside	1
<i>Lithobius forficatus</i>	Common Lithobius Centipede	T	C	C	C	Roughs	Urban, suburban, many rural areas	1
ORTHOPTEROIDEA		GRASSHOPPERS (+ EARWIG): species:						
<i>Omocestus viridulus</i>	Common Green Grasshopper	T	C	C/L	C/L	Roughs	Old grassland, damp meadows, rides	3
<i>Chorthippus brunneus</i>	Field Grasshopper	T	C	C/L	C	Roughs	Unmanaged grassland, roughs, heaths	4
<i>Forficula auricularia</i>	Common Earwig	T	C	C	C	Wood edge	Forests, agricultural, suburban areas	2
ARACHNIDA:		SPIDERS, HARVESTMEN, MITES: taxa:						
Spider species:								
<i>Agalenatea redii</i>	Ruddy Orbweb Spider	T	L	VL	L	Roughs	Heather, Gorse, roughs, damp grass	4
<i>Araniella cucurbitana</i>	Common Cucumber Spider	T	C	VL	C/L	Wood edge	Trees, woods, hedges	1
<i>Araneus diadematus</i>	Garden Cross Orb-web Spider	T	C	C	C	Roughs	Wide range of habitats	2
<i>Araneus quadratus</i>	4-spot Orb-web Spider	T	C/L	C	C	Roughs	Tall grasses, heather, gorse	7
<i>Larinioides cornutus</i>	Shield Orb-web Spider	W	C	C	C	Wetland	Marshes, reeds, damp grass	7

<i>Dictyna arundinacea</i>	Yellow & Brown Meshweaver Spider	T	C/L	L	C/L	Wood edge	Roughs, wood edges, hedges, Gorse/Heather	4
<i>Ero cambridgei</i>	Pirate Spider	T	C	VL	L	Wood edge	Bushes, trees low vegetation	1
<i>Pirata piraticus</i>	Cabin Hooks Otter Spider	W	C	C	C	Wetland	Wetlands, bogs	3
<i>Alopecosa pulverulenta</i>	Dusty Wolf Spider	T	C	L	C/L	Roughs	Heath, roughs, moors, quarries	1
<i>Pardosa amentata</i> (very banded)	Lump-hammer Wolf Spider	T	C	L	C	Roughs	Wide range, inc gardens	2
<i>Pardosa pullata</i>	Bolster-chisel Wolf Spider	T	C	C/L	C	Roughs	Grass, heath, moor, woods, waste	1
<i>Pardosa sp</i>	Wolf Spider (not determinable)							9
<i>Trochosa ruricola</i>	Dark-fore-legged Wolf Spider	W	C	L	L	Wetland	Damp grass, marshes, ditches	2
<i>Pisaura mirabilis</i>	Nurseryweb Spider	T	C/L	C	C	Roughs	Grassland, heaths, open woods	6
<i>Clubiona diversa</i>	Hoof-palped Yellow Sac Spider	W	L	L	L	Wetland	Dry habitats in South Eng, bogs in North	3
<i>Clubiona pallidula</i>	Red & Yellow Sac Spider	T	L	VL	C/L	Wood edge	Trees, shrubs, gardens	2
<i>Pachygnatha clerki</i>	Tooth-fanged Long-jawed Hunting Spider	W	C	C	C	Wetland	Marshes. By water	3
<i>Pachygnatha degeeri</i>	Least Long-jawed Hunting Spider	T	C	C/L	C/L	Wood edge	Woodland rides to derelict land	6
<i>Tetragnatha extensa</i>	Banded V-marked Long-jawed Web-spinner	W	C	C	C	Wetland	Low veg close to/ over water	9
<i>Tetragnatha montana</i>	Paler solid-coloured Long-jawed Web-spinner	T	C	C	C	Wood edge	Low veg, bushes, trees	1
<i>Tibellus oblongus</i>	Less-spotted Tibellus	T	C/L	L	L	Roughs	Roughs, marshland, heaths	2
<i>Enoplognatha</i>								1
<i>Phylloneta impressa</i>	Banded-leg Therid Spider	T	L	L	L	Wood edge	Gorse, oak, nettles, thistles	3
<i>Philodromus aureolus</i>	Common Running Crab Spider	T	C/L	VL	C/L	Wood edge	Trees, scrub, hedge, woods	2
<i>Xysticus cristatus</i>	Common Anchor Crab Spider	T	C	C/L	C	Roughs	Low vegetation but not woodland	9
<i>Baryphyma trifrons</i>	Yellow-legged Dark-bodied Money Spider	W	L	L	VL	Wetland	Fens, marshes, swamps, damp grass, dunes	6
<i>Bathyphantes gracilis</i>	Wide-loop Money Spider	T	C	C	C	Roughs	Roughs, heaths, woods, marsh	1
<i>Cnephalocotes obscurus</i>	Saw-edged-palp spider	T	C/L	C/L	C/L	Roughs	Detritus, moss, other vegetation	2
<i>Dicymbium nigrum</i>	Orange & Brown Money Spider	W+	C/L	L	C/L	Wetland	Bogs, marsh, wood, heath, roughs	1
<i>Erigone atra</i>	Aeronaut Money Spider	T	C	C/L	C	Roughs	Aeronaut. Many wild habitats	1
<i>Gnathonarium dentatum</i>	Pelican-palped Money Spider	W	C/L	L	C/L	Wetland	Lowland wetlands, inundation grassland	1
<i>Microlinyphia pusilla</i>	Brown spotted Linyphid Spider	W	C	L	C	Wetland	Roughs, damp grassland	2
<i>Neriere clathrata</i>	W-marked Linyphid Spider	T	C/L	C/L	C	Wood edge	Wide range in leaf litter and low veg	1
<i>Oedothorax fuscus</i>	Brown Money Spider (seen by Rich Burkmar)	T	C	C/L	C	Roughs	Grassland, wetland, woodland, heath	1
<i>Oedothorax retusus</i>	Two-pitted Money Spider	T	C	C/L	C	Roughs	Grassland, farmland grass	1
<i>Oedothorax sp</i>								
<i>Pelecopsis parallelus</i>	Scutummed Fingered Money Spider	T	C/L	VL	VL	Flower meadows	Grasslands, moss, detritus, stones	2
<i>Tenuiphantes tenuis</i>	Bolas Linyphid Spider (was Lepthy..)	T	C	C/L	C	Roughs	Low veg, moss, leaf litter, grassland, wetland	1
<i>Tenuiphantes zimmermanni</i>	Spots-n-stripes Linyphid Spider (was Lepthy..)	T	C	C/L	C	Wood edge	Litter and logs in Woods. Heaths	1
Harvestman species:								
<i>Leiobunum rotundum</i>	Orange & Black Harvestman	T	C	L	C	Wood edge	Woods, hedges, rocks, gardens, heath	1

<i>Oligolophus tridens</i>	Short-saddled Harvestman	T	C	L	C	Roughs	Most habitats, woods, gardens, roughs	3
<i>Paroligolophus agrestis</i>	Pincered Harvestman	T	C	C	C	Roughs	Most habitats inc	4
<i>Platybunus (Rilaena) triangularis</i>	Low-crowned Harvestman	T	C	C/L	C/L	Wood edge	Wood, grassland, bushes	1
Mite taxa:								
<i>Anystidae</i>	Whirligig Mite	T				Roughs	Ground layer	2
<i>Camisiidae</i>	Three-lined fringed Beetle Mite	T				Roughs	Ground layer	4
<i>Astigmatina</i>	Soft Mite	W				Roughs	Ground layer	1
<i>Galumnidae</i>	Forward-pointed-wing Mite	T				Roughs	Ground layer	4
<i>Ceratoppia sp</i>	Horned Bulb Mite	T				Roughs	Ground layer	1
<i>Euzetes globulus (nitens?)</i>	Imm Large Helmet Mite	T	C	C?	C	Roughs	Ground layer	3
<i>Bdellidae</i>	Snout Mite	T				Roughs	Ground layer	5
	1.5mm Soft Red Velvet Mite	T						
<i>Erythraeidae</i>		T				Roughs	Ground layer	2
<i>Olgasamidae</i>	50/50 orange hard					Roughs	Ground layer	3
<i>Parasitidae</i>	Orange Hard Mite	T				Roughs	Ground layer	4
MICROCRUSTACEA	MICROCRUSTACEANS: taxa							
<i>Cyclops spp</i>	Cyclopic Copepods	A				Wetland	Standing waters/wet marshes	1
MALACOSTRACA :	CRUSTACEANS: species:							
<i>Asellus aquaticus</i>	Common Hoglouse	A	C	C	C	Wetland	Wide variety of waterbodies	2
<i>Gammarus pulex (stricto)</i>	Freshwater Shrimp	A	C	C	C	Wetland	Running water mostly/large waterbodies	1
	Common Striped Woodlouse (head dot, lateral bands)	T	C	C	C	Roughs	Hedges, roughs, woods, gardens	4
<i>Philoscia muscorum</i>	Common Rough						Wide range, drier than <i>Oniscus</i>	
<i>Porcellio scaber</i>	Woodlouse	T	C	C	C	Roughs		2
MEGALOPTERA:	LACEWINGS & SCORPION FLIES: species:							
	Lacewing larva							3
<i>Sialis lutaria</i>	Common Alderfly	A+	C	L	C	Wetland	Ponds with reedswamp and silt	1
EPHEMEROPTERA:	Mayflies: 1 species:							
<i>Baetis rhodani</i>	Common Stream Mayfly	A+	C	C	C	Streams	Riffles in streams & rivers	1
<i>Baetis vernus</i>	Medium Olive Mayfly	A+	C/L	NC	L	Streams	Pools/margins rivers/streams	1
PLECOPTERA:								
<i>Leuctra fusca</i>	Dark Stonefly	A+	C/L	VL	NC	Wetland	Mainly upland streams	1
TRICHOPTERA:	Caddisflies: species:							
<i>Limnephilus rhombicus</i>	Rhomboid-patch Caddis	A+	L	L	L	Wetland	Still and slow waters	1
<i>Limnephilus lunatus</i>	Crescent-moon Caddis	A+	C	C	C	Wetland	Streams, ponds, lakes, marshes	1
<i>Micropterna lateralis</i>	Brown Stream Caddis	A+	C	C/L	C	Streams	Small temporary streams/ditches	1
	Brown & Yellow Stream Caddis	A+	C	C	C	Streams	Small streams, can be semi-permanent	1
<i>Micropterna sequax</i>								
<i>Potamophylax cingulatus</i>	Pale-eyed River caddis	A+	C/L	C/L	C/L	Streams	Streams and rivers	1
<i>Potamophylax latipennis</i>	Brown-eyed River Caddis	A+	C	C/L	C/L	Streams	Streams, rivers, lakes	1
	Multi-hooked Cased						Rivers, streams, stony lakes	
<i>Sericostoma personatum</i>	Caddis	A+	C	C/L	C/L	Streams		1
<i>Hydropsyche angustipennis</i>	Dark Brown Caseless Caddis	A+	C	C	C	Streams	Rivers, streams, lake outfalls	1
<i>Rhyacophila dorsalis</i>	Branched Gill Caddis	A+	C	C	C	Streams	Clean rivers & streams	1
ODONATA:	DRAGONFLIES & DAMSELFLIES: species:							

<i>Aeshna cyanea</i>	Southern Hawker Dragonfly	A+	C	C	C	Wetland	Ponds + margins	1
<i>Aeshna grandis</i>	Brown Hawker Dragonfly	A+	C/L	C	C	Wetland	Ponds + margins	1
<i>Aeshna mixta</i>	Migrant Hawker	A+	C	C/L	C	Wetland	Standing water, hedges, wood edge	1
<i>Anax imperator</i>	Emperor Dragonfly	A+	C	C	C	Wetland	Deeper Ponds + margins	3
<i>Libellula depressa</i>	Broad-bodied Chaser Dragonfly (up)	A+	C	C/L	C	Wetland	Shallow muddy bottom ponds + margins	1
<i>Sympetrum danae</i> (photo)	Black Darter	AH	L	L	L	Wetland	Heaths, moors, bogs. Sphagnum	1
<i>Sympetrum striolatum</i>	Common Darter Dragonfly	A+	C	C	C	Wetland	Ponds + margins	3
HEMIPTERA:		WATER BUGS:						
<i>Velia caprai</i>	Water Cricket	A	C	C	C	Wetland	Mostly rivers/streams: little vegetation	1
HEMIPTERA:		LAND BUGS: taxa:						
Shorebug species:								
<i>Saldula saltatoria</i>	Common Shorebug	W	C/L	L	C/L	Wetland	Pond and ditch margins. Predator.	1
Shieldbug species:								
<i>Aelia acuminata</i>	Bishop's Mitre Shieldbug	T	C/L	VL	L			1
<i>Dolycoris baccarum</i>	Sloe (Hairy) Shieldbug	T	C	C/L	C	Wood edge	Roasaceae. Many habitats, hedges, wood edges	9
<i>Palomena prasina</i>	Green Shieldbug	T	C	C	C	Wood edge	Trees and shrubs, inc gardens	6
<i>Zicrona caerulea</i>	Blue Shieldbug	W+	C	C/L	C/L	Wetland	Attacks beetles which feed on Willowherb	1
Lacebug species:								
<i>Physatocheila dumetorum/confinis</i>	Lichen Lacebug	T	L	NC	VL	Wood edge	Lichen on trees, esp Hawthorn	1
Flower Bug species:								
<i>Anthocoris</i>	Unidentifiable nymphs							2
<i>Orius not horvathi</i>	Unnamed Minute Flower Bug	T	?	NC	NC	Wood edge	Deciduous trees, inc Elm, Lime	2
Plant Bug species:								
<i>Deraeocoris lutescens</i>	Oak Plant Bug	T	C/L	C/L	C/L	Wood edge	Deciduous trees inc Oak	1
<i>Lygus rugulipennis</i>	Long-haired Tarnished Plant Bug	T	C	C/L	C	Wood edge	Wide variety of herbs & shrubs	7
<i>Notostira elongata</i>	Dimorphic Hairy Unpunctured Grassbug	T	C/L	C/L	C	Roughs	Grasslands	9
<i>Phytocoris varipes</i>	Long-legged Grass Bug	T	C/L	L	L	Roughs	Rough grassland flowers/seeds	1
<i>Pithanus maerkelii</i>	Pale-legged Black Ant-like Bug	T	C/L	L	L	Roughs	Damp grassland. Predatory	1
<i>Plagiognathus chrysanthemi</i>	Green Spotted-legged Grassbug	T	C/L	L	L	Flower meadows	Grass & wastelands: Asteraceae	1
<i>Stenodema calcarata</i>	2-spurred Punctured Grassbug	T	C	L	C	Roughs	Grass seeds	2
<i>Stenodema holsata</i>	Short Punctured Grassbug	T	C/L	VL	VL	Roughs	Acid grasslands, mostly uplands	1
<i>Stenodema laevigata</i>	Unspurred Punctured Grassbug	W	C	L	C	Wetland	Damp areas - grass seeds	8
<i>Tytthus pygmaeus</i>	Marsh Leaf Bug	W	L	NC	NC	Wetland	Marsh, with Leaf Hoppers	1
Ground Bug species:								
<i>Cymus melanocephalus</i>	Punctured Dark-scutellum Ground Bug	W	C	L	L	Wetland	Damp areas trefoil, loosestrife, rush	4
<i>Drymus sylvaticus</i>	V-marked Buff Ground Bug	T	C	VL	L	Roughs	Moss, grass, leaf litter	2
<i>Heterogaster urticae</i>	Grey Nettle Bug	T	C/L	L	L	Wood edge	Nettles	2
<i>Peritrechus geniculatus</i>	Bent-kneed Ground Bug	T	C/L	NC	VL	Roughs	Dry grassland/ open habitats	2

<i>Scolopostethus nymph</i>	(one of 3 species in area)	T		L/NC					1
<i>Stygnocoris sabulosus</i>	Shiny Hairy Yellow-legged Ground Bug	T	C/L	VL	VL	Heaths	Dry habitats, sandy soils		2
Damselbug species:									
<i>Himacerus major</i>	Grey Damselbug (dark striped femurs)	W+	C/L	VL	L	Wetland	Grassy habitats, inc dunes & salt marshes		1
<i>Nabis ferus</i>	Hairy Grey Field Damselbug	T	C/L	L	L	Roughs	Dry, grassy habitats		2
<i>Nabis flavomarginatus</i>	Yellow-margined Damselbug	T	C/L	L	L	Roughs	Grassland, especially damper ones		3
<i>Nabis rugosus</i>	Common Damselbug	T	C/L	L	L	Roughs	Grassy habitats		2
<i>Nabis limbatus</i>	Marsh Damselbug (small-winged broad-edged)	W	C/L	C/L	C	Wetland	Damp grassland/wet meadows		4
Stiltbug species:									
<i>Berytinus minor</i>	Pale-kneed Stiltbug	T	L	VL	VL	Flower meadows	Clover & Lesser Trefoil		4
Larger Leafhopper species:									
<i>Aphrodes bicincta/diminuta</i>	Leafhopper (with +- identical females)	T/ W	L/VL	NC	NC		Dry habitats/ wet meadows		1
<i>Arthaldeus pascuellus</i>	Barbed Leafhopper	T	C/L	VL	VL	Roughs	Grasses, esp drier places		8
<i>Balclutha punctata</i>	Dark-spotted Orange Leafhopper	T	C/L	VL	VL	Wood edge	Clearings in woods		2
<i>Cicadella viridis</i>	Large Green Leafhopper	W	C	C	C	Wetland	Damp grasslands, marshes		4
<i>Cicadula quadrinotata</i>	Long-antennaed 4-spot Leafhopper	T	C/L	VL	L	Wetland	Damp grassland, rush, sedge		2
<i>Conosanus obsoletus</i>	Part-winged Buff Leafhopper	W	C/L	NC	VL	Wetland	Damp habitats with rushes		2
<i>Deltocephalus pulicaris</i>	Bart Simpson Leafhopper	T	C/L	NC	VL	Roughs	Mostly short, dry grassland		1
<i>Errastumus (Adarrus) ocellaris</i>	Crossed-plates Eyed Leafhopper	T	C/L	L	VL	Roughs	Dry/moist tall grassland, ruderals		3
<i>Euscelis incisus</i>	Mottled Stubby Leafhopper	T	C/L	L	VL	Roughs	Medium most grasslands		9
<i>Macrosteles laevis</i>	a 6-spot Smiling Ghost Leafhopper	T	C/L	VL	NC	Roughs	Drier grasslands, disturbed areas		2
<i>Macrosteles sexnotatus</i>	a 6-spot Smiling Ghost Leafhopper	W	C/L	VL	VL	Roughs	Moist open habitats, Juncus, Carex, Clover		2
<i>Macrosteles viridigriseus</i>	a 6-spot Smiling Ghost Leafhopper	W	C/L	NC	VL	Wetland	Marshes, pond margins		4
<i>Macrosteles (females only)</i>	a 6-spot Smiling Ghost Leafhopper	W				Wetland	Marshes, pond margins		
<i>Mocytia crocea</i>	Orange & White-striped Leafhopper	T	C/L	VL	VL	Roughs	Tall grasses in woods & meadows		3
<i>Mocydiopsis parvicauda</i>	Orange & White-striped Leafhopper	T	L	NC	NC	Roughs	Grassy more acidic habitats		1
<i>Notus flavipennis</i>	Golden-winged Leafhopper	W	C/L	VL	NC	Wetland	Marsh sedges esp. alkaline soil		1
<i>Paluda adumbrata (Rhopalopyx)</i>	Leopard Leafhopper	T	L	NC	NC	Roughs	Dry or calcareous hillside grasses		1
<i>Paluda flaveola</i>	Indented Yellow Leafhopper	W	VL	NC	NC	Wetland	Moist shady site on tall wetland grasses		1
<i>Psammotettix confinis</i>	Red-eyed Goblet Leafhopper	T	C	NC	VL	Wood edge	Woodland glades		4
<i>Streptanus sordidus</i>	Broad Buff Leafhopper								
	Spotted pronotum, brown abdomen	W+	C/L	NC(<60)	VL	Wetland	Damp, grassy places		1
Small Leafhopper species:									
<i>Edwardsiana ulmiphagus</i>	Elm Small Leafhopper	T	VL	NC	NC	Wood edge	Elm trees		1
<i>Eupteryx urticae</i>	C-marked dark-legged 15 spot Small Leafhopper	T	C	C/L	L	Wood edge	Nettles & other low vegetation		2
<i>Zyginidia scutellaris</i>	3-spotted Yellow Small Leafhopper	T	C/L	VL	VL	Roughs	Rough grass		6
Planthopper species:									
<i>Conomelus anceps</i>	Marsh Short-winged Planthopper	W	C	VL	VL	Wetland	Damp areas/ Rushes		4

<i>Delphacodes venosus</i>	Pale Stumpy Planthopper	W+	L	VL	VL	Wetland Wood edge	Sphagnum, Sedge, Rush, Festuca, Molinea Often on Bracken in woods	1
<i>Ditropis pteridis?</i>	Bracken Planthopper	T	C/L	VL	L			1
<i>Javesella pellucida</i>	Stripe-faced Long-winged Planthopper	T	C/L	VL	VL	Roughs	Enriched grasslands Damp areas.	2
<i>Muellerianella fairmairei</i>	3-Banded Planthopper	W	C/L	NC(<60)	NC	Wetland	<i>Deschampsia cespitosa</i>	8
<i>Stenocranus minutus</i>	Long-winged Long-nosed Planthopper	T	C/L	VL	VL	Roughs	Diverse grassy habitats	2
Frog hopper species:								
<i>Aphrophora major</i>	Largest Fen Frog hopper	W	NB	NC	L	Wetland	Nice marshes with willow	2
<i>Neophilaenus lineatus</i>	Pale-edged rear-spotted Frog hopper	T	C	C	C	Roughs	Grassland	7
<i>Philaenus spumarius</i>	Cuckoospit Frog hopper	T	C	C	C	Roughs	Wide range of plants inc gardens	7
Jumping Plant Louse species:								
<i>Cacopsylla sp</i>	Jumping Plant Louse	T	C/L	VL	VL			1
<i>Trioxa urticae</i>	Nettle Jumping Plant Louse	T	C	NC	VL	Wood edge	Nettles etc	1
Greenfly species:								
<i>Aphis fabae?</i>	Black Bean Blackfly Aphid	T	C	VL	VL	Wood edge	Spindle, Beans, other pants	1
<i>Atheroides serrulatus</i>	Orange Grass Aphid	T		NC	NC	Roughs	Grasses and sedges	2
<i>Megoura viciae</i>	Vetch Aphid	T	C?	VL	C?	Flower meadows	Trefoils and Vetches	3
<i>Microlophium carnosum</i>	Large Nettle Aphid	T	C	VL	C?	Wood edge	Nettles	4
<i>Myzus persicae</i>	Green Peach-Potato Aphid.dark feet, dark tip to long siphons	T	A	NC	C?	Flower meadows	Wide range of plants	2
<i>Aphid</i>	Many-sclerited Aphid	T						1
<i>Trama troglodytes</i>	Artichoke Tuber Aphid	T		NC	NC	Flower meadows	On roots of Thistles, Yarrow etc	1
<i>Aphid spp</i>	Aphid (Misc)	T						3
LEPIDOPTERA: BUTTERFLIES & MOTHS: 18 taxa:								
Butterfly species:								
<i>Aglais io</i>	Peacock Butterfly	T	C	C	C	Wood edge	Eggs Nettles. Adults:open woods, rides, edges	1
<i>Agalis urticae</i>	Small Tortoiseshell Butterfly	T	C	C	C	Wood edge	Eggs laid on Nettles. Many habitats including gardens	1
<i>Lycaena phlaeas</i>	Small Copper Butterfly	T	C	C	C	Flower meadows	Eggs on Sorrel & Dock. Flowers	1
<i>Maniola jurtina</i>	Meadow Brown Butterfly	T	C	C	C	Roughs	Eggs on grasses. Meadows, hedges, open woods.	3
<i>Pararge aegeria</i>	Speckled Wood Butterfly	T	C	C	C	Wood edge	Aphid honeydew; lays on tough grasses	2
<i>Pieris brassicae</i>	Large White Butterfly	T	C	C	C	Flower meadows	Eggs on Brassicas; Adult visits flowers	1
<i>Polygonia c-album</i>	Comma	T	C	C	C	Wood edge	Eggs laid on Nettles, Willows.	2
<i>Pyronia tithonus</i>	Gatekeeper Butterfly	T	C	C	C	Flower meadows	Eggs on grasses; Bramble, Co Fleabane, Ragworts etc	2
<i>Vanessa atalanta</i>	Red Admiral Butterfly	T	C	C	C	Wood edge	Nectar feeder. Lays on Nettles	3
Moth species:								
<i>Moth or caterpillar</i>		T						7
<i>Geometridae (other)</i>	Looper moth caterpillar	T						5
<i>Noctuidae (other)</i>	Moth caterpillar/damaged Adult	T						8

<i>Autographa gamma</i>	Silver Y Moth	T	C	C	C	Roughs	Range of low plants inc Nettles	1
<i>Catocala nupta</i>	Red Underwing	T	C/L	C	C	Wood edge	Willow + Poplar, carr, scrub, wood	1
<i>Noctua pronuba</i>	Large Yellow Underwing	T	C	C	C	Wood edge	Range of habitats: Dock, Nettle, Foxglove	1
<i>Coleophora sp</i>	cased micromoth caterpillar	T	C	(L)	(L)	Roughs	Tube-case-bearing larvae in tall vegetation	1
<i>Deilephila elpenor</i>	Elephant Hawk Moth	T	C	C	C	Roughs	Rosebay Willowherb	1
<i>Eupithecia subfuscata</i>	Grey Pug	T	C	C	C	Roughs	Range of herbs, flowers, leaves	1
<i>Mormo maura</i>	Old Lady Moth	W	C/L	C	C/L	Wetland	Variety of habitats near water, Blackthorn	1
<i>Spilosoma lubricipeda</i>	White Ermine Moth	T	C	C/L	C	Wood edge	Nettle, Dock etc	2
COLEOPTERA: BEETLES: taxa:								
Water Beetle species:								
<i>Gyrinus substriatus</i>	Common Pond Whirligig Beetle	A	C	C	C	Wetland	Permanent ponds	1
<i>Agabus bipustulatus</i>	Common Black Diving Beetle	A	C	C	C	Wetland	Permanent ponds	1
<i>Ilybius fuliginosus</i>	Side-banded Diving Beetle	A	C	C	C	Wetland	Permanent Ponds	1
<i>Rhantus suturalis</i>	3-spot Gold-speckled Diving Beetle	A	C/L	L	L	Wetland	Wide variety of ponds	1
<i>Hydroporus planus</i>	Common Small Brown Diving Beetle	A	C	C	C	Wetland	Ponds and marshy pools	1
<i>Anacaena globulus</i>	Brown Domed Scavenger Beetle	W	C	C	C	Wetland	Pond & stream edges, woodland pools	1
<i>Anacaena limbata</i>	Brown Domed Scavenger Beetle	W	C	C	C	Wetland	Well-vegetated marshes / pond edges	1
<i>Coelostoma orbiculare</i>	Black Domed Scavenger Beetle	W	C	C/L	C/L	Wetland	Marshes / pond edges	1
<i>Helophorus brevipalpis</i>	Golden Scavenger Beetle	W	C	C	C	Wetland	Marshes / pond edges	2
<i>Helophorus grandis</i>	Large-toothed Greater Scavenger Beetle	W	C	C	C	Wetland	Marshes / pond edges	1
<i>Helophorus obscurus</i>	Pale Brown Scavenger Beetle	W	C	C/L	C/L	Wetland	Muddy habitats pH 7 and above	1
<i>Elmis aenea</i>	Riffle Beetle	W	C	VL	L	Streams	Rivers, streams, esp headwaters, mossy riffles	1
<i>Cyphon padi</i>	Least Dark-headed Marsh Beetle	W	C	VL	C/L	Wetland	Marshes / pond edges	1
Leaf & Flea Beetle species:								
<i>Cassida rubiginosa</i>	Green Thistle Tortoise Beetle	T	C	C/L	C	Roughs	Roughs and tall herb, Creeping Thistle	1
<i>Chaetocnema hortensis</i>	Greenish Yellow-antennaed Erratic Flea Beetle	T	C/L	VL	C/L	Roughs	Grasses, wild & cultivated	1
<i>Longitarsus gracilis</i>	Pale Longitarsus Flea Beetle	T	L	NC		Flower meadows	Asteracea esp Ragwort	1
<i>Longitarsus atricillus</i>	Large dark-headed-dark-sutured Longitarsus	T	C/L	NC	NC	Flower meadows	esp Pea family	5
<i>Longitarsus luridus</i>	Common Dark Flea Beetle	T	C	VL	L	Roughs	Many plants, leaves, roots. Grass tussocks	4
<i>Longitarsus melanocephalus</i>	Narrowly-dark-sutured pale Longitarsus	T	C/L	VL	L	Flower meadows	Plantain	3
<i>Longitarsus pratensis</i>	Small dark headed pale-elytrad Longitarsus	T	C/L	NC	NC	Flower meadows	Plantain	8
<i>Neocrepidodera ferruginea</i>	Small Orange Wheat Flea Beetle	T	C/L	VL	C/L	Roughs	Wild & cultivated grasses	1
<i>Neocrepidodera transversa</i>	Large Orange Wheat Flea Beetle	T	C	L	C/L	Roughs	Various plants in many habitats	3
<i>Psylliodes chrysocephala</i>	Cabbage-stem Flea Beetle	T	C/L	VL	L	Flower meadows	Brassicaceae	2
<i>Psylliodes picina</i>	Smooth-headed Flea Beetle	W+	C/L	NC	VL :	Wetland	Phragmites, Phalaris, Salix, Birch, Oak, Hazel	1

Ladybird species:

<i>Coccidula rufa</i>	Red Marsh Ladybird	W	C	C	C	Wetland	Aphids, tall wetland grasses/reeds	2
<i>Coccinella 7-punctata</i>	Common 7 Spot Red Ladybird	T	C	C	C	Any	Anywhere with Aphids. Low herbage.	7
<i>Harmonia axyridis</i>	Harlequin Ladybird (red or black)	T	A	C	C	Any	Aphids. Trees, scrub, grass, marsh.	1
<i>Hippodamia variegata</i>	Adonis Ladybird	T	NB	L	C/L	Roughs	Dry & bare ground with tall herbs	1
<i>Propylea 14-punctata</i>	14 Spot Yellow Ladybird	T	C	C	C	Wood edge	Tall vegetation, trees, overwinters	3
<i>Psyllobora 22-punctata</i>	22 Spot Yellow Ladybird	T	C	C	C	Roughs	Low vegetation: mildew feeder	3
<i>Rhyzobius litura</i>	U-marked Ladybird	W+	C/L	L	C	Wetland	Grasses, thistle, nettle, rush, reed	8
<i>Rhyzobius lophanthae</i>	Australian Yellow Ladybird	T	A	NC	NC	Wood edge	On cypress and other trees	1
<i>Tytthaspis 16-punctata</i>	16 Spot Beige Ladybird	T	C/L	L	L	Roughs	Grassland: pollen, fungi, nectar	1

Ground Beetle species:

<i>Amara communis</i>	Part-punctured Sunshiner GB	T	C	L	C/L	Wood edge	Moss & leaf litter	2
<i>Amara lunicollis</i>	Mesophile Sunshiner GB	T	C	L	VL	Roughs	Open/semi-open habitats. Matted grassland.	1
<i>Anisodactylus binotatus</i>	Common Short-spur GB	W	C/L	L	L	Wetland	Damp meadows, arable & marsh	1
<i>Bembidion lampros</i>	12-rowed Ground Beetle	T	C	C	C	Roughs	Dry sunny habitats, esp gardens, agriculture	3
<i>Bembidion properans</i>	14-rowed Ground Beetle	T	C/L	VL	L	Roughs	Damp or shaded lowlands, esp grassland	2
<i>Pterostichus vernalis</i>	Spring Blackclock GB	T	C	L	L	Roughs		1

Rove Beetle species:

<i>Stenus aceris</i>	Camphor Beetle	T	L	VL	VL	Roughs	Lowland grass tussocks/moss in grass/wood	1
<i>Stenus cicindeloides</i>	Shining Camphor Beetle	W	C	L	C	Wetland	Wet grassland esp Juncus and others	1
<i>Stenus clavicornis</i>	Toadspawn Camphor Beetle	T	C	L	C	Roughs	Farmland/dry/damp	2
<i>Stenus fulvicornis</i>	Camphor Beetle	W	C/L	L	L	Wetland	Rush pasture etc	2
<i>Stenus junco</i>	Hairy-chested Black Camphor Beetle	W	C	L	C/L	Wetland	Wetlands of many kinds	2
<i>Stenus latifrons</i>	Camphor Beetle	W	C/L	VL	VL	Wetland	Lake margins, fens, swamps	1
<i>Stenus nanus</i>	Camphor Beetle	W+	C/L	VL	L	Roughs	Hay, arable margins, wet grass, sandy shores	1
<i>Stenus ossium</i>	Camphor Beetle	W	C/L	VL	L	Wetland	Tussocks in marshes, dryish grassland, dunes	3
<i>Stenus picipes</i>	Camphor Beetle	T	C/L	VL	L	Wetland	Dry to wet grassland	1
<i>Stenus similis</i>	Tube-bodied Camphor Beetle	T	C/L	L	C/L	Heaths	Drier grassland & heathland, mountains	6
<i>Acrotichis sp</i>	Feather-wing Rove Beetle (1mm)	T/W					Taken in ground vegetation	3
<i>Aleocharinae</i> (several species)	Brown Rove Beetles (various)	W				Wetland		4
<i>Metopsia clypeata</i>	Distinctive-head Rove Beetle	T	C/L	L	L	Roughs	Tussocks, leaf litter, dung, fungi	1
<i>Micropeplus staphylinoides</i>	Well-grooved Rove Beetle	T	C/L	VL	C	Roughs	Damp/wet decaying vegetation/ hay	1
<i>Philonthus carbonarius</i>	Green-winged Black Rove Beetle	T	C/L	L	C/L	Heaths	Open woods, heath-grassland	1
<i>Philonthus cognatus</i>	Bicolour-antennaed Black Rove Beetle	T	C	L	C/L	Heaths	Damp soil, open woods, heath-grassland	1
<i>Quedius levicollis</i>	Three-eye dot Rove Beetle	T	C/L	NC	L	Roughs	Open habitats on damp to drier soil	1

<i>Quedius semiobscurus</i>	Red-fringed-wing Rove Beetle	T	C/L	NC	VL	Roughs	Open drier habitats	1
<i>Tachinus rufipes</i>	Pale-edged Black Rove Beetle	T	C/L	VL	C	Roughs	Leaf litter, thick grass, dung, logs	1
<i>Tachyporus dispar</i>	8-hair-edged Yellow & Black Rove Beetle	T	C	VL	L	Roughs	Leaf litter, rotting grass, moss, soil surface	5
<i>Tachyporus hypnorum</i>	Bi-coloured-pronotum Yellow & Black Rove Beetle	W+	C	L	C/L	Wetland	Leaf litter, rotting grass, moss, soil surface	1
<i>Tachyporus nitidulus</i>	Yellow & Black Rove Beetle	T	C	NC	L	Wetland	Leaf litter, rotting grass, moss, soil surface	1
<i>Xantholinus linearis</i>	Narrow-necked Rove Beetle	T	C/L	L	C	Roughs	Dry, open situations	1
<i>Xantholinus longiventris</i>	Narrow-necked Rove Beetle	T	C	L	C	Roughs	Open situations, some damp	2
<i>Xantholinus</i>	(Unidentified female)							
Weevil species:								
<i>Apion frumentarium</i>	Orange Dock Weevil	T	C/L	C	C	Roughs	Docks	2
<i>Catapion pubescens</i>	Low-foreheaded Apion Weevil	T	Nb	NC	NC	Flower meadows	Trefoils	2
<i>Ceratapion onopordi</i>	Thistle Weevil	T	C/L	NC	L	Flower meadows	Thistles esp, grassland/brownfield	1
<i>Coelositona cambricus</i>	Welsh Sitona Weevil	W	C/L	VL	VL	Wetland	Greater Bird's-foot Trefoil	1
<i>Eutrichapion ervi</i>	Meadow Vetchling Seed Weevil Eye-beard, yellow/part antennae	T	C/L	VL	L	Flower meadows	Meadow Vetchling, vetches	2
<i>Eutrichapion viciae</i>	Yellow-legged Bearded Weevil	T	C/L	VL	VL	Flower meadows	Vetchling and Vetches	2
<i>Holotrichapion aethiops</i>	Vetch Weevil	T	L	NC	VL	Flower meadows	on Vetches	1
<i>Hypera meles</i>	Furrow-nosed Red Clover Weevil	T	NA	NC	VL	Flower meadows	Red Clover esp	1
<i>Hypera nigrirostris</i>	Black-nosed Green Clover Weevil	T	C/L	L	VL	Flower meadows	Clover & Bird's-foot-trefoil	5
<i>Hypera postica</i>	Clover Leaf Weevil	T	C/L	VL	VL	Flower meadows	Clover	1
<i>Ischnopterapion modestum</i>	Bird's-foot Trefoil Weevil	W	L	NC	NC	Wetland	Greater Bird's-foot Trefoil	1
<i>Ischnopterapion virens</i>	White Clover Weevil (green/purple)	T	L/C	VL	L	Flower meadows	White Clover	2
<i>Mecinus pascuorum</i>	Red-patched Ribwort Plantain Weevil	T	C/L	VL	L	Flower meadows	Ribwort Plantain	7
<i>Mecinus pyrastrer</i>	Black Ribwort Plantain Weevil	T	C/L	VL	L	Flower meadows	Ribwort Plantain	4
<i>Nedys quadrimaculatus</i>	Small White-patched Nettle Weevil	T	C	C/L	C	Wood edge	Nettles	1
<i>Oxystoma cerdo</i>	Small pinch-nosed antennae 1 yellow weevil	T	Nb	VL	L	Flower meadows	Tufted Vetch	1
<i>Parathelcus pollinarius</i>	Head-lights Nettle Weevil	T	C	L	L	Wood edge	Nettles	1
<i>Perapion curtirostre</i>	Common Black Dock Weevil	T+	C/L	VL	C/L	Roughs	Well vegetated areas with Rumex	1
<i>Perapion hydrolapathi</i>	Straight-sided Blue Dock Weevil	T+	C/L	NC	C/L	Roughs	Docks	1
<i>Protapion apricans</i>	Smooth Dark-legged Weevil	T	C/L	VL	C/L	Flower meadows	Red Clover	7
<i>Protapion assimile</i>	Rough Dark-legged Weevil	T	C/L	VL	VL	Flower meadows	On Clover	8
<i>Protapion fulvipes</i>	Yellow-legged Black-nosed Weevil	T	C	L	L	Flower meadows	White Clover	4
<i>Protapion nigritarse</i>	Yellow-nosed Weevil	T	C/L	NC	VL	Flower meadows	Lesser Trefoil	7
<i>Protapion trifolii</i>	Dark-trochantered Weevil	T	C/L	NC	L	Flower meadows	Red Clover, Zig-zag Clover	4
<i>Rhinoncus pericarpus</i> (pre 2014)	Smooth Cream-spotted Sorrel Weevil	T	C	VL	C/L	Flower meadows	Sorrel & Docks	5
<i>Sitona hispidulus</i>	Flat-eyed Hairy Clover-root Weevil	T	C/L	VL	VL	Flower meadows	Various herbs, often Clover	5
<i>Sitona lineatus</i>	Big-eyed Striped Sitona Weevil	T	C	C/L	C/L	Flower meadows	Vetches, grasslands	5

<i>Sitona obsoletus (lepidus)</i>	6-spotted Cinnamon Sitona Weevil	T	C/L	VL	VL	Flower meadows	Trifolium Clovers	2
<i>Sitona sulcifrons</i>	Big-eyed Side-banded Sitona Weevil	T	C	VL	NC	Flower meadows	Clover, Bird's-foot Trefoil	5
<i>Sitona suturalis</i>	Striped Sitona Weevil	T	C/L	VL	VL	Flower meadows	Meadow Vetchling, vetches	3
<i>Stenopterapion tenue</i>	Medick Weevil	T	L	NC	VL	Flower meadows	Medicks	1
<i>Trichosirocalus troglodytes</i>	Square-backed Ribwort Plantain Weevil	T	C/L	L	C/L	Flower meadows	Ribwort Plantain	7
Dung specialists:								
<i>Geotrupes spiniger</i>	Dumble Dor Beetle	T	C/L	NC	VL	Pasture	Dung of herbivores	1
Other Beetle species:								
<i>Anthocomus rufus</i>	Red and Black Beetle	W	C/L	VL	L	Wetland	Wetter areas around reedbeds & margins.	1
<i>Brachypterus urticae</i>	Pale-legged Short-winged Nettle Pollen Beetle	T	C	L	C	Wood edge	Nettle flowers & buds	1
<i>Cartodere nodifer</i>	Noduled Catodere Latrid	T	A	L	C/L	Wood edge	Fungi. Compost, leaf litter, logs.	1
<i>Corticarina minuta (fuscula)</i>	Round-pronotum Latrid (1.5 to 1.8mm), head pron dark. A9 long.	T	C/L	VL	C/L	Wood edge	Fungi. Compost, leaf litter, logs.	3
<i>Cortinicara gibbosa</i>	Narrow-pronotum Latrid (no 1st sternite lines)	T	C	L	C	Wood edge	Flowers	2
<i>Hoplia philanthus</i>	Welsh Chafer	T	C/L	C/L	C	Flower meadows	Meadows, hedges, wood edge	1
<i>Oedemera nobilis</i>	Green Swollen-thighed Beetle	T	C/L	C/L	C	Flower meadows	Flower meadows, gardens, roughs	1
<i>Telmatophilus caricis</i>	Burreed Pollen Beetle	W	C/L	VL	L	Wetland	On Burreed	1
DIPTERA: TRUE FLIES: taxa:								
Hoverfly species:								
<i>Episyrphus balteatus</i>	Marmalade Hoverfly	T	C	C	C	Flower meadows	All habitats, larvae eat aphids	1
<i>Eristalis arbustorum</i>	Thick-footed Eristalis Hoverfly	A+	C	C	C	Wetland	Farm drains, dung in water. Roughs, gardens	2
<i>Eristalis nemorum (Interruptus) (C Sellen)</i>	Narrow-black-striped Eristalis Hoverfly	A+	C	C	C	Wetland	Flower meadow, woodland rides, hedge	1
<i>Helophilus pendulus</i>	Common Striped-thorax Hoverfly (third black tibia)	A+	C	C	C	Wetland	Wetlands, ranging far for pollen	1
<i>Melanostoma mellinum</i>	Narrowly-dusted Orange-clubbed Hoverfly	W+	C	C	C	Wetland	Grasslands esp moorland flushes	4
<i>Melanostoma scalare</i>	Broadly-dusted Orange-clubbed Hoverfly	T	C	C	C	Wood edge	Grassland, scrub, wood rides.	2
<i>Melanostoma platycheirus scutatus group (female)</i>	unidentified females only Female hoverfly (1 of 3/4 species)	T	C/L	C/L	L	Wood edge	Woodland edge trees & flowers	1
<i>Scaeva pyrastris</i>	White-clubbed Hoverfly	T	C/L	C/L	C	Roughs	Gardens, roughs, meadows	1
<i>Sphaerophoria scripta</i>	Bi-width-process Sphaerophoria Hoverfly	T	C/L	C/L	C	Flower meadows	Mobile species. Larvae eat ground level aphids	2
<i>Sphaerophoria (females)</i>		T					Larvae eat Aphids	2
<i>Syrphus ribesii</i>	Hoverfly (yellow femur)	T	C	C	C	Wood edge	Garden, hedge, wood, roughs, wastes	3
Soldierfly & allies species:								
<i>Haematodocha pluvialis</i>	Notch-horned Cleg	T	C	C	C	Roughs	Damp, less improved countryside with mammals	1
<i>Stratiomyidae</i>	Aquatic/Marsh larva	A+				Wetland	Wetlands	1
Crane fly species:								
<i>Pedicia rivosa</i>	Large Stripe-winged Crane fly	A+	C/L	L	L	Wetland	Bog, moors, wet woods	1
<i>Tipula paludosa</i>	Common Long-palped Crane fly	W+	C	C	C	Roughs	Damp grassland	8
other Nematocera species:								
<i>Culex pipiens</i>	Mosquito	A+	C/L	C/L	C	Wetland	Wetlands and water butts	1

<i>Culicidae</i> (unidentifiable)	Mosquito	A+					Wetland	Wetlands and water butts	
<i>Ceratopogonidae</i> (adults)	Biting Midges								3
<i>Ceratopogonidae</i> (<i>Bezzia</i> larvae)	Biting Midges	A+					Wetland	Wetlands	
<i>Chironomidae</i> (large adults)	Non-biting Midges	A+					Wetland	Ponds/ditches	3
<i>Chironomidae</i> (tiny adults)	Non-biting Midges	A+					Wetland	Ponds/ditches	5
<i>Chironomidae</i> (red larvae)	Non-biting Midges (bloodworm)	A+					Wetland	Wetlands	
<i>Mycetophilidae</i>	Fungus Gnats	T					Wood edge	Fungi, mycelium, nests, tall, shady veg	1
<i>Sciaridae</i>	Black Fungus Gnats	W+					Wetland	Mainly wet habitats.	
<i>Sylvicola cinctus</i>	Common Window Gnat	T	C/L	C/L	C		Roughs	Multi-strategy Larvae found in decaying matter	4
<i>Sylvicola punctatus</i>	Spotted Window Gnat	T	C/L	VL	C	Pasture		Associated with cattle dung	1
<i>Scatopsidae</i>	Dung Midges	T					Pasture	Rotting organics; marshes , open habitats	1
<i>Cecidomyiidae</i>	Gall Midges (3 main groups exist)	T						Rotting organics; galls/mines; predatory	4
<i>Dixella autumnalis</i>	Meniscus Midge	A+	C/L	NC	L	Wetland		Swamps at the edges of wetlands	1
<i>Dixidae</i>	Unidentified larvae	A+					Wetland		
<i>Simulium cryophilum</i> (larvae)	Blackfly	A+	C/L	NC	NC	Wetland		Running water; nectar or blood	1
<i>Simulium erythrocephalum</i> (larvae)	Blackfly	A+	L	NC	NC	Wetland		Running water; nectar or blood	1
<i>Simuliidae</i>	Blackflies	A+					Wetland	Running water; nectar or blood	
<i>Psychodidae</i>	Moth Flies	A+					Wetland	Larvae in water; damp woods, marshes	1
other Brachycera Fly taxa:									
<i>Elgiva solicita</i>	Brown S-veined Snail-killing Fly	W	C/L	C/L	C/L		Wetland	Ponds and ditches with snails	2
<i>Limnia unguicornis</i>	Stripe-backed Snail-killer	T	C/L	VL	L	Roughs		Snails: Grassland, wetland, dunes, brownfield	1
<i>Tetanocera elata</i>	Field Buff Snail-killing Fly	T	C/L	L	C	Roughs		Roughs, wetlands, heaths, wood edge, dunes	1
<i>Dolichopidae</i> (females only found)	Long-legged Flies (females only found)								2
<i>Bicellaria vana</i>	Dance Fly	T	C/L	L	C/L		Wood edge	Woods, roughs, wastes, gardens	1
<i>Platypalpus longicornis</i>	Long-antennaed Dance Fly	T	C/L	NC	C/L		Wood edge	Tall herb and scrub mostly	1
<i>Lonchoptera lutea</i>	Yellow Spear-winged Fly	T	C	C	C	Roughs		Leaf litter; nectar; open habitats	6
<i>Phoridae</i>	Scuttle Flies	T						Multiple strategies	2
<i>Pipunculus campestris</i>	Striped Big-headed Fly	T	C/L	NC	L		Wood edge	Brambles on wood edges	1
<i>Pipunculus thomsoni</i> (lenis)	Banded-legged Big-headed Fly	T	L	NC	NC		Wood edge	Brambles on wood edges	1
Acalypterate Fly taxa:									
<i>Calliopum elisae</i>	Remarkable Black Lauxanid	W	L	VL	VL	Wetland		Fens, pond edges, marshy streamsides	1
<i>Meiosimyza sp</i>									1
<i>Minettia fasciata</i> group	Grey-fronted Striped Lauxanid Fly	T	L		L		Wood edge	Open woods, shrubs, hedges	1
<i>Geomyza balachowskyi</i>	Pliers Geomyza Fly	T	C/L	VL	L	Roughs		Mainly grasslands	3
<i>Geomyza hackmani</i>	Archway Geomyza Fly	W	VL	NC	VL	Wetland		Wetlands and marsh	1
<i>Geomyza tripunctata</i>	Round-tipped Geomyza Fly	T	C	C/L	C	Roughs		Grasslands, woods, cereal fields	1

<i>Opomyza germinationis</i>	Marked-wing Spotted Red Cereal Fly	T	C	C/L	C	Roughs	Moist habitats, grass, leaf litter	3
<i>Opomyza petrei</i>	Marked-wing Striped Red Cereal Fly	T	C	C/L	C	Roughs	Unmanaged grassland, roughs, wastes	7
<i>Tephritis vespertina</i>	Autumn Hawkbit Gall Fly	T	C/L	VL	C/L	Flower meadows	Autumn Hawkbit and Cat's-ear buds	1
<i>Sepsis cynipsea</i>	Ensign Fly with two humps on tibia	T	C	C/L	C	Pasture	Tall veg. Larvae in cow dung	1
<i>Sepsis violacea</i>	Ensign Fly with one-spined prominence	T	C	VL	C	Pasture	Cow, horse, pig, chicken dung	1
<i>Sepsis sp</i>	female only	T				Pasture	Dung	
<i>Themira sp</i>	female only	T					Genus linked to droppings	1
<i>Drosophilidae</i>	Fruit Flies	T						1
<i>Ephydriidae</i>	Shore Fly	W				Wetland	Wetland	6
<i>Thaumatomyia & c</i>	Yellow Swarming Grass Fly (Chloropidae)	T				Roughs	Permanent grasslands	1
<i>Chloropidae</i>	Triangular-head mark minute yellow and brown flies	T					Multiple strategies	5
<i>Sphaeroceridae</i>	Lesser Dung Fly	T				Roughs	Larvae in rotting organics	2
Calypterate Fly taxa:								
<i>Scathophaga stercoraria</i>	Yellow Dung Fly	T	C	C/L	C	Flower meadows	Cow pats, pollen, predators	6
<i>Fannidae</i>	Lesser House Flies	T					Rotting organics; Esp in or near woods	1
<i>Musca autumnalis</i>	Face Fly	T	C	L	L	Flower meadows	Cattle, flowers, larvae in cattle dung	1
<i>Muscidae</i>	House Flies	T					Multiple strategies	1
<i>Phryxe nemea</i>	Tachinid	C/L	C/L	VL	L	Roughs	Parasitic on Lepidoptera larvae	1
<i>Tachinidae</i> (other)	Bristly Parasitic Flies	T					Larvae parasitic on invertebrates	4
<i>Calyptrate misc</i>								1
THYSANOPTERA: THUNDERFLIES: taxa:								
<i>Thrip</i>	Brown (winged) Thrip	T	?	?	?	Flower meadows	Flowers/grasses	5
<i>Thrip</i>	Yellow (winged) Thrip	T	?	?	?	Flower meadows	Flowers/grasses	2
STREPSIPTERA:								
<i>Elenchus tenuicornis?</i>	Leafhopper Parasite	W		NC	NC	Wetland	Marshes with <i>Conomelus anceps</i>	2
COLLEMBOLA: SPRINGTAILS: species:								
<i>Deuterosminthurus</i> (yellow)		T	C	NC	VL	Roughs	Surface debris, low vegetation	2
<i>Dicyrtoma fusca</i>	Purple Squat Springtail	T	CW	VL	L	Roughs	Surface debris, low vegetation	1
<i>Dicyrtomina ornata</i>	Patterned Squat Springtail	T	W	VL	L	Roughs	Surface debris, low vegetation	4
<i>Dicyrtomina saundersi</i>	Blue-masted Yellow Squat Springtail	T	VC	VL	L	Roughs	Surface debris, low vegetation	2
<i>Sminthurinus aureus</i>	Squat Grey yellow Springtail	T	CW	NC		Rough	Wet & dry leaf litter & low vegetation	3
<i>Sminthurinus elegans</i>	Elegant Squat Springtail	T	VCW	NC		Rough	Drier than above	1
<i>Heterosminthurus insignis</i>	Yellow Least Squat Springtail	T	MC	VL	NC	Roughs	Damp surface debris, low vegetation	3
<i>Sminthurus viridis</i>	Clover Springtail	T	VCW	NC	VL	Roughs	Grasses and shrubs	7
<i>Isotomurus graminis</i> (prasinus)	Greenish Springtail	W	C?	NC	L	Wetland	Wet habitats	1
<i>Isotomurus palustris</i>	Patterned Springtail	W	VC	L	L	Wetland	Damp surface debris, low vegetation	1
<i>Isotoma riparia</i>	1-striped Springtail	W	NS?	NC	L	Wetland	Stream edges, flood debris etc	2
<i>Isotoma viridis</i>	Green Springtail	W	CW	C	C	Wetland	Range of habitats inc wetlands	6
<i>Lepidocyrtus curvicollis</i>	Yellow Humped Springtail	T	CW	NC	L	Roughs	Surface debris, low vegetation	4

<i>Orchesella cincta</i>	Dark-headed Patterned Springtail	T	VC	C	C	Roughs	Surface debris, low vegetation	1
<i>Entomobrya nivalis</i>	Two-lined Patterned Springtail	T	VCW	L	L	Roughs	Surface debris, low vegetation	3
<i>Pogonognathellus longicornis</i>	Coil-antennaed Yellow Springtail	W+	VCW	C	C	Wetland	Surface debris, low vegetation, marsh, garden	2

Columns C-H:

Column C uses W for Wetland, A for Aquatic, T for Terrestrial Habitats. Column F gives an abbreviated habitat. Column G gives habitat per literature.

Column D gives the status in England and Wales, from UK JNCC Taxon list supplemented by the literature (esp if no Review).

Columns E & F uses online atlases, iRecord, NBN Atlas, and rECOrd (Cheshire) to give an England/Wales status, a GM status and a Cheshire status.

C = Common; L = Local, or scattered records; C/L is some areas many, some few or none. Collembola MVCW = Moderately Very Common Widespread.

A relates to Alien species - all are naturalised.

The official scarcity status is given in Column C:

RDB 1 – species appear in the Red Data Book and are categorised as endangered;

RDB 2 – species appear in the Red Data Book and are categorised as vulnerable;

RDB 3 – species appear in the Red Data Book and are categorised as rare;

RDB K – species appear in the Red Data Book but the status is unknown, although they are thought to be rare;

pRDB 1 – species are likely to appear in the Red Data Book and be categorised as endangered;

pRDB 2 – species are likely to appear in the Red Data Book and be categorised as vulnerable;

pRDB 3 – species are likely to appear in the Red Data Book and be categorised as rare;

NN/NS – species are nationally notable and have been recorded in 16-100 ten kilometre squares in Great Britain.

Na – species are nationally scarce and have been recorded in 16 – 30 ten kilometre squares in Great Britain;

Nb – species are nationally scarce and have been recorded in 31 – 100 ten kilometre squares in Great Britain

NC is given there is only one record in Greater Manchester or Cheshire

Un - literature states uncommon but no status assigned.

* refers reader to the final report

<https://check-long-term-flood-risk.service.gov.uk/map?easting=378771&northing=408195&map=SurfaceWater>



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