

SITE NAME, DISTRICT, COUNTY. GRID REF:

SURVEY OF **th and **th July 20 by Dave Bentley Ecological Consultant**

Methods include direct observation, pond net, butterfly net, canvas bag, beating, shaking, hand-searching, pitfall traps and vacuuming. See notes at end.

TOTAL TAXA: 278

		Habitat per literature	BROAD HABITAT	Samples this survey	Eng- land Status	Lanca- shire Sttus
LUMBRICIDAE:		EARTHWORM : 1 species:				
<i>Lumbricus rubellus</i>	Red Earthworm	Least habitat specific Earthworm	Wood edge	1	C	C
MOLLUSCA:		SNAILS & SLUGS: 13 species:				
<i>Aegopinella nitidula</i>	Smooth Glass Snail	Woods, hedges, gardens, roughs, wasteland	Wood edge	4	C	C
<i>Cepaea hortensis</i>	White-lipped Banded Snail	Many habitats, wetter than nemoralis	Wood edge	1	C	C
<i>Cepaea nemoralis</i>	Brown-lipped Banded Snail	Woods, hedges, calcareous grasslands	Wood edge	1	C	C
<i>Cochlicopa lubrica</i>	Glossy Pillar Snail	Woods, hedges, damp grassland, wetlands	Wood edge	3	C	C
<i>Nesovitrea hammonis</i>	Rayed Glass Snail	Widespread + acid woods	Wood edge	2	C	C
<i>Oxyloma elegans</i>	Amber Reed Snail	Fens, marshes, reedbeds	Wetland	1	C	C
<i>Trochulus hispida</i>	Hairy Snail	Woods, wetlands, roughs, dry calc grass	Wood edge	2	C	C
<i>Pisidium castertanum</i>	Common Pond Pea Mussel	Ponds, ditches, very small wet a+C15reas	Wetland	1	C	C
<i>Arion cf circumscriptus sylvaticus</i>	Silver False-keeled Slug	Gardens, roadsides, arable, woodland, scrub, wastes	Roughs	6	C	C
<i>Arion subfuscus</i>	Dusky Slug	Almost everywhere, disturbed or natural	Roughs	1	C	C
<i>Derocerus invadens</i>	Tramp Slug	Gardens, roadsides, tipped material	Roughs	1	C	C
<i>Derocerus reticulatum</i>	Pale grey-flecked small slug	All open habitats (not big wetlands)	Roughs	1	C	C
<i>Tandonia budapestensis</i>	Budapest Keeled Slug	Gardens, ruins, woodlands, woodland edges	Wood edge	1	A	C(A)
HYMENOPTERA:		BEEES, WASPS, ANTS, SAWFLIES: 20 taxa:				
3 Ant species:						
<i>Lasius niger</i>	Common Black Ant	Open habitats	Roughs	4	C	L
<i>Myrmica ruginodis</i>	Long-spined Red Ant	Most habitats, rural or urban	Roughs	4	C	L
<i>Myrmica scabrinodis</i>	Right-angle-antennaed Red Ant	Many habitats, dry grass, human habitats, bogs	Roughs	11	C	L
9 Bee species:						
<i>Apis mellifera</i>	Western Honey Bee	Domesticated; some feral colonies	Flower meadows	1	A?	L
<i>Bombus campestris</i>	Field Cuckoo Bee	Wooded and open, rural and urban. Social parasite of <i>B pascuorum</i> .	Flower meadows	3	C/L	L
<i>Bombus lapidarius</i>	Red-tailed Bumblebee	Wooded and open, rural and urban esp sites with clovers and vetches	Flower meadows	2	C/L	C
<i>Bombus lucorum</i>	White-tailed Bumblebee	Most habitats except uplands	Flower meadows	4	C	C
<i>Bombus pascuorum</i>	Common Carder Bee	Wide variety of habitats. Nesting in grass tussocks, shrub bases or maybe tree hol	Flower meadows	2	C	C
<i>Bombus rupestris</i>	Red-tailed Cuckoo Bee	Wooded/open Rural/urban. Social parasite of Red-tailed Bumblebee	Flower meadows	1	L	L
<i>Halictus tumulorum (male)</i>	Bronze Furrow Bee	Light soils. Grassland, heathland, wasteland, coastal	Flower meadows	1	C/L	L

<i>Lasioglossum albipes</i> (male)	Bloomed Furrow Bee	Wide variety, inc urban	Flower meadows	4	C/L	L
<i>Sphcodes monilicornis</i>	Box-headed Blood Bee	Heaths, calc grass, wood edges, gardens. Social parasite of <i>L albipes</i> etc	Flower meadows	1	C	L
8 other Hymenoptera species:						
<i>Ancistrocerus gazella</i> (female)	Small-notched Mason Wasp (Solitary Wasp)	s in bramble stems, timber; feeds its young caterpillars. Bramble, Hogweed, Th	Wood edge	1	L	L
<i>Ectemnius continuus</i> (male)	Yellow & Black Solitary Wasp	Many habitats, dead wood, umbellifers. Kills flies.	Flower meadows	2	C/L	L
<i>Vespula vulgaris</i>	Common Wasp	ests underground/buildings. Catch insects. Umbellifers etc, flowering shrubs, iv	Wood edge	3	C	C
<i>Andricus kollari</i>	Oak Marble Gall Wasp (from gall)	Oak trees	Wood edge	1	C	C
<i>Neuroterus numismolis</i>	Silk-button Gall Wasp (from gall)	Oak trees	Wood edge	1	C	C
<i>Hoplocampa flava</i>	Plum Sawfly	Plum trees and Blackthorn hedges, flowers; under-recorded species	Wood edge	1	C/L	NC
<i>Tenthredo atra</i>	Pale-faced brown-legged Black Sawfly	bellifers, hedges, buttercups, plantains, scabious, labiates: under-recorded spec	Flower meadows	1	C	NC
<i>Tenthredo cf brevicornis</i>	Green-legged Sawfly	White Clover /flower rich meadows: under-recorded species	Flower meadows	1	L	L
MYRIAPODA: CENTIPEDES & MILLIPEDES: 6 species:						
<i>Cylindroiulus punctatus</i>	Lesser Club-tailed Millipede	Woodland + sandy heathland	Wood edge	2	C	C/L
<i>Julus scandinavius</i>	Long-tailed Scored Brown Millipede	Acidic, uncultivated land	Roughs	3	C	C/L
<i>Ommatoiulus sabulosus</i>	Common Stocky Striped Millipede	Sandy soils, acid woods, heaths, any habitat	Wood edge	3	C	C/L
<i>Polydesmus denticulatum</i>	Flat-backed Millipede	Broad-leaved woodland/edges	Wood edge	1	C/L	L
<i>Tachypodoiulus niger</i>	Black White-legged Millipede	Most habitats, esp base rich sites	Any	1	C	C
<i>Lithobius variegatus</i>	Variiegated Centipede	Rural gardens, woods, moorland	Any	3	C/L	C/L
ORTHOPTEROIDEA: GRASSHOPPERS (+ EARWIG): 5 species:						
<i>Chorthippus brunneus</i>	Field Grasshopper	Dry, open grassland	Roughs	2	C	C
<i>Chorthippus parallelus</i>	Meadow Grasshopper	Damp, unimproved pastures and meadows	Roughs	1	C	C
<i>Omocestrus viridulus</i>	Common Green Grasshopper	Coarse moist grassland, parks, woodland rides, meadows	Roughs	2	C	C
<i>Tetrix undulata</i>	Common Groundhopper	Wetland, heath, moist forest, bare areas	Wetland	3	C	C/L
<i>Forficula auricularia</i>	Common Earwig	Forests, agricultural, suburban areas	Any	5	C	C
ARACHNIDA: SPIDERS, HARVESTMEN, SOIL MITES: 35 taxa:						
21 Spider species:						
<i>Araneus diadematus</i>	Garden Cross Spider	Wide range of habitats	Any	2	C	C
<i>Araneus quadratus</i>	4-spot Orb Web Spider	Undisturbed tall grass and bushes e.g. gorse, rushes	Roughs	2	C/L	L
<i>Dictyna cf arundinacea</i> (juveniles)	Meshweaver Spider	Tall vegetation/ low scrub/wood edge/rides	Wood edge	3	C/L	L
<i>Pirata piraticus</i>	Pond Wolf Spider	Wetlands, stream edges, bogs	Wetland	2	C	C
<i>Pardosa amentata</i> (female + juv)	Lump-hammer Wolf Spider	Wide range, inc gardens	Any	1+5	C	C
<i>Pisaura mirabilis</i>	Nursery-web Spider	Grassland, heaths, open woods	Roughs	3	C/L	C
<i>Clubiona lutescens</i> (female + juv)	Brown Sac Spider	Low vegetation, bushes, trees, open damp habitats	Roughs	1+1	L	L

<i>Enoplognatha latimana</i>	Pale Candy-striped Spider (epigyne spreading	Low vegetation, bushes, dry grassland.	Roughs	6	L	L
<i>Larinooides (juveniles)</i>	An Orb-web Spider	Grasses, tall vegetation often near water	Wetland	7	C	C
<i>Pachygnatha clerki (male)</i>	Tooth-fanged Long-jawed Hunting Spider	Marshes. By water	Wetland	4	C	C
<i>Pachygnatha degeeri (male)</i>	Least Long-jawed Hunting Spider	Woodland rides to derelict land	Wood edge	2	C	C
<i>Philodromus sp (aureolus group)</i>	Common Running Crab Spider	Trees, scrub, hedge, woods	Wood edge	2	C/L	C
<i>Metellina mengiei/segmentata (juv)</i>	Stripe-bellied Metellina Spider	Wetlands/bushes & trees etc	Wetland	3	C	C
<i>Metellina merianae</i>	Banded-legged Metellina Spider	Shady, damp habitats, woods, trees, soil overhangs	Wood edge	1	C	C
<i>Xysticus cristatus (female & juv)</i>	Common Crab Spider (Anchor)	Low vegetation but not woodland	Roughs	?1+	C	C
<i>Bathyphantes gracilis (female)</i>	Dark-spotted Money Spider	Grasslands, woods, marshes	Roughs	1	C	C
<i>Floronia bucculenta</i>	2-banded Linyphid Spider	Damp low veg in marsh, scrub, open woods	Roughs	1	C	L
<i>Linyphia triangularis (m + f)</i>	Chevroned Banded Linyphid Spider	Bushes and low vegetation	Roughs	2	C	C
<i>Microlinyphia pusilla</i>	Brown spotted Linyphid Spider	Roughs, damp grassland	Roughs	1	C	C
<i>Neriere clathrata</i>	W-marked Linyphid Spider	Wide range in leaf litter and low veg	Roughs	2	C	C
<i>Linyphiidae (juveniles)</i>	Black or Orange Money Spiders		Roughs	2		
6 Harvestman species:						
<i>Oligolophus tridens</i>	Black-oblong-saddled Harvestman with spur	Vegetation litter of woodlands, grasslands, gardens	Roughs	11	C/L	C
<i>Leiobunum rotundum</i>	Orange & Black Harvestman	Woods, hedges, rocks, gardens, heath	Roughs	1	C	C/L
<i>Mitopus morio</i>	Black-waisted-saddled Harvestman	All habitats: dune to mountaintop (heath)	Roughs	1	C	C/L
<i>Opilio canestrinii (alien)</i>	Orange dark-legged Harvestman	Urban, gardens, parks, semi-natural woodland	Roughs	1	A	L (A)
<i>Nemastoma bimaculatum</i>	Two-spot Harvestman	Most habitats inc woods and roughs	Roughs	2	C	C
<i>Paroligolophus agrestis</i>	Pincered Harvestman	Most habitats inc woods and roughs	Roughs	3	C	C
8 Soil Mite taxa:						
<i>Pergamasus sp etc</i>	1-1.3mm Hard Red/Orange/Yellow Mite	Rough grass soil and litter layer	Roughs	8		
<i>Ceratoppia?</i>	Bulb-shaped Mite	Rough grass soil and litter layer	Roughs	2		
<i>Erythraeidae</i>	1.5mm Soft Velvet Mite	Rough grass soil and litter layer	Roughs	5		
<i>Bdellidae</i>	Snout Mite	Rough grass soil and litter layer	Roughs	1		
<i>Platynothrus?</i>	Beetle Mite	Rough grass soil and litter layer	Roughs	4		
<i>Damaeus sp</i>	Hairy-legged Mite	Rough grass soil and litter layer	Roughs	1		
<i>Orbitada</i>	1mm Helmet Mite	Rough grass soil and litter layer	Roughs	3		
<i>Cepheus sp</i>	0.5mm Tortoise-Hedgehog Mite	Rough grass soil and litter layer	Roughs	1		
MICROCRUSTACEA: WATER FLEAS: 1 species:						
<i>Daphnia obtusa</i>	Big-mouthed Water-flea	Medium to small and minor ponds	Wetland	1	C	C

MALACOSTRACA :**CRUSTACEANS: 5 species:**

<i>Arcitalitrus dorrieni</i>	Australian Landhopper	Damp grass/debris, scrub, woodland, gardens	Roughs	4	A	L (A)
<i>Trichoniscus provisorius/pusillus</i>	Common Pigmy Woodlouse agg	Damp soil and deep leaf litter	Roughs	1	C	C
<i>Philoscia muscorum</i>	Common Striped Woodlouse (head dot, later)	Hedges, roughs, woods, gardens	Roughs	3	C	C
<i>Porcellio scaber</i>	Common Rough Woodlouse	Wide range, drier than <i>Oniscus</i>	Roughs	1	C	C
<i>Oniscus asellus</i>	Common Shiny Woodlouse	All damp habitats, woods, logs, gardens	Roughs	1	C	C

HEMIPTERA:**LAND & WATER BUGS: 59 taxa:****3 Water Bugs species:**

<i>Gerris lacustris</i>	Common Pond Skater	Ponds, large or small	Wetland	1	C	C
<i>Sigara nigrolineata</i>	Lesser Water Boatman	Ponds, large or small	Wetland	1	C	L
<i>Saldula saltatoria</i>	Common Shorebug	Ponds and marshes	Wetland	1	C/L	L

3 Shieldbug species:

<i>Dolycoris baccarium</i>	Sloe (Hairy) Shieldbug	Roasaceae. Many habitats, hedges, wood edges	Wood edge	5	C/L	L
<i>Paloemena prasina (juv)</i>	Green Shieldbug	Trees and shrubs, inc gardens	Wood edge	3	C	C
<i>Picromerus bidens</i>	Spiked Shieldbug	Heaths, downs, flower-rich meadows	Flower meadows	2	C	L

1 Lacebug species:

<i>Derephysia foliacea</i>	Ivy Lacebug	Ivy, thus trees, wood edges, woods	Wood edge	1	L	NC*
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2 Flower Bug species:

<i>Anthocoris confusus</i>	Part-dull Flower Bug	Deciduous trees, esp Oak	Wood edge	1	C	NC*
<i>Anthocoris nemorum</i>	2-spotted all-shining Flower Bug	Lower vegetation with insects	Flower meadows	4	C	C

21 Plant Bug species:

<i>Campyloneura virgula</i>	Red & Yellow dotted Tree Bug	Predatory bug on broad-leaved trees	Wood edge	1	C/L	L
<i>Compsidolon salicellum</i>	Spotty Green-brown Tree Bug	Mite-predator on Bramble + Hazel, Alder, Willows, Apple etc	Wood edge	1	L	L*
<i>Deraeocoris flavilinea</i>	Italian Two-spotted Tree Bug	Aphid-feeder on Sycamore, Field Maple, Ash, Hazel, Hawthorn	Wood edge	1	L	L
<i>Deraeocoris ruber</i>	Shining Orange/Black Plant Bug	Especially on Nettles	Wood edge	1	C/L	L
<i>Dicyphus epilobii</i>	Great Willowherb Plant Bug	Great Willowherb	Wetland	2	C/L	L
<i>Heterotoma planicornis</i>	Pipe-cleaner-antennaed Plant Bug	Plants, trees. Feeds on insects and buds	Wood edge	3	C/L	L
<i>Leptopterna dolabrata</i>	Meadow Plant Bug	Feeds on grasses	Roughs	2	C	C
<i>Liocoris tripustualtus</i>	Nettle Plant Bug	Nettles	Wood edge	3	C/L	L
<i>Lygocoris pabulinus</i>	Common Green Capsid Plant Bug	Plants, trees, esp nettles	Wood edge	4	C/L	C
<i>Mecomma ambulans</i>	Dark-headed Dimorphic Plant Bug	Tall vegetation especially at woodland edges	Wood edge	2	C/L	L
<i>Monalocoris filicis</i>	Bracken Bug	Ferns (including Bracken)	Wood edge	2	C/L	L
<i>Notostira elongata</i>	Dimorphic Grass Bug	Grasslands	Roughs	1	C/L	L

<i>Oncotylus viridiflavus</i>	Knapweed Plant Bug	Feeds on Black Knapweed flowers	Flower Meadow	2	L	NC
<i>Orthops campestris</i>	Small Green Heart Plant Bug	Umbellifer flowers	Flower Meadow	1	C/L	L*
<i>Phytocoris longipennis</i>	Green long-legged long-antennaed Tree Bug	Broad-leaved trees eating invertebrates	Wood edge	1	L	L*
<i>Phytocoris varipes</i>	Pink long-legged long-antennaed Tree Bug	Rough grassland eating flowers and fruits	Roughs	5	L	L
<i>Plagiognathus arbustorum</i>	Olive Spotted-legged Grass Bug	A range of plants especially Nettles	Wood edge	10	C	C
<i>Plagiognathus chrysanthemi</i>	Green Spotted-legged Grass Bug	Grasslands & wastelands: Asteraceae e.g. Ragwort & Yarrow	Flower Meadow	10	C/L	L
<i>Stenodema laevigata</i>	Unspurred Grass Bug	Damp areas - feeds on grass seeds	Roughs	8	C	C
<i>Stenotus binotatus</i>	Timothy Grass Bug	Dry grasslands feeding on grass flowers/seeds	Roughs	4	C/L	L
<i>Tytthus pygmaeus</i>	Small brown Plant Bug	Marshes feeding on Leafhopper eggs	Wetland	2	L	NC*
7 Ground Bug species:						
<i>Cymus clavicularis</i>	Unpunctured-strip Ground Bug	Dry meadows, sandy heaths. Toad Rush, Knot-grass	Flower meadow	1	L	NC*
<i>Cymus glandicolor</i>	Pale-keeled Ground Bug	Damp meadows, marshes feeding on Sedges	Wetland	1	L	L*
<i>Cymus melanocephalus</i>	Dark-keeled Ground Bug	Damp areas on Trefoil, Loosestrife, Rush	Wetland	3	L	NC*
<i>Drymus sylvaticus</i>	V-marked Buff Ground Bug	Moss, grass, leaf litter	Wood edge	1	C/L	L
<i>Kleidocerys resedae (nymphs)</i>	Birch Catkin Bug	Birch trees	Wood edge	1	C/L	L
<i>Scolopostethus affinis</i>	Ground Bug	Leaf litter often around Nettles	Wood edge	1	C/L	L
<i>Stygnocoris sabulosus</i>	Shiny Hairy Ground Bug	Dry habitats, sandy soils	Roughs	3	C/L	L
2 Damsel Bug species:						
<i>Nabis flavomarginatus</i>	Golden-haired Half-winged Damsel Bug	Damp, tussocky grass	Roughs	2	C/L	L
<i>Nabis limbatus</i>	(micro-winged broad-edged) Marsh Damsel I	Damp grassland/wet meadows	Wetland	7	C/L	L
8 Larger Leafhopper species:						
<i>Aphrodes bicincta (male)</i>	Sharp-faced Leafhopper	Asteraceae plants on various habitats	Flower Meadow	2	C/L	L
<i>Arthaldeus pascuellus</i>	Dark-faced Glum-bear Leafhopper	Grasses, especially drier places	Roughs	1	C/L	C
<i>Cicadella viridis</i>	Large Green/ Blue Leafhopper	Damp grasslands, marshes	Wetland	5	C	C
<i>Cicadula aurantipes</i>	Yellow-green 4-spotted Leafhopper	Marshy areas by ponds on Sedges	Wetland	3	L	L
<i>Cixius nervosus</i>	Banded and spotted-wing Lacehopper	Deciduous trees & shrubs	Wood edge	2	C/L	L
<i>Elymana sulphurella</i>	Sulphur Leafhopper	Dry grassland	Roughs	1	C/L	L
<i>Iassus lanius</i>	Dark-fronted Large Green Leafhopper	Oak trees	Wood edge	1	C/L	L
<i>Megopthalmus scanicus (m & f)</i>	Cross-faced Leafhopper	Found amongst grass roots and bushes	Roughs	12	L	L
3 Small Leafhopper species:						
<i>Alebra albostriella</i>	Appendixed Green Small Leafhopper	English Oak	Wood edge	1	C/L	L
<i>Alnetoidea alneti</i>	Dusky-tailed Yellow Small Leafhopper	Broad-leaved trees	Wood edge	1	C/L	C
<i>Forcipata citrinella</i>	Trilobed Yellow-green Small Leafhopper	On sedges and grasses in damp places	Wetland	1	L	L

3 Planthopper species:

<i>Conomelus anceps</i>	Marsh Short-winged Planthopper	Damp areas/ Rushes	Wetland	6	C/L	L
<i>Kelisia vittipennis</i>	Planthopper	Sedges dry or wet	Wetland	1	C/L	NC*
<i>Muellerianella fairmairei</i> (male)	3-Banded Planthopper	Damp areas. <i>Deschampsia cespitosa</i>	Wetland	2	L	L

3 Froghopper species:

<i>Aphrophora alni</i>	Large White-patched Froghopper	Wide range of trees /bushes	Wood edge	2	C/L	C
<i>Neophilaenus lineatus</i>	Pale-edged rear-spotted Froghopper	Grassland	Roughs	2	C	C
<i>Philaenus spumarius</i>	Cuckoospit Froghopper	Wide range of plants inc gardens	Roughs	8	C	C

3+ Greenfly species:

<i>Microlophium carnosum</i>	Large Nettle Aphid	Nettles	Wood edge	1	C	C
<i>Drepanosiphum platanoidis</i>	Common Sycamore Aphid	Sycamore trees	Wood edge	1	C	C
<i>Myzus persicae</i>	Green Peach-Potato Aphid. Dark feet, dark tip	Wide range of plants	Flower Meadows	1	C	C

LEPIDOPTERA:**BUTTERFLIES & MOTHS: 17 taxa:****13 Butterfly species:**

<i>Aglais io</i>	Peacock Butterfly	Eggs laid on Nettles. Adults favour open woods, rides & edges	Wood edge	5	C	C
<i>Aglais urticae</i>	Small Tortoiseshell Butterfly	Eggs laid on Nettles. Many habitats including gardens	Wood edge	1	C	C
<i>Aphantopus hyperantus</i>	Ringlet Butterfly	Eggs laid on grasses. Damp and shady habitats preferred	Roughs	3	C	L
<i>Lycaena phlaeas</i>	Small Copper Butterfly	Eggs laid on Sorrels & Docks. Adult uses a variety of dry habitats.	Flower Meadows	3	C	C
<i>Maniola jurtina</i>	Meadow Brown Butterfly	Eggs laid on grasses. Variety of habitats used inc meadows, hedges, open woods	Roughs	9	C	C
<i>Pararge aegeria</i>	Speckled Wood Butterfly	Adults eat Aphid honeydew; lays on tough grasses; woodland rides	Wood edge	6	C	C
<i>Pieris rapae</i>	Small White Butterfly	Eggs laid on wild or farmed Brassicas; Adult visits flowering plants	Flower Meadows	8	C	C
<i>Pieris napi</i>	Green-veined White	Eggs laid on wild crucifers. Adult inhabits damp grassland/marshes	Wetland	4	C	C
<i>Pieris brassicae</i>	Large White Butterfly	Eggs laid on wild or farmed Brassicas; Adult visits flowering plants	Flower Meadows	9	C	C
<i>Polygonia c-album</i>	Comma Butterfly	Eggs laid on Nettles, Willows. Adults favour open woods, rides & edges	Wood edge	1	C	C
<i>Polommatus icarus</i>	Common Blue Butterfly	Eggs laid on Bird's-foot Trefoils, Clovers etc. Uses meadows and wood clearin	Flower Meadows	3	C	C
<i>Pyronia tithonus</i>	Gatekeeper Butterfly	Eggs laid on grasses; Adults visit Bramble, Co Fleabane, Ragworts etc	Flower Meadows	6	C	C
<i>Thymelicus sylvestris</i>	Small Skipper Butterfly	Eggs laid on Yorkshire Fog grass. Inhabits tall grasses and herbage.	Roughs	2	C	C

4+ Moth species:

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner Moth (from leaf r	Horse Chestnut trees	Wood edge	1	A	?A
<i>Scotopeteryx chenopodiata</i>	Shaded Broad-bar Moth	Clover/Vetches. Woodland rides	Wood edge	4	C	C
<i>Stigmella confusella</i>	Pale Birch Pigmy Moth (from leaf mine)	Birch trees	Wood edge	1	C/L	L
<i>Zygaena lonicera</i>	Narrow-bordered 5-spot Burnet Moth	Eggs laid on Ragworts. Adults in rough grassland using Vetches, Clovers	Flower Meadows	1	C/L	C

COLEOPTERA:**BEETLES: 85 taxa:****8 Water Beetle species:**

<i>Agabus bipustulatus</i>	Common Black Diving Beetle	Ponds, large, small, minor	Wetland	1	C	C
<i>Hydroporus memnonius</i>	Shiny Brown Small Diving Beetle	Ponds, large, small, minor	Wetland	1	C	C
<i>Hydroporus planus</i>	Matt Dark Small Diving Beetle	Ponds, large, small, minor	Wetland	1	C	C
<i>Anacaena globulus</i>	Scavenger Beetle	Marshes / pond edges	Wetland	2	C	C
<i>Helophorus brevipalpis</i>	Scavenger Beetle	Ponds, large, small, minor	Wetland	1	C	C
<i>Hydrobius fuscipes agg</i>	Scavenger Beetle	Ponds, large, small, minor	Wetland	1	C	C
<i>Limnebius truncatellus</i>	Short-winged Scavenger Beetle	Primarily streams though taken in a marsh here	Wetland	1	C	L
<i>Megasternum concinnum</i>	Pale Scavenger Beetle	In rotting vegetable matter in marshes, rough grass, dung	Wetland	2	C	C

9 Leaf & Flea Beetle species:

<i>Agelastica alni</i>	Alder Leaf Beetle	Alder	Wetland	1	NR	L
<i>Altica lythri</i>	Willowherb Flea Beetle	Willowherbs	Wetland	3	C/L	C
<i>Cassida viridis</i>	Green Tortoise Beetle	On Mints/ Dead-nettles in wetlands, woods, moors, heaths	Wetland	1	C/L	L
<i>Crepidodera aurea</i>	Bronze Flea Beetle	Poplars, Aspen, Willows	Wood edge	1	C/L	L
<i>Longitarsus flavicornis</i>	Southern Larger Ragwort Flea Beetle	Asteraceae especially Ragworts	Flower Meadows	2	C/L	L
<i>Longitarsus gracilis</i>	Smaller Ragwort Flea Beetle	Asteraceae especially Ragworts	Flower Meadows	1	L	L
<i>Longitarsus jacobaeae</i>	Common Larger Ragwort Flea Beetle	Asteraceae especially Ragworts	Flower Meadows	2	C/L	L
<i>Neocrepidodera transversa</i>	Common Large Neocrepid	Various plants in many habitats including Thistles	Flower Meadows	3	C	L
<i>Phyllotreta nemorum</i>	Common Striped Flea Beetle	Brassicaceae feeder	Flower Meadows	1	C/L	NC

4 Ladybird species:

<i>Coccinella 7-punctata</i>	7 Spot Ladybird	Anywhere with Aphids. Low herbage.	Flower Meadows	4	C	C
<i>Harmonia axyridis</i>	Harlequin Ladybird	Aphids. Trees, scrub, grass, marsh.	Flower Meadows	1	A	C(A)
<i>Propylea 14-punctata</i>	14 Spot Ladybird	Tall vegetation, trees, overwinters	Roughs	2	C	C
<i>Ryzobius litura</i>	Hairy Yellow Ladybird	Dense low vegetation	Roughs	6	C	L

14 Ground Beetle species:

<i>Abax parallelepipedus</i>	Large Keeled Ground Beetle	Woods; damp, well-vegetated moors	Wood edge	3	C	C
<i>Bembidion guttula</i>	2-spotted Ground Beetle	Almost all habitats, esp near water	Wetland	1	C	C
<i>Bembidion lampros</i>	Shining pale-legged Ground Beetle	Dry sunny habitats, esp gardens, agriculture	Flower Meadows	1	C	C
<i>Bembidion lunulatum</i>	Brown Ground Beetle	Damp, bare ground near water.	Wetland	1	C	L
<i>Bradycellus verbasci</i>	Winged Angle-cornered Ground Beetle	Well drained soil, arable, wastes	Flower Meadows	1	C	L
<i>Carabus nemoralis</i>	Bronze Ground Beetle	Drier parts of most habitats, gardens, fields	Flower Meadows	1	C	C
<i>Harpalus rufipes</i>	Hairy-winged Ground Beetle	Open dry habitats, light soils, esp arable. Not uplands	Flower Meadows	1	C	C

<i>Paradromius linearis</i>	Common Bladerunner Ground Beetle	Grass tussocks, also reeds	Roughs	1	C	L
<i>Platynus assimilis</i>	Sharp-pronotumed Black Ground Beetle	Woods, especially near water	Wetland	1	C	C
<i>Pterostichus cristatus</i>	Northumberland Blackclock Ground Beetle	Woodlands, gardens, shaded grassland	Wood edge	1	A	L(A)
<i>Pterostichus diligens</i>	Smooth-chested Blackclock Ground Beetle	Wetlands, damp grass, moor, marsh	Wetland	1	C	C
<i>Pterostichus madidus</i>	Common Blackclock Ground Beetle	Woods, gardens, dry grassland	Wood edge	3	C	C
<i>Pterostichus niger</i>	Great Blackclock Ground Beetle	Woods, damp grass, moors	Wood edge	2	C	C
<i>Trechus obtusus</i>	Wingless Brown Ground Beetle	Fields, gardens, moor, dry heath	Roughs	2	C	L
15 Rove Beetle species:						
<i>Aleocharinae</i>	Brown Rove Beetles (various)	Damp habitat, damp logs, matted vegetation, compost & dung	Roughs	10		
<i>Anotylus mutator/sculpturatus (f)</i>	Ridged Rove Beetle	Dung, vegetable litter	Wood edge	2	NN/C/L	NC*
<i>Anotylus rugosus</i>	Ridged Rove Beetle	Damp veg litter, esp marshes	Wetland	1	C/L	L
<i>Lordithon exoletus</i>	Borderless Black and Yellow Narrow Rove B	Fungi especially	Wood edge	1	L	NC
<i>Mycetoporus nigricollis</i>	Black and Red Rove Beetle	Moss, dead leaves	Wood edge	1	L	NC
<i>Quedius cf curtipennis</i>	Black Rove Beetle	Woodland and closed-sward grassland on damp soils etc	Wood edge	1	C/L	L
<i>Reichenbachia juncorum</i>	Squat Rove Beetle	Moss and grass tussocks, especially near water	Wetland	1	L	NC*
<i>Rugilus rufipes</i>	Large-headed Narrow-necked Rove Beetle	Marsh, close-sward grassland, woods	Wetland	1	C/L	NC*
<i>Stenus impressus</i>	Camphor Beetle	Woods, dunes, marshes, mountains	Roughs	2	C	NC*
<i>Stenus lustrator (male)</i>	Camphor Beetle	Mires, floodplains, flushes, saline lagoon margins	Wetland	1	L	NC*
<i>Stenus picipes</i>	Camphor Beetle	Moderately dry to wet grasslands	Roughs	1	C/L	L
<i>Stenus pusillus</i>	Camphor Beetle	Marshes, ditches, pond margins, silage, hay & arable fields	Wetland	1	C/L	NC*
<i>Stenus similis</i>	Camphor Beetle	Drier grassland & heathland, mountains	Flower Meadows	2	C	NC*
<i>Tachinus rufipes</i>	Few-haired black Rove Beetle	Damp (not wet) habitat, damp logs, matted vegetation, compost & dung	Roughs	10	C/L	L
<i>Tachyporus chrysoelinus/dispar</i>	Yellow & Black Rove Beetle (missing hairs)	Leaf litter, rotting grass, moss, soil surface	Roughs	1	C/L	NC*/L
20 Weevil species:						
<i>Barypeithes pellucidus</i>	Hairy Spider Weevil	Moss or on low vegetation & under bark. Larvae on Black Medick	Flower Meadows	1	C/L	L
<i>Ceratapion gibbirostre</i>	Blue Thistle Weevil	Thistles	Flower Meadows	1	C/L	NC*
<i>Coelositona cambricus</i>		Greater and Common Bird's-foot Trefoil	Flower Meadows	3	C/L	NC*
<i>Expapion ulicis</i>	Grey Gorse Weevil	Gorse bushes	Wood edge	1	C/L	NC*
<i>Holotrichapion aethiops</i>	Globular Blue Apion Weevil	Vetch plants	Flower Meadows	2	C/L	NC
<i>Hypera nigrirostris</i>	Black-nosed Green Hypera Weevil	Clover	Flower Meadows	1	C/L	L
<i>Ischnopterapion loti</i>	Bird'sfoot Trefoil Weevil (black)	Common Bird's-foot Trefoil	Flower Meadows	3	C/L	L
<i>Ischnopterapion modestum</i>	Hairy Black Apion Weevil	Greater Bird's-foot Trefoil	Flower Meadows	2	C/L	NC
<i>Ischnopterapion virens</i>	White Clover Weevil (green/purple)	White Clover	Flower Meadows	1	C/L	NC*

<i>Mecinus pascuorum</i>	Squat red-patched Ribwort Weevil	Ribwort Plantain	Flower Meadows	11	C/L	NC*
<i>Mecinus pyraster</i>	Elongate Black Ribwort Weevil	Grassy areas with Plantain	Flower Meadows	1	C/L	NC*
<i>Oxystoma cerdo</i>	Globular pinch-nosed antennae 1 yellow weev	Tufted Vetch	Flower Meadows	1	NNb	L
<i>Perapion curtirostre</i>	Short-nosed Black Dock Weevil	Docks and Sorrel plants	Flower Meadows	4	C/L	NC*
<i>Perapion violaceum</i>	Short-nosed Blue Dock Weevil	Docks and Sorrel plants	Flower Meadows	1	C/L	NC*
<i>Protapion assimile</i>	Clover Seed Weevil	Clover	Flower Meadows	1	C/L	NC*
<i>Protapion fulvipes</i>	White Clover Seed Weevil Yellow-legged, bl	White Clover	Flower Meadows	1	C/L	L
<i>Protapion trifoli</i>	Clover Seed Weevil	Clover	Flower Meadows	2	C/L	NC*
<i>Sitona lineatus</i>	Striped Sitona Weevil	Vetches, grasslands	Flower Meadows	1	C/L	L
<i>Sitona sulcifrons</i>	Raised-eye Sitona Weevil	Clover, Bird's-foot Trefoil	Flower Meadows	1	C/L	L
<i>Sitona suturalis</i>	Flat-eyed Sitona Weevil	Vetches and Vetchling plants in open places	Flower Meadows	2	C/L	L
15 Other Beetle species:						
<i>Agathidium laevigatum</i>	Figure-8 Shining Round Fungus Beetle	Fungi, leaf litter, stumps, trees	Wood edge	1	C/L	NC*
<i>Atomaria atricapilla</i>	Yellow Silken Fungus Beetle	Fungi. Compost, leaf litter, hay, logs.	Wood edge	1	C/L	L
<i>Atomaria rubella</i>	Ruddy Silken Fungus Beetle	Fungi. Compost, leaf litter, hay, logs.	Wood edge	1	C	L
<i>Catops coracinus</i>	Elongate brown Round Fungus Beetle	Fungi, leaf litter, stumps, trees	Wood edge	1	C/L	L
<i>Cortinicara gibbosa</i>	Narrow-pronotum Latrid (no 1st sternite lines)	Flowers of ground layer or shrubs and trees	Wood edge	5	C/L	NC*
<i>Crptophagus saginatus</i>	Ruddy Silken Fungus Beetle	Rotting grass/plant matter	Wood edge	1	L	NC
<i>Sciodrepoides watsoni</i>	Hairy Ruddy Round Fungus Beetle	Fungi, leaf litter, stumps, trees	Wood edge	1	C/L	NC*
<i>Meligethes aeneus</i>	Bronzed Pollen Beetle	Wild & cultivated Brassica flowers in any habitat; grass tussocks & leaf mould	Flower Meadows	3	C/L	L
<i>Meligethes carinulatus</i>	Black Pollen Beetle	Bird's-foot Trefoils in rough grassland; grass tussocks in winter	Flower Meadows	5	C/L	NC*
<i>Meligethes nigrescens</i>	Black Pollen Beetle	White Clover; grass tussocks in winter	Flower Meadows	2	C/L	NC
<i>Lagria hirta</i>	Common Bristly Yellow Brown Beetle	Leaf litter and matted grass; later Compositae & Umbellifers	Flower Meadows	1	C/L	L
<i>Oedemera lurida</i>	Small False Blister Beetle	Open areas with pollen (Hawthorn, Umbellifers), larvae in dead stems	Flower Meadows	3	C/L	L
<i>Rhagonycha fulva</i>	Black-tipped red-headed Soldier Beetle	Often on Hogweed & Cow-parsley eating pollen & other insects	Flower Meadows	7	C	C
<i>Nicrophorus vespilloides</i>	Common (black & orange) Sexton Beetle	Under carrion (taken in meat lure)	Roughs	1	C	C
<i>Silpha tristis</i>	All-black Tubercle-punctured Keeled Carrion	Sandy Soil. Carrion eater (taken in meat lure)	Roughs	7	L	L
EPEHEMEROPTERA: MAYFLIES: 1 species:						
<i>Cloeon dipterum (aquatic larva)</i>	Pond Olive Mayfly	Ponds, large or small	Wetland	1	C	C
DIPTERA: TRUE FLIES: 27 taxa:						
12 Hoverfly species:						
<i>Baccha elongata</i>	Thin-waisted Hoverfly	Dappled-shady places in woodland and hedges	Wood edge	1	C	C
<i>Episyrphus balteatus</i>	Marmalade Hoverfly	All habitats, larvae eat aphids	Flower Meadows	3	C	C

<i>Eristalis arbustorum</i>	Yellow-face Rat-tailed Maggot Hoverfly	Visits Knapweed, Thistle, Ragwort, Umbellifer. Larvae aquatic	Wetland	1	C	C
<i>Eristalis horticola</i>	Spot-winged Rat-tailed Maggot Hoverfly	Mostly in woods/hedges liking Bramble & Hawthorn. Larvae aquatic	Wetland	1	C/L	L
<i>Eristalis tenax</i>	Large Rat-tailed Maggot Hoverfly	Enriched water/pollen/ivy/buildings in winter	Wetland	1	C	C
<i>Helophilus hybridus</i> (+ juv)	Striped-thorax Hoverfly (half black tibia)	Wetlands/pollen near water	Wetland	1	C/L	C
<i>Melanostoma mellinum</i>	Narrowly-dusted Orange Golf-club Hoverfly	Grasslands and wet flushes	Wetland	2	C	C
<i>Platycheirus clypeatus</i>	Round-pitted Orange-spot Hoverfly	Dry grass, wet meadows, fens	Wetland	1	C/L	L
<i>Platycheirus rosarum</i>	Two-spotted Hoverfly	Marshy meadows, lush waterside veg	Wetland	1	C/L	L
<i>Sphaerophoria interrupta</i>	Elongate Black & Orange Hoverfly	Many habitats, often damper	Wetland	3	C/L	L
<i>Sphaerophoria scripta</i>	Elongate Black & Orange Hoverfly	Grasslands	Flower Meadows	2	C/L	C
<i>Syrirta pipiens</i>	The Fat-femured Hoverfly	Most places inc gardens, ivy	Wood edge	2	C	C
15 Other Fly taxa:						
<i>Paradelphomyia senilis</i>	Small Brown Cranefly	Muddy places in woods	Wetland	1	C	C
<i>Tipula lateralis</i>	White-patched Striped Cranefly	Streamside mud	Wetland	1	C	C
<i>Hartigiola annulipes</i>	Hairy Beech Gall Midge (from gall)	Beech trees	Wood edge	1	L	L
<i>Conops quadrifasciatus</i>	Four banded Bee-grabbing Fly	Attacks <i>Bombus lapidarius</i> bees	Flower Meadows	2	C/L	L
<i>Coremacera marginata</i>	Heavy-mottled Snail-killing Fly	Damps areas, woods, grass. Land snails	Roughs	1	C/L	L
<i>Tetanocera elata</i>	Field Buff Slug-killing Fly	Dry and damp grass, wood clearings, wetlands	Roughs	1	C	C
<i>Tachina fera</i>	Bristly Orange and Black Fly	Parasitizes moth caterpillars; adult on Umbellifers and waterside plants	Wetland	2	C	C
<i>Haematopota pluvialis</i>	Notch-horned Clegg	Livestock areas; damp soils/woods; nectar and blood	Roughs	2	C	C
<i>Neuroctena analis</i>	Spotted-wing Yellow Fly	Shady herbage, carrion, dung, fungi	Wood edge	5	C/L	C
<i>Loxocera albiseta</i>	Yellow-faced Rust Fly	Rushes	Wetland	1	C/L	NC*
<i>Lucilia sericata</i>	Common Greenbottle Fly	Carrion, droppings, garbage	Wood edge	4	C/L	L
<i>Melinda gentilis</i>	Pale-palped Melinda Fly	Parasitizes land snails; damper habitats where snails live	Roughs	1	L	NC*
<i>Pollenia pediculata</i>	Tufted Clusterfly	Eats worms	Any	1	L	L
<i>Tanypodinae</i> (aquatic larva)	Narrow-headed Non-biting Midge	Flooded ground/ponds	Wetland	1	C	C
<i>Dixidae</i> (aquatic larva)	Meniscus Midge (larva and adult)	Slow streams, ponds, ditches, minor ponds	Wetland	1	C	C
THYSANOPTERA:	THUNDERFLIES: 1 taxa:					
<i>Haplothrips leucanthemi?</i>	Thrip	Flowers, trees, bushes, gardens	Flower Meadows	10	C	C
COLLEMBOLA:	SPRINGTAILS: 7 species:					
<i>Allacma fusca</i>	Large Mottled Squat Springtail	Surface debris, low vegetation	Roughs	1	C/L	NC*
<i>Heterosminthurus bilineatus</i>	Least Squat Springtail	Surface debris, low vegetation	Roughs	2	C/L	NC
<i>Lepidocyrtus curvicolis</i>	Yellow Humped Springtail	Surface debris, low vegetation	Roughs	2	C	L
<i>Orchesella villosa</i>	Patterned Springtail	Surface debris, low vegetation	Roughs	3	C/L	NC*

<i>Entomobrya nivalis</i>	Patterned Springtail	Flowers, trees, bushes, gardens	Flower Meadows	4	C	L
<i>Pogonognathellus longicornis</i>	Coil-antennaed Yellow Springtail	Surface debris, low vegetation, marsh, garden	Wetland	6	C	C
<i>Tomocereus minor</i>	Tooth-spined Annulated Springtail	Surface debris, low vegetation, marsh, garden	Wetland	1	C	C

The fifth column shows the number of samples/habitat parcels that the animal was recorded at this site

The sixth column is the scarcity status for England and Wales. C = Common, L = Local, A = Alien, NR = Nationally Rare (1 species), NN = Nationally Notable (1 possible species), NNb = Nationally Notable B (1 species)

"Common" is lifted from the literature. C/L is used if available distribution maps show a lightly scattered distribution or areas of England and Wales with no records.

"Local" relates to a species with few scattered records but not one that is deemed scarce or uncommon.

The seventh column: C = common if the records are scattered across Lancashire; L if there is 1 to few records, scattered at most; L* means records referred to in an online summary of literature.

NC means notable in the county i.e. the record appears to be the only Lancashire Administrative County record; NC* is used if there are other records in the Lancashire Vice Counties.

s) , RDBI = RED Dat Book Insufficient Data (0 species).