

Shropshire Invertebrates Group



Annual Report 2007

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Photo: SIG members at Hoar
Wood, Bury Ditches, Clunton,
May 2007

Shropshire Invertebrates Group

ANNUAL REPORT 2007

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Field Meetings 2007

25 February 2007: Whixall Moss (present: J. Mason, W. Rudge, G. Blunt)

Although this classic site has been worked by many entomologists over the years, a late-winter expedition was a rarity. Our target for the day was the Snow Flea *Boreus hyemalis*, a strange member of the Mecoptera reputed to be on the Moss. According to the text-books they may be found running about over snow: but as no snow was in evidence our primary fieldwork technique was frustrated and our search for the Snow Flea proved in vain. Nevertheless we had a productive visit, though the vertebrates we encountered well outnumbered the invertebrates.

As far as we could establish where the county boundary lay we kept to the Shropshire side of the Moss. Hare's-tail Cottongrass was in flower, and we also came across Cowberry among the vegetation. Searching open patches on dry peat banks brought us no reward at all, so we turned our attention to wetter areas, tramping exhaustedly over the uneven terrain in search of any invertebrate habitat we could find. The common dung-fly *Scathophaga stercoraria* was the only insect on the wing in the cool, cloudy conditions. We came upon a decayed Birch stump beneath which a colony of the ant *Lasius niger* was active. More dead wood sheltered the ground beetles *Agonum muelleri* and *Notiophilus biguttatus* and a *Theridion* spider, possibly *T. tinctum*. Our other invertebrate finds throughout the day were a Fox moth larva in a pit among *Sphagnum*, the beetle *Lochmaea suturalis* on Heather, an old pupa of Bulrush Wainscot in a decayed Bulrush stem, and our best find of the day, a cocoon of a sawfly on a twig overhanging our lunch spot. A female *Trichiosoma lucorum* was later bred from it.

In contrast to this paucity of invertebrates, bird-life was well in evidence, and we spent much of our time bird-watching, especially as showers closed in after lunch. The Moss's pools held a good range of wildfowl: 40 Canada Geese, 30 Mallard, pairs of Teal and Tufted Duck, and two pairs of Shoveler; 10 Black-headed Gulls were noisily establishing their territories; and two Curlews were in display flight. From boggy areas we flushed nine Common Snipe, a Moorhen and a Meadow Pipit. Both Sparrowhawk and Kestrel hunted overhead. Evidence of mammals was provided by molehills and scats of Fox and of a mustelid, which from its size we thought might be a Mink.

The trees, shrubs and gardens around the edge of the Moss were equally productive of birds, and here we recorded Blackbird, Wren, Dunnock, Magpie and Jay, Great and Long-tailed Tits. A flock of 20 Chaffinches was also present. As we headed back to our cars late in the day a flock of 200 Starlings passed overhead towards a roost somewhere in Wales.

25 March 2007: Ironbridge (present: I. Thompson, J. Mason, C. Derry, N. Jones, G. Blunt, R. Iremonger, E. Iremonger)

Meeting at the car park next to the famous iron bridge, our party made its way along the disused railway almost as far as the Buildwas cooling towers, then explored the woodlands on Benthall Edge, before making our way back via footpaths along the top edge of the wood, across farmland and finally down the country lane which led to our starting point. The day was cloudy and rather cool, which meant that few insects were on the wing, though a couple of bumblebee queens, *Bombus terrestris*, were seen as we set out on our way.

The damp, shady environs of the old railway track proved ideal habitat for ferns, and Hart's-tongue flourished in abundance here. We also noted Hard Shield-fern and Maidenhair Spleenwort. Pendulous Sedge was equally common, and fungi included Scarlet Elf-cups and King Alfred's Cakes. Being so close to the River Severn the adjacent woodlands attracted a good variety of birds, and we heard Chiffchaff, Chaffinch, Great Tit and Robin in song, a Nuthatch called and was eventually seen, and a Cormorant flew upriver. Searching trackside vegetation produced leaf mines of the micro-moth *Stigmella aurella* on Bramble and the agromyzid flies *Aulagromyza hendeliana* on Honeysuckle and *Phytomyza ilicis* on Holly. A strikingly-marked ladybird caused some initial excitement, but later examination showed it to be a melanic 10-Spot Ladybird. A solitary fly of the family Heleomyzidae, *Suillia variegata*, was found amongst bramble leaves.

Benthall Edge wood is actively managed, and we found several places where recent coppicing had taken place. These open areas supported groups of flowering Wood Anemone, Wood-sorrel, Dog's Mercury and Early Dog-violet, with Lesser Celandine in damper spots. A small trickle of water at the foot of one coppiced area attracted, rather surprisingly, a Grey Wagtail. For entomologists, however, this extensive woodland management produced a bonus in the form of an abundance of logs in various stages of decay. These became the main centre of our attention, and we rolled over the smaller logs and prised bark off those too large to roll, until we had an excellent tally of typical invertebrates. Among them were several snails, including *Arianta arbustorum*, *Discus rotundatus*, *Cochlicopa lubricella*, *Clausilia bidentata* and the similar, but larger and more local *Cochlodina laminata*. Other fauna under bark were larvae of a cardinal beetle *Pyrochroa* species, an imago and two larvae of the longhorn beetle *Rhagium mordax*, the ground beetle *Abax parallelipipedus*, a Lesser Stag Beetle *Dorcus parallelipipedus*, the distinctive centipede *Lithobius variegatus* and millipede *Glomeris marginata*, and a queen Common Wasp.

As we headed further up towards the top of the wood we began to encounter groups of flowering Primroses, plus one or two Blackthorns and a single Spurge-laurel also in flower. Pheasant, Goldcrest, Great Spotted Woodpecker and Long-tailed Tit were seen or heard here, and a Buzzard wheeled overhead. The presence of mammals was evidenced by Badger dung and deer slots on a muddy track, though we could not tell which deer species was involved. John Mason sifted a couple of pseudoscorpions from leaf litter.

As we followed the footpath along the top of the wood we were delighted to find a fine clump of Toothwort flowering beneath a Hazel bush, and Sweet Violet nearby made an equally good show. Along this path Early Dog-violet was also blooming more profusely than anywhere else on our route, and Traveller's-joy was much in evidence. At length we came upon a much-shaded pond, where Common Frog spawn was discovered, and the Orange Ladybird, the ant *Lasius flavus* and the bug *Peritrechus geniculatus* were found on the sparsely-vegetated pond margin. Treecreeper was added to our tally of birds in this area.

Soon after this the path left the wood and headed along a farm-track towards the road. Two Song Thrushes were noted in an adjacent field. Although we found nothing else of note on the way, the walk added a nice diversity to the woodland habitats we had been exploring, and we returned to our cars well satisfied with our early spring excursion.

29 April 2007: Hope Bowdler and Ragleth Wood (present: I. Thompson, E. Andrews, W. Rudge, N. Jones, G. Blunt)

Warm, pleasant sunshine gave our group cause for optimism as we met at the lay-by on the B4371 just outside Hope Bowdler. The day could scarcely have been better for insects, for besides the weather there were numerous nectar sources in the roadside verges: Dandelion and Cow Parsley were flowering abundantly, supplemented by Red Campion, Greater Stitchwort, Bluebell, Common Vetch, Garlic Mustard and Ground-ivy. Even before we left the lay-by we recorded imagines of Small White, Red Admiral and Nettle Tap moth, plus an Orange Tip egg on Garlic Mustard. A *Bombus pratorum* was present and we found a dead bumblebee at the road edge, probably hit by a passing vehicle, which later examination proved to be the cuckoo species *B. bohemicus*.

For the first part of our excursion we took the lane leading towards Ragleth Wood via Dryhill (Bull Lane). Our parking spot was chosen simply for convenience, yet this lane proved to be well worth our investigation. The mixed hedgerow consisted of much Hazel and Blackthorn and a variety of other shrubs, while Primrose, Lesser Celandine and Common Dog-violet flowered in the shady hedge-banks. A Holly held the leaf-mines of the agromyzid fly *Phytomyza ilicis*, while on the wing were a male Orange Tip and a couple of Holly Blues, a Shaded Broad-bar moth, a teneral Common Blue Damselfly, the bees *Andrena angustior*, *A. haemorrhoa*, *A. labiata* (four males), *A. synadelpha*, *Nomada flava*, *Bombus pratorum* and *B. lucorum*, and the flies *Eristalis pertinax*, *Melanostoma mellinum*, *Meliscaeva auricollis* var. *maculicornis* (this variation is not often recorded in Shropshire), *Syrphus ribesii*, *Xylota segnis*, *Tachina fera*, *Bibio marci* and a cranefly, *Nephrotoma appendiculata*, was photographed. In the lush vegetation of the broader verges were the distinctive homopteran *Cercopis vulnerata* and both 7-spot and 14-spot Ladybirds, while a micro moth which gave some initial identification problems was later determined as *Glyphipterix fuscoviridella*. Bird-life along the lane included Chaffinch, Mistle Thrush, Sparrowhawk and Raven.

Ravens were again in evidence as we approached Dryhill, and we saw our first Swallow here too. Beside the footpath leading to Ragleth Wood a few Cowslips were in flower and we encountered the bee *Andrena cineraria* and tachinid-fly *Gymnochaeta viridis*. Then we entered the wood, rather abruptly. Today Ragleth Wood consists largely of Pendunculate Oak and Hazel, with scattered Crab Apple, Wild Cherry, Rowan and Honeysuckle and planted Beech trees. Much of the wood is sheep-grazed, leaving a sparse ground flora with few flowers other than Wood-sorrel, Lords-and-Ladies and Ramsons. As we entered the wood we were greeted by swarms of St Mark's Fly *Bibio marci* and the longhorn moth *Adela reaumurella*, while the hoverflies *Rhingia rostrata* and *Chrysotoxum arcuatum* gave promise of greater treasures. Beating produced an abundance of small geometrid larvae, among which we identified Mottled Umber, Winter Moth, Northern Winter Moth and Pale Brindled Beauty. The Birch Shieldbug was also numerous in our beating-tray, and other shieldbugs encountered in this way were the Parent Bug and Green Shieldbug. Our best species to fall to beating, however, were the local beetles *Rhagonycha testacea* and *Phytodecta pallida*, taken from neighbouring Oak trees in the lower part of the wood-pasture. This area of Ragleth Wood also produced one or two rather shy Grey Squirrels, along with Buzzard, Greenfinch, Coal Tit and a male Redstart in full song.

Lower parts of Ragleth Wood lay outside a fence which served to exclude the sheep and in consequence marked a striking change in the ground flora. Bluebell and Greater Stitchwort now appeared in quantity, Ash and planted Larch were additions to the tree cover, and a small marshy area had flowering Lesser Celandine and Cuckooflower. As we had permission from the National Trust, the landowner, we explored these areas fully, recording Speckled Wood, Orange Tip and Peacock butterflies, the hoverfly *Melanostoma scalare*, bee-fly *Bombylius major*, foraging queens of the bumblebee *Bombus lucorum*, and the spiders *Pisaura mirabilis* and *Araniella cucurbitina*. Two members of the party explored the woodland below the dividing fence between open pasture and wood, where they found the following hoverflies: *Cheilosia pagana*, *Dasysyrphus albostrigatus*, *Epistrophe eligans*, *Eristalis pertinax*, *Eupodes luniger*, *Ferdinadea cuprea* (three seen on a tree trunk and a fence post), *Melanostoma mellinum*, *M. scalare*, *Platycheirus albimanus*, *P. tarsalis*, *Rhingia campestris*, *Syrphus ribesii* and *S. vitripennis*. In this area, a notable find for the day was the rarely recorded Tachinid fly *Carcelia puberula*. The woodland and its edges were productive for bees and the following were recorded: *Osmia rufa*, *Andrena angustior*, *A. nigroea*, *Nomada fabriciana*, *N. flava*, *N. ruficornis*. The striking red and black weevil *Apoderus coryli* was present on its host plant Hazel.

For some while we sat on a grassy bank beside the marsh and watched four female Orange Tips seeking nectar from Cuckooflowers and in turn being pursued by an ardent male. The craneflies *Eriocnopa trivialis* and *Tipula unca* were collected from this damp area. Following some rather exhausting fieldwork up and down the steep slopes of the wood this interlude gave us both a time to rest and a quiet insight into the lives of some of our most attractive spring insects.

As a finale for the day, on returning to the car park, we were pleased to find the local hoverfly, *Chalcosyrphus nemorum* sitting on leaves in a hedge.

20 May 2007: Bury Ditches and Sunny Hill (present: J. Mason, I. Thompson, N. Jones, E. Andrews, G. Blunt)

Coming after a period of wind and rain this proved to be a beautifully still day, warm and sunny with occasional cloudy spells, perfect for invertebrate recording. Insects were notably common and in consequence we had one of our best recording days in a long while. We had hardly left our cars when we came across Green-veined White and Wood White: we were to record five and nine respectively during the day. A Blackthorn near the car park was infested with galls of the mite *Eriophyes prunispinosae*. Nearby we discovered a Common Frog, and heard Siskin and Goldcrest calling from a plantation of Larch and Sitka Spruce.

The track from the car park skirted a mixed Oak-Silver Birch woodland whose verges held an abundance of flowering plants, notably Germander Speedwell, Bush Vetch, Red Campion, Greater Stitchwort and Wood Forget-me-not. In contrast dry, shaly banks were colonised by Wood Sage and Bramble, with many Speckled Yellow moths around the former, their larval foodplant. The range of insect species encountered along this track was impressive. Butterflies were Peacock, Large and Small

Whites, Orange Tip, Large Skipper and Wall Brown - the last a rare species in the West Midlands nowadays. Moths were equally numerous, including:

Brown Silver-line	<i>Crambus lathoniellus</i>	<i>Micropterix aruncella</i>
Cinnabar	<i>Epiblema scutulana</i>	<i>Nematopogon</i>
Cream Wave	<i>E. sticticana</i>	<i>swammerdamella</i>
Small Engrailed	<i>Epinotia tedella</i>	<i>Olethreutes lacunana</i>
Streak (larva on Broom)	<i>Eucosma aspidiscana</i>	<i>Platyptilia gonodactyla</i>
<i>Adela fibulella</i>	<i>E. hohenwartiana</i>	
<i>Anthophila fabriciana</i>	<i>Glyphipterix simpliciella</i>	

The great diversity of insect species encountered along this track also included the bees *Andrena scotica*, *A. nigroeana*, *A. subopaca*, *A. wilkella*, *Lasioglossum lativentre*, *Nomada fabriciana*, *N. flava*, *N. striata*, *Sphecodes ephippius*, *S. geoffrellus* and *S. gibbus* and the bumblebees *Bombus pascuorum*, *B. pratorum*, *B. lapidarius* and *B. lucorum*; the bugs *Dolycoris baccarum*, *Cixius nervosus* and *Cercopis vulnerata* (all common) plus one or two Green Shieldbugs; and the beetles *Gastrophysa viridula* (common), *Clytus arietis*, *Pachytodes cerambyciformis*, *Oedemera lurida*, *Phyllopertha horticola* and the Pine and Ten Spot Ladybirds. Beating trackside vegetation also produced the spider *Araniella cucurbitina*. The hoverfly *Paragus haemorrhous* was swept from short vegetation beside the forest road. Two Common Blue Damselflies, one teneral and one male, were noted in the dense vegetation between the track and the conifer plantation.

Many black and red sawflies (Hymenoptera, Symphyta) were present amongst lush vegetation. These were all *Macrophya annulata*. This sawfly is a convincing spider-hunting wasp (Pompilidae) mimic.

Though we had not progressed very far we were now ready for lunch, which we took on a convenient log. This gave us a chance to investigate an area of short turf, where we came across the Common Ground-hopper, a queen of the ant *Formica fusca*, and one of the day's best finds, the bug *Neottiglossa pusilla* (Pentatomidae), a scarce southern species which is almost certainly new for Shropshire.

As we walked from the car park along the wide forest track we encountered a very good variety of hoverfly species: *Cheilosia lasiopa*, *C. pagana*, *Chrysotoxum arcuatum*, *Criorhina berberina*, *Eristalis pertinax*, *Helophilus pendulus*, *Leucozona lucorum*, *Melanostoma scalare*, *Neoascia podagrica*, *Parasyrphus punctulatus*, *Platycheirus tarsalis*, *Rhingia campestri*, *Rhingia rostrata* and *Xylota segnis*. As we turned up a path, passing beneath some very large conifers, we came across a further three hoverflies, all associated with conifer plantations: the large and very local bumblebee mimic *Eriozona syrphoides* (a first Shropshire record), *Parasyrphus mallinellus* (another first Shropshire record) and *Dasysyrphus pinastri*. Also in this area was a *Heringia* species, possibly *H. pubescens*.

After lunch we continued for a little way along the main track, coming across a Stinkhorn fungus as we did so, then we turned up a narrow path into the wood. Here we found Yellow Pimpernel in flower, and two singing Wood Warblers could be heard, one of which eventually showed itself. The patchwork of sun and shade along this path was highly productive of insects. We soon recorded a queen Hornet, a 14-spot Ladybird, the moths Common Carpet, Grey Pine Carpet, Little Emerald and *Adela reaumurella*, the hoverfly *Cheilosia variabilis* and a tachinid-fly *Phasia* species. At the top of the path we continued to find good insects, notably the micro-moth *Rhopobota myrtillana* around Bilberry and a bee, *Andrena angustior* was photographed. A good range of deciduous woodland birds was evident throughout our visit, including Pheasant, Chaffinch, Great Spotted Woodpecker, Great Tit, Song Thrush, Wren and Robin. Several summer visitors were in song too, providing first records of the year for some of us: Blackcap, Chiffchaff and a single Willow Warbler in addition to the two Wood Warblers heard earlier. A hunting Kestrel was seen and Buzzard and Raven called overhead at various times during the day.

At last we arrived at Bury Ditches itself, a large iron-age hill-fort whose impressive earthworks were covered in a heathland vegetation which included Broom, Gorse, and flowering Tormentil and Common Vetch. Linnets, Yellowhammers and singing Tree Pipit and Whitethroat were the birds identified here, and the micro-moth *Cydia succedana* was much in evidence. Two local beetles were also recorded *Oiceoptoma thoracicum* and *Aclypea opaca*, both from the family Silphidae, bringing an outstanding field trip to a conclusion.

During the day we collected a number of craneflies from the Sunny Hill woodland and these were later determined by Peter Boardman as follows: *Cylindrotoma distinctissima* – a local species, *Limonia flavipes*, *Limonia nigropunctata x masoni* – a nationally rare species and a first Shropshire record, plus *Eleophila subarmorata*.

Additional Records for Bury Ditches and Sunny Hill

Member Nigel Jones had visited the site on 26 April, and recorded the following insects: Around the hill fort the bees *Sphecodes pellucidus*, *Lasioglossum parvulum*, and *Andrena similis*. The latter is a nationally scarce species. In the woodland the hoverflies *Baccha elongata*, *Platycheirus tarsalis*, *Dasysyrphus albostrigatus*, *Epistrophe eligans*, *Eupodes luniger*, large numbers of *Parasyrphus punctulatus* hovering at about 12-15 feet height above paths. *Melangyna lasiophthalma*, *Cheilosia albitarsis*, *Cheilosia lasiopa*, *C. bergenstammi*, *C. pagana*; the distinctly local tachinid-fly *Tachina ursina*, further bee species – *Andrena labiata* (a nationally scarce species), *A. haemorrhoea*, *A. scotica*, *Nomada goodeniana* and *Bombus lucorum* and an Eyed Ladybird *Anatis ocellata*.

Another visit was made by Nigel Jones on the 12 June and the following additional species were recorded:

Hoverflies (Syrphidae) *Chrysogaster solstitialis*, *Episyrphus balteatus*, *Cheilosia illustrata*, *C. impressa*, *Sericomyia silentis*, *Volucella bombylans*, *Syrphoctonus pipiens*.

Conopidae: *Myopa buccata* (a local species), *Sicus ferrugineus*.

Tachinidae: *Phasia hemiptera*.

Bees & Wasps Hymenoptera: *Odynerus spinipe*, and *Andrena haemorrhoea*.

24 June 2007: Titterstone Clee (present: J. Mason, I. Thompson, G. Blunt)

This trip was arranged to explore at greater length the quarry and its neighbourhood at the summit of Titterstone Clee which we had briefly visited in 2006. Our target was the Scarce Blue-tailed Damselfly, which had been reported in flushes on the quarry floor. Unfortunately the weather on this visit mirrored that of our last to this hill, being dull and cloudy with occasional light showers.

From the parking spot beside the quarry we proceeded to give the area a thorough search. Drier soils were characterised by a sward rather lacking in diversity and comprising species such as Mat-grass, Crested Dog's-tail and Heath Bedstraw, the most abundantly in flower plant in the area. This monotonous vegetation was intermixed with a greater variety of mostly annual species on bare and lightly-vegetated soils, where Lesser Trefoil, Small Cudweed, Parsley-piert, Squirreltail Fescue, Silver and Early Hair-grasses were present. Here too was New Zealand Willowherb, a plant we had found on nearby Clee Hill in 2006. Also floristically diverse were the wet areas of Titterstone Clee quarry, consisting as they did of small but rather deep ponds, shallow runnels and damp soils. Here were Marsh Arrowgrass, Bog Pondweed, Canadian Waterweed, Bristle Club-rush, Cuckooflower and Ivy-leaved Crowfoot, while nectar sources were provided by Marsh Thistle, Brooklime and Lesser Spearwort. We recorded several species of *Carex*: Star, Oval, Flea, Glaucous Sedges and the form of Yellow-sedge formerly known as *C. demissa*.

Our search focused on the runnels which provided a typical habitat for our target species. A handful of damselflies were indeed located, mostly sheltering low in waterside vegetation, but they proved to be only the Common Blue and Blue-tailed Damselflies – no sign of the latter's rarer congener. An interesting specimen was a female Blue-tailed Damselfly of the form *rufescens-obsolata* (formerly *infuscans-obsolata*), lacking thoracic stripes. As we searched these runnels we came across three Common Frogs and watched a couple of Palmate Newts swimming in the water. A beetle taken from one pond was later identified as *Agabus sturmi* (Dytiscidae). But the poor weather conditions were responsible for a great paucity of flying insects, and we added only the hoverfly *Helophilus hybridus*, a 7-spot Ladybird and a solitary Meadow Brown butterfly to the above list. A Pied Wagtail searched the quarry floor and four Wheatears its scree slopes, while Buzzard, Raven, Swallow, Kestrel and Carrion Crow passed overhead. At the very base of the quarry face a more ruderal vegetation was investigated and found to include White Campion and Lesser Stitchwort, but no significant invertebrates were located there.

After this we left the quarry and worked our way round the hill towards its southern side. Here we examined a number of old buildings, relics of earlier industrial activity, finding Wall-rue growing in

their crevices. Nearby earth banks held abundant Foxgloves in flower and, on shallower soils, equally abundant flowering Wild Thyme, this latter species being infested with galls of the mite *Aceria thomasi*. Birds of open spaces were present here: three Skylarks, two Linnets and a Meadow Pipit were recorded. While investigating this area we encountered Brett Westwood, who after sharing anecdotes and information sent us a little way down the slope in a quest for Lesser Marshwort. We failed to locate this plant, but during our search we found Creeping Forget-me-not, Green Field-speedwell, Buck's-horn Plantain and Small Sweet-grass. Turning over a discarded piece of corrugated iron we were finally rewarded, not with any invertebrate of note, but with a small Grass Snake which made a rapid and effective escape as we tried to manoeuvre it to get a better look.

Finally, back at our cars and taking a welcome drink from our flasks, we observed to westward a water-spout which trailed down from a louring cloud towards earth. We watched it for several minutes, but it never quite made contact with the ground and eventually, gradually, grew shorter and fainter until it disappeared altogether - a fitting conclusion, we thought, to a day when the weather thwarted our very best efforts at entomology.

8 July 2007: More Quarry, north of Bishop's Castle (present N.Jones, J.Mason, I.Thompson)

This visit was rescheduled due to concern over nesting Peregrines. We clambered up a steep bank from the lay-by on the A488 to the level of the lower quarry floor. Although some scrub has established at this point there are still open areas and we were greeted by the sight of a considerable area of Rock Stonecrop with some smaller clumps of White Stonecrop. Also in this outer area we noted Wood Sage, Selfheal, Common Centaury, Common Ragwort and Trailing St John's-wort. The floor of the quarry is generally level with some low stone piles and the remains of a bitumen heating plant. The wrecked electrical equipment and heating elements were evident together with a pool of bitumen, which in very warm weather would be extremely viscous, but on our visit was merely soft to walk upon. The scrub trees are predominately Silver Birch with some Ash and Grey Willow.

The noise from the Peregrines was considerable. Whilst we were in the quarry and whenever we moved around, particularly in the open, they issued alarm calls and circled above us. We saw at least three in the air at one time and there may have been a total of four. Understandably not many other birds were present except for numbers of Swallows and House Martins which were hawking along the quarry faces where there were vegetated ledges. Among some scree at the foot of the rock face we found a dead young Jackdaw but it had probably fallen from a nest rather than being a prey item of the falcons. The only other bird noted was a Raven. On the quarry floor near the rock face we found the remains of falcon kills, usually just the feathers but also a very fresh racing pigeon from that morning. The legs carried in addition to its number ring and loft ring, a rubber racing ring. Subsequent efforts to find its home loft or the race in which it had been involved proved fruitless.

In the innermost part of the lower quarry Rosebay Willowherb was present. On the shaded floor we found Scarlet Pimpernel and many bryophytes. A fine plant of Maidenhair Spleenwort was growing in deep shade on a boulder at the foot of the cliff and Wild Strawberry grew profusely on the well drained stone rubble of the ledges and gullies of the old quarry face. The shrub layer in this area is almost non-existent apart from some bramble on which a single *Bombus pratorum* was noted. Around the margins of the quarry floor Ringlet, Meadow Brown, Painted Lady, Small White and Small Tortoiseshell were present either as singletons or in very small numbers. A Comma was seen feeding on a dead pigeon. Cinnabar Moth caterpillars were present on some of the ragwort, a few *Bombus lucorum/terrestris* and a *B.lapidarius* were noted. On a willow we found evidence of the activities of leaf cutter bees but no adults were seen. Our search of the foliage did reveal however the shieldbug *Pentatoma rufipes*. On a grassy bank at the quarry margin the orthopterans Field Grasshopper and Mottled Grasshopper were the only members of this order found during the day.

Collecting other invertebrates from this area produced the following additional records:

Diptera – Syrphidae: *Xylota sylvarum*, *Episyrphus balteatus*, *Syrphus vitripennis*, *Eristalis pertinax*, *Cheilosia proxima*, *Paragus haemorrhous* and *Melanostoma mellinum*.

Diptera – Asilidae: *Machimus atricapillus*

Diptera – Stratiomyidae: *Chloromyia formosa*

Diptera – Tabanidae: *Haematopota crassicornis*

Hymenoptera – Chrysididae: *Chrysis angustula*

We climbed up over some of the derelict structures to an old trackway, which leads to the upper quarry levels. This feature was well vegetated, indicating a greater soil depth, and the margins had much Bracken, Bramble and Rosebay Willowherb. On a flat area at about the level of the lower quarry lip a gated former access track leads downhill across adjacent farmland, and at this point we stopped for lunch. In the shorter turf areas at this point Lesser Stitchwort, Tormentil, Wild Thyme and several plants of Musk Mallow were present.

At this lunch location, whilst moving logs to provide seats, we disturbed a Violet Ground Beetle. In adjoining bramble patches we found the hoverflies *Volucella bombylans* and *V. pellucens*, a Nettle Tap moth, Small Heath, Ringletbutterflies and, probably the find of the day, a White Letter Hairstreak.

The continuation of the trackway to the upper levels passed through the area of densest vegetation more or less at the original ground level prior to quarrying operations. The path narrowed through Hawthorn scrub and then came out onto a shallow quarry floor which was reasonably flat, with some ephemeral pools filled from the recent rains. At this level we found more Woodpigeons killed by the falcons. This quarry area contained many large boulders and there was evidence of rabbits living among and under these. Amongst the vegetation of the floor we noted Herb-Robert, Birdsfoot Trefoil and Scarlet Pimpernel, together with some Wood Sage. At this top level we noted Carrion Crows for the first time during the day.

Around part of the upper quarry level are steep earth cliffs with some shattered stone bands. We climbed up to some quite extensive patches of Navelwort to search for mines of the larvae of the rare hoverfly *Cheilosia semifasciata*, but found none. As it had started to rain we made our way back downhill. However the rain soon eased, and on a level area, from which we could look over the cliff into the lower quarry, we found several bumblebees. *Bombus lapidarius* were present in some numbers, several *B. lucorum* including one daughter queen, and on wood sage *B. pascuorum*, and surprisingly, a single *B. monticola*. A male collected and expected to be a cuckoo bee species turned out on examination of the genital capsule to be a very dark form of *B. hortorum*. The solitary bee *Andrena subopaca* and specimens of the social Tree and Red wasps were the other hymenoptera recorded. The other species collected from the upper quarries were:

Diptera – Syrphidae: *Ferdinandea cuprea*, *Eristalis arbustorum*, *Platycheirus albimanus*, *Chrysogaster solstitialis* and *Sphaerophoria scripta*.

Diptera – Dolichopodidae: *Dolichopus longitarsus* and *Poecilobothrus nobilitatus*.

Diptera – Empididae: *Empis livida*.

Diptera – Therevidae: *Thereva nobilitata*.

Hymenoptera – Sphecidae: *Crossocerus dimidiatus*, *C. podagricus* and *Trypoxylon attenuatum*.

Hymenoptera – Vespidae: *Symmorphus bifasciatus*.

As we made our way down to our cars we heard and then saw a Great Spotted Woodpecker.

5 August 2007: Lower Short Ditch (present J.Mason, W.Rudge, I.Thompson)

This was a return visit to this upland site following that of October 2006. We all travelled together and parked our car in a layby at the south-west corner. Almost immediately after locking the vehicle a dragonfly was spotted along the edge of the tarmac road where surface water formed a shallow rivulet alongside the wet verge. The specimen was netted easily and to our surprise proved to be a mature male Keeled Skimmer in perfect condition, sufficiently so to suggest that it had originated from a nearby site. This species is only known to breed within VC40 on Catherton Common, which is some 43km east of Lower Short Ditch. A search was made of the old plantation area immediately to the west of the road but no suitable breeding habitat was noted. The open moorland area further west and south and the upper part of Ditch Dingle may be more productive areas for a future, more detailed, search.

As a continuation of our seeking suitable habitat, we followed the line of the depression which drains to the small abandoned quarry alongside the track parallel to the woodland fringe at this end of the site. Vegetation in this depression was too dense and long to be suitable to provide the necessary breeding conditions. There were still quite a few plants of Bog Asphodel in flower along this wet feature and some Marsh Bedstraw. Because of recent rains the pool in the base of the quarry was full and overflowing onto the track. A Southern Hawker dragonfly was flying around the pond and close

scrutiny of the emergent vegetation revealed 3 teneral of the same species on Common Spike-rush, one of which was still drying and expanding its wings. Reaching these individuals proved impossible without getting wet. We had not come prepared for this situation and the water was too deep for us to access the emergence point. Later in the day after the dragonflies had taken wing we were able to retrieve an exuvium with the aid of a long stick. Also at this pond Common Darters and Azure Damselflies were in evidence. This pool with its ability to provide a breeding site for aeshnids is clearly not an ephemeral one. Other water plants noted were Branched Bur-reed, Broad-leaved Pondweed, Soft-rush and some Common Duckweed. The vegetation was dense and there was little clear water. Lesser Spearwort was found at the drier margins and in some of the adjacent damp gullies. Small frogs were seen in this pool and the other sighting of note was a chinamark moth. This too could not be reached and therefore a positive identification to species could not be made. From the wing patterning it would seem likely to have been either *Nymphula stagnata* or *N. nymphaea*.

Our target species for the day was the Mountain or Bilberry Bumblebee. We quartered much of the moorland of the central and southern areas of the site but found nothing. The species had been seen here in 2006 by a reliable observer but it may be that it does not occur on this site but in some of the adjacent suitable habitat. Several Silver Y were flushed during this period of searching and a single Brown Hawker dragonfly hunted low over the heathy vegetation. The heather was not yet in full bloom but Cross-leaved Heath, Tormentil and Valerian were noted. The most striking flowers were those of patches of Great Willowherb from one of which a male Tree Wasp was collected. Much of the gorse is of the Western species and from this a specimen of the micromoth *Cydia succedana* was netted. Some Broom was evident and Three-nerved Sedge was present in profusion. On the drier side of the site near the road alongside the Lower Short Ditch several people were gathering bilberries, including one who appeared to be collecting extremely assiduously using a comb to remove the fruit and working very hard, stooped for considerable lengths of time. In this area we found a Common Lizard in the shortest vegetation and also the only orthopteran seen all day, a Common Green Grasshopper. House Martins and Swallows were constantly criss-crossing the moor and a few Meadow Pipits were flushed. Wheatears were seen along the eastern boundary area where a plantation has been cleared. At intervals Swifts would arrive in small numbers but after a short time would all disappear together.

Butterflies were never that numerous at any time during the day. The species most commonly seen was the Peacock, individuals flying strongly in several areas. Those parts of the site which are most grassy, along the southern margin and the woodland edge, provided sightings of Small Skipper, Small White, Small Heath, Large White, Ringlet and Meadow Brown. Carrion Crows were evident in the trees along this boundary and at the time of our arrival we could also hear Ravens, probably young ones which left once we approached. A single Jay was spotted as it departed. On the sheep pastures beyond the moorland Rooks were numerous and extremely vociferous.

After lunch we proceeded along the Kerry Ridgeway track to the very northern end of the site, where an area of relatively young forestry abuts the moorland. We enjoyed the views from this elevated point and tried to identify as many surrounding hills and features as possible. We heard and then managed to see a Great Spotted Woodpecker, and Linnets were present along the plantation edge. Working back along the moorland edge John Mason sieved litter and moss at several points. The most interesting find beside the Ditch was a very small species of pseudoscorpion. Also whilst on this route we encountered the only bumblebees of the day. We were initially unsure whether they were *Bombus terrestris*. Some had markings showing fading of the yellow hairs and the width of the collar was variable. Two daughter queens examined were brightly marked and typically *B. lucorum* so our conclusion was that all were of the *B. lucorum* complex.

As we were preparing to leave the Ravens returned to the trees where they were first seen. Driving down the road a brightly coloured butterfly caught our eye and was found to be a Small Copper, our last species record for the day.

A micro-moth collected on the day, was later identified By Godfrey Blunt as *Cydia succedana* (a common species on gorse).

2 September 2007: Brown Clee (present: J. Mason, I. Thompson, G. Blunt)

Our second excursion of the year to the Clee hills took place in no more favourable conditions than the first. Cloud, wind and light rain escorted us from our roadside parking spot on the north-east flank of Brown Clee, through woodland and open grazings as far as Green Lea, where we hoped to spend some time observing insect migration. The early part of our walk was partly sheltered from the wind, and we did come across a handful of insects – two ground beetles *Pterostichus* species, which evaded capture, and a dung beetle *Geotrupes stercorosus*; while an Antler moth was sitting miserably among Lesser Burdocks. Little else was located here: a Jay was heard, a Raven and two Buzzards were on the wing, and a Goldcrest called from track-side conifers. As we were approaching Green Lea we found a quiet, sheltered gully where two Peacocks, three Small Tortoiseshells and the bumblebees *Bombus lucorum* and *B. lapidarius* were feeding on a group of Creeping Thistles.

Green Lea, mid-way between the higher tops of Abdon Burf and Clee Burf, is a noted spot for observing migration, and we set up our station there for a while. We were not well rewarded. A dozen Swallows passed westwards in three small parties. The wind swept an *Eristalis* hoverfly and four unidentified bumblebees across the hill too quickly for any chance of identification. A Small Heath skulked in the grass. Molehills and a “good crop of Beech mast” were the only other entries in our notebooks for this location.

After a short time (though it seemed much longer) we gave up the thankless exercise and made our way onto the heath which flanks the summit of Abdon Burf. A dozen House Martins hawked overhead. A queen bumblebee *Bombus lucorum* and another Antler moth were found, but again we had more success in spotting birds than insects: five Meadow Pipits, eight more Swallows passing westwards, a Skylark and another Buzzard. Below the summit of Abdon Burf a pond beside the curiously-named Lake Kilowatt (itself only a small pool) produced some typical aquatic plants in the form of Lesser Spearwort, Branched Bur-reed, an unidentified pondweed, and Pond Water-crowfoot in flower. Three Meadow Pipits were flushed nearby, and beneath an overturned grit bin we discovered two Common Toads and an old nest, probably of a mouse.

Further down this track we re-entered the woods which flank much of Brown Clee’s lower and middle slopes. The wind had dropped and the rains relented by this time, and wildlife was suddenly more noticeable. Green and Great Spotted Woodpeckers and a Brown Hawker dragonfly appeared, and we came across the delicate flowers of Harebell. Then at last, almost back at our cars, we encountered a small mixed flock of birds feeding on Rowan berries and searching nearby hedge bottoms. In some fifteen minutes we identified several Robins and Blackbirds, two Blue Tits, a further Great Spotted Woodpecker, single Chaffinch and Great Tit, a Siskin and, best of all, two Spotted Flycatchers, a most uncommon summer visitor nowadays.

“That was...a good walk,” summed up Ian as we packed our equipment away and prepared to leave. At least the final few moments gave us some positive memories.

29-30 September 2007: Attingham Park (present: I. Thompson, C. Derry, G. Blunt, R. Thurston, J. Mason, W. Rudge, S. Lewis)

Despite its obvious potential Attingham Park seems to have been little worked for its moth fauna, so Bob Thurston’s invitation to run light traps in his garden at No.1 Deer Park Cottage was welcomed by our group. We arranged this preliminary visit and set up two Robinson traps and a Skinner trap in the vicinity of the cottage. During the evening the sky cleared and the temperature dropped quickly, so we had no great expectations when we gathered on the morning of the 30th to inspect the catch. In the event a total of 31 macro moths of 13 species was rather better than anticipated. Some 45% of the catch consisted of one species, Lunar Underwing. The presence of Black Rustic, Brindled Green and Grey Shoulder-knot served to underline the site’s potential, for, while not being rare, they are among the less frequently recorded species in the county. The full list of macro moths is as follows, with numbers given in brackets of those species which occurred other than as singletons:

Brimstone Moth
Beaded Chestnut (2)
Black Rustic

Brindled Green (2)
Common Wainscot
Flame Shoulder



Left *Cheilosia semifasciata* female at Haugmond Hill

Above *Hylaeus signatus* in a Shrewsbury garden



Above *Epeolus cruciger* below the Long Mynd near Darnhope

Right *Arctophila superbiens* at Huglith Wood, Westcott



Above *Chrysis viridula* at Oaks Wood, Habberley



Above *Tenthredo zona* at Prees Heath

Photos: Nigel Jones

Flounced Rustic
Grey Shoulder-knot
Lunar Underwing (14)
Setaceous Hebrew Character (2)

Shuttle-shaped Dart
Snout (2)
Square-spot Rustic (2)

The traps also picked up the distinctive caddis-fly *Limnephilus lunatus*, while the micro *Endrosis sarcitrella* was found at the cottage. During the morning we also recorded the robin's pincushion gall of the hymenopteran *Diplolepis rosae* (Cynipidae) on Rose.

14 October 2007, Tantree Bank, Rowley Farm (present: I Thompson, D Wrench, G Blunt, B Rudge, N Jones, J Mason, M Duffell, S Ayliffe)

Five members of the Shropshire Invertebrates Group gathered at Rowley Farm, Rowley with the object of exploring Tantree Bank, an area containing unimproved grassland on steep slopes and an ancient dingle woodland. The area is managed as part of a Countryside Stewardship Scheme agreement. We were joined by three members of the Borders Group of the British Bryological Society. A target species for the day was Beech Fern *Phegoptera connectilis* which had last been recorded in the woodland at Tantree Bank early in the twentieth century.

We walked downhill from the farm, along a track bounded by a tall hedge, where several micro-lepidoptera leafmines in Hazel were noted: *Stigmella microtheriella*, *S. floslactella*, *Parornix devoniella*, *Phyllonorycter coryli*, *Phyllonorycter nicellii*. As we continued along the hedgerow and into the top of a steep sided meadow we noted two further leafmines of micro-lepidoptera: *Parornix torquillella* on Blackthorn, and *Parornix anglicella* on Hawthorn. Also in this hedgerow, mines of the fly *Phytomyza ilicis*, were discovered on Holly.

On entering the meadow we investigated patches of rough grass and brambles where mines of *Stigmella aurella* were sparsely distributed in bramble. As we slowly worked our way down the very steeply sloping meadow we recorded the Common Ground-hopper *Tetrix undulata* and the heteropteran bugs *Lygocoris contaminatus*, *Stenodema holsatum* and *S. calcaratum*, plus the ground beetle *Amara aulicus*.

On nettles in the field and around its edges were the beetle *Brachypterus glaber*, the heteropteran bug *Tingis cardui*, the flies *Geomyza tripunctata*, *Mesembrina meridiana* and *Siphona geniculata*, plus mines of the fly *Agromyza anthracina*. Gorse harboured a female spider *Zygiella atrica* and the beetle *Apion (Exapion) ulicis*.

In the field we noted Field Mushroom *Agaricus campestris* and the lichen *Caldonia pyxidata* on a soil bank.

We moved to the bottom of the field and explored along the alder tree lined edge of Brockton Brook. Here we recorded the Autumnal Moth *Epirrita autumnata* (male), Brick moth *Agrochola circumcellaris*, and mines of the moth *Phyllonorycter rajella* on Alder. Sweeping beneath the trees captured large numbers of the fly *Campsicnemus curvipes*. A caddisfly (Trichoptera) *Rhyacophila oblitterata* was taken.

Walking slowly along the brook we eventually reached the boundary of the woodland. Close to the edge of the woodland were Nettle Tap moths *Anthophila fabriciana*, common on one area of nettles in the lee of a hedge, but it appeared to be absent from other nettle patches. There were also mines of the moth *Stigmella malella* on an old Crab Apple and the fly *Amauromyza labiatarum* on Hedge Woundwort. The lichen *Caldonia ramulosa* grew on a gatepost.

The party entered the woodland where we were able to follow a narrow path, just above the Brook. The woodland was dominated by Ash, with Holly, Birch, Cherry, Oak, Rowan and Sycamore present in significant quantities. The damp woodland provided ideal conditions for woodland diptera and it was not surprising that we collected many craneflies. Specimens were passed to Peter Boardman who determined nine species, including two local species *Pedicia occulta* and *Rhypholophus varia*, plus *Dicranomyia autumnalis*, *Erioconopa trivialis*, *Limonia macrostigma*, *L. nubeculosa*, *Tipula*

fulvipennis (a large species, of which several were seen), *T. pagana*, and *Trichocera annulata*. Other diptera recorded from the woodland were *Eristalis pertinax*, *Lonchoptera lutea* and *Neuroctera anilis*.

As we explored the woodland, hoping to rediscover Beech Fern, a number of other species were noted. There were about thirty snails, *Clausilia bidentata* on one trunk, but it was not found on any other trunks. On a Hawthorn grew the lichen *Ramalina farinacea*. Stinkhorn fungus *Phallus impudicus* alerted us to its presence, courtesy of its distinctive odour. Two further insects were encountered, the beetle *Agonum assimile* under bark and the heteropteran bug *Picromerus bidens*.

Returning to our cars, we came across at least three *Xanthandrus comtus* hovering with *Eristalis pertinax* males, at about 15 feet height, at the edge of the wood. *X. comtus* is a formerly very scarce species which in recent years has been encountered regularly around southern England. It was first recorded in Shropshire in 2007, this being the third county record.

Several species of mite (Acari) were noted: *Dasyneura urticae* galls, very sparse on Nettle; *Eriophyes prunispinosae*, several galls on Blackthorn; *E. laevis*, a few galls on Alder; *Phyllocoptes goniothorax*, galls very sparse on Hawthorn; *Aceria aceriscampestris* and *A. macrochelus* galls on Field Maple.

We observed a number of birds over the course of the day, including a single Dipper along the Brook, several Goldcrests, Robin, Great Spotted Woodpecker, two Bullfinches, Wren and Nuthatch in the woodland, plus Sparrowhawk, Buzzard and two Ravens flying above the site. Finally, a latrine beneath a hedge was that of a Badger.

Members' individual activities 2007

Godfrey Blunt:

Shropshire

As in previous years my home village of Alveley produced some interesting sightings, of which the most notable were the Hornets which searched for prey in my garden on 5, 6 and 20 May. On the first occasion a Hornet entered inside a flowering *Berberis* shrub. I do not know where they were nesting locally, and I did not see them after 20 May. Other interesting species were a Spring Usher moth in the village on 9 April, the same date as the first (unidentified) White butterflies of the year; the pyralid *Pyrausta purpuralis* in my garden on 2 June; and a female *Misumena vatia* crab spider on an Oxeye Daisy there on 14 May: this last species has clearly now colonised my garden. In the Severn Valley Country Park at Alveley the micro *Micropterix aruncella* was swarming around Blackthorn on 2 June; Azure Damselflies were also numerous on the same date; and I saw several Banded Demoiselles and Blue-tailed Damselflies (including one ovipositing) plus a single Large Red Damselfly.

Near to home there were four dead Badgers, road traffic victims, along a six-mile stretch of road between Alveley and Bridgnorth on 25 March. These included two cubs of the year. My first Holly Blue of the year was at Bridgnorth on 11 April.

Elsewhere in Shropshire I ran a Microlepidoptera workshop at Craven Arms Discovery Centre on 19 May, during which our group found larval webs of an *Yponomeuta* species (probably *cagnagella*) on Spindle and an imago of *Adela rufimitrella*, not a common moth in the county. A visit to the north-west of the county on 3 June produced a number of micros at Oswestry Old Hill Fort, notably several *Glyphipterix fuscoviridella* around Great Wood-rush, plus *Nemophora degeerella* and *Epiblema scutulana*. My friends and I also found 60 spikes of Greater Broomrape there, mostly just over flowering. Later that day a Small Pearl-bordered Fritillary was on Llynclys Common, where a male Broad-bodied Chaser was by Oliver Pond; while in its clear waters I counted at least 30 Palmate Newts.

Micros passed on to me by Ian Thompson from his trap at Meole Brace on 8 June included the juniper-feeder *Dichomeris marginella*, an uncommon moth in the county, plus *Scoparia subfusca* and the Codling Moth *Cydia pomonella*. My final sighting for the county in this account, though chronologically the first, was a Reeves's Muntjak which crossed the road before me at Much Wenlock while I was driving back from the SIG meeting late on 7 March.

Elsewhere in England

My most notable entomological find of the year was a Sulphur Pearl moth *Sitochroa palealis* (Pyrilidae) at Durnford, Long Ashton, Bristol on 13 September; this is a nationally Notable species and the first for the area except for a 1937 record for "North Somerset." I had another new moth species for me, Thrift Clearwing, at Holseer Cove during a holiday on the Lizard, Cornwall, in early June. This trip was mainly to photograph some of the rare plants of the area, in which task I was quite successful. Near Lizard Point I found Hairy Bird's-foot-trefoil, Three-cornered Garlic, Fringed Rupturewort and most of the area's special Clovers - Rough, Smooth, Upright and Long-headed. The British endemic Western Ramping-fumitory was also in full flower in one hedgerow. At Kynance Cove I located Cornish Heath and Thyme Broomrape. A day trip to St Mary's in the Scilly Isles produced Lesser and Greater Quaking-grasses, Bermuda-buttercup, Four-leaved Allseed, Italian Lords-and-Ladies, Smaller Tree-mallow and Small-flowered Catchfly, most of them in the Old Town area of the island.

Ian Thompson:

Mammals

I have seen four Polecat RTAs this year. In March on the 6th and 18th two were seen on the A454 within a half mile of one another near Hinton and Worfield respectively. The other two were in September and October as part of the Vincent Wildlife Trust's annual monitoring programme.

At night on 21st November a car (travelling quite fast) in which I was a passenger had a near miss with a deer near the Ironbridge road junction just alongside the Attingham Park deer fence. The whole event happened so quickly that I am not sure of the species involved. The reflections in the eyes were bright and the animal was like a shadow moving off the road. It was not large and may have been a Roe deer

Birds

At the end of January there were several days when there was one and usually two Buzzards feeding on the ground in a field alongside Longden and Washford roads at Nobold. One bird was noticeably smaller than the other and I assume this individual to be a young one from 2006. I believe they were hunting for worms. On 22nd February we had eight Goldfinches feeding on old lavender flower spikes, Teasel heads and Nyjer seeds in the garden. My first Swallow of the year was seen in Kington (Herefordshire) on 18th April, the first in Shropshire not until 29th April near Church Stretton. First Swifts were in Meole Brace on 18th May.

Invertebrates

Moth trapping in my garden was restricted this year by a combination of rain, high winds or moon conditions, these factors reducing opportunities to three nights. This year I have made an MV lightbar for the trap. I now run the trap with the MV bulb until around midnight and then switch to the actinic tube when neighbours would probably not appreciate the brighter output. Eleven new species for the garden were recorded and notably on 8th June I had specimens of four species of Hawk-moth – Lime, Poplar, Elephant and Small Elephant – albeit only one of each.

After a good start butterflies had a disappointing year. First sightings in Shropshire:-

- Peacock – 4th April in my garden
- Brimstone & Orange Tip – 12th April at Weir Coppice
- Small Tortoiseshell – 12th April at Redhill
- Speckled Wood – 13th April at Nobold
- Small White & Holly Blue – 21st April at Weston Lullingfields
- Meadow Brown – 5th June at Shavington
- Painted Lady – 15th June at Atcham
- Red Admiral – 18th June in my garden
- Gatekeeper – 14th July on Haughmond Hill

Red Admirals seemed to stay around longer than other species this year. My last recorded sighting was on 30th October when I saw an individual in seemingly good condition flying strongly.

This year has also seen the recording of the Harlequin ladybird in Shropshire for the first time. Two separate records from Shrewsbury, each of a single specimen, were followed by a record of 'dozens' in a house near Tenbury Wells, then two at Attingham Park and finally one in the SCC offices in Shrewsbury. Three forms were noted, *succinea*, *conspicua* & *spectabilis*. Among other ladybird records this year were two each for three species not commonly recorded in Shropshire – Pine, Water & 24-Spot ladybirds.

As early as 26th February a *Bombus terrestris* queen was present in my garden. The dry warm weather of April produced many records and a good year for bumblebees seemed likely. On 6th April a *B. pratorum* worker was in my garden, on 7th April a *B. lucorum* queen was noted in Meole Brace and on 12th April in Weir Coppice queens of *B. lapidarius* & *B. terrestris* (several individuals) were present. On a road verge near Weston Lullingfields on 21st April queens of four bumblebee species were active, *B. terrestris*, *lucorum*, *lapidarius*, & *pascuorum*. During June *B. lucorum/terrestris* workers were noted at four sites, Whixall Moss (10th), a limestone grassland site at Ironbridge Power Station (12th), Attingham estate (15th) and in my garden (17th). By late summer it was clear that most bumblebees had had a bad season because of the wet weather and a few were found only on elevated or well drained sites such as Nipstone Rock on 8th September where *B. lucorum* & *B. pascuorum* were evident on Heather. The same species were also at Attingham estate on the old airfield on 7th September.

Examination of the fallen leaves of a Horse Chestnut in Meole Brace School grounds revealed the presence of mines of the micromoth *Cameraria ohridella*. We have quite a few Horse Chestnut trees in the village and this was the only one I examined. I plan to look at some of the others in 2008.

On 5th June, with others, I visited Shavington Park and estate to carry out some assessments to help the owners with their improvement schemes for stewardship. Among the habitats were some marginal fields previously drained at some expense to the public purse by way of grants, which are now being left to revert to their former wet pasture state. Two shallow pools have formed in just two years, which were already in use by dragonflies and birds, and hold no fish. This is a private estate in north-east Shropshire where no recording has been done. The owner's principal interest is butterflies but he also expressed an interest in learning more about dragonflies and I hope in the future to visit not only these pools but also the park lake which at the time of our visit had many Azure Damselflies and Four-spot Chasers in evidence.

Botany

Last year I reported finding a Mistletoe plant in an apple tree in our garden. One year on and another has appeared. It is in a more noticeable place (and also vulnerable to accidental damage) and has only two leaves. The earlier plant has flourished this year and its leaves, six when first noticed, now number around twenty.

Nigel Jones:

2007 provided an unusually good early spring season, with warm and dry conditions for much of March and April. After this promising start the weather deteriorated and at times seemed unremittingly wet and cool. None-the-less I managed to get out into the field between storms and tempest. Warm and dry conditions returned in August and September, providing a decent finale to a disappointing year, when general insect numbers were well down. A selection of interesting records are given in my report for the year.

DIPTERA

Syrphidae - Hoverflies

Cheilosia grossa – 13 March 2007 two feeding from flowers of *Ranunculus ficaria*. Atcham. *Cheilosia semifasciata*: Following my 2006 discovery of the larvae of this rare species in leaves of *Umbilicus rupestris*, in woodland at Haughmond Hill, I returned to the site in 2007 and was able to photograph adult males and females. They were present in very good numbers throughout much of this woodland. Adults were first recorded as early as 26 March and again on 12 April. I also encountered adults flying around Pontesford and Earl's Hills, Shropshire on 10 April and 14 April. Several males were also

swept from a small woodland at Lee Brockhurst, Shropshire, on 30 April. I failed to record *C. semifasciata* from two other candidate sites at Nesscliffe Hill and near Harmer Hill. Single *Criorhina ranunculi* were present at Eastridge Wood 11 April, and Earl's Hill 14 April. both flying high over early blossom. *Criorhina asilica*: This is probably the rarest of our *Criorhina* species and for the second time in four years I found it at Stevenshill Wood, near Cound, 20 June. *Criorhina floccosa* was recorded at Attingham Park 16 and 18 April; below Haughmond Hill, 3 June and one at Hazel Coppice, Mortimer Forest (Herefordshire) on 7 July. *Meligramma trianguliferum*: A single male at Presthoke, Wenlock Edge on 20 April. my first Shropshire record for twenty years. *Parasyrphus punctulatus* was very common in 2007, being encountered on 14 occasions between 23 March and 20 May, with large numbers present on 26 April at Sunny Hill wood, near Clunton, where many males were hovering at about 4-5 metres over forest roads. *Didea fasciata* and *Pipiza fenestrata* were at Harmer Hill, 30 April. *Eriozona syrphoides*: Following the first Shropshire record for this fly, made at SIG's 20 May field trip, I found a second specimen from nearby Blakeridge Wood, Bishop's Castle on 20 August. *Chrysotoxum arcuatum* – eleven individuals were counted at Sunny Hill wood, Clunton on 26 April. *Heringia pubescens*: A single female from Sunny Hill, Clunton, 20 May. Several male *Parhelophilus versicolor* were whizzing around over alder leaves, alongside the Cound Brook, near Condover, 2 June. *Sphegina verecunda*: Lee Brockhurst, Shropshire, 11 June. *Pocota personata*: A single female of this rarely encountered fly was found resting on a path in secondary woodland, near Llanyrnech Hill Nature Reserve, on 17 May. This is a first modern record of *P personata* for Shropshire. *Rhingia rostrata* appears to be firmly established in the Welsh border region. It was frequently encountered in spring and late summer/autumn, in the Shropshire, Worcestershire and Herefordshire region. I recorded *R rostrata* on nine occasions between 21 April and 1 June, then on five occasions between 22 August and 13 September. *Xylota xanthocnema*: I found this scarce fly at Attingham Park on 4 July and in woodland at Smethcott on 10 August.

The high summer of 2007 was particularly disappointing for adult hoverflies, most species occurring in very low numbers. However late August and September, proved to be a far more productive period, during which some species were notable for their relative frequency. *Arctophila superbiens*: I had not encountered *A superbiens* for many years in Shropshire, so it has been pleasing to record this handsome fly in good numbers from six locations during 2007. The most notable of which was Riddles Wood, Westcott, Shropshire, where I had ten sightings of individuals along a ride in a small wet woodland. I also encountered *A superbiens* at Blakeridge Wood, Bishops' Castle, 24 August; Eastridge Wood, Habberley, 28 August; near Pulverbatch, 16 September; Breidden Hill, Montgomeryshire, 1 September and Wigmore Rolls, Herefordshire, 13 September. As a general observation, rides in coniferised woodlands seem to be well suited to this fly. *Epistrophe grossulariae* appeared in good numbers throughout August and September, with ten individuals sighted at Eastridge Wood, Habberley, Shropshire, on 28 August. Four *Melangyna umbellatarum* put in an appearance at Blakeridge Wood, Bishop's Castle on 24 August, and another two at Eastridge Wood, on 28 August. A single *Scaeva selentica* was recorded in Blakeridge Wood on 24 August. *Helophilus trivittatus* was recorded in Shropshire, on nine occasions between 29 June and 22 August. A Shropshire first record for *Xanthandrus comtus* was made at Smethcott on 10 August, with a second, the next day, found in my house in Shrewsbury! Finally I saw a late *Didea fasciata* on a roadside hedge at Berrington, 7 September.

Stratiomyidae – Soldierflies

A splendid *Stratiomys potamida* along a water filled ditch at Attingham Park on 16 July. *Sargus bipunctatus* during mid September in my Shrewsbury garden, for the third year running, a group of males hovered in the same spot, on the north, shady side of a birch tree, at about fifteen to twenty feet height.

Scenopinidae – Window Flies

The rarely recorded *Scenopinus niger* was a surprise find on 20 June, in a hedge in the car park at Venus Pool. This is probably a first Shropshire record.

Tabanidae – Horseflies

Hybomitra distiguenda – three seen at Bucknell Wood, Bucknell on 12 June, one at Earlsdale, Pontesford, 23 June.

Conopidae – Thick-Headed Flies

Two *Myopa buccata*, visiting flowers of *Veronica chamaedrys*, Radnor Wood, near Clun, 1 June. Another at Sunny Hill, Clunton, 12 June. Two *Thecophora atra* near Venus Pool, Eaton Mascott, 19 July and a late record of a single specimen on bramble flowers near Pulverbatch, 23 September.

Sarcophagidae – “Flesh Flies”

At Prees Heath on 11 June I took a male *Metopia staegeerii*. This species was only recently added to the British list and previously had only been recorded from a handful of southern heaths. This is the most northerly UK record for *M. staegeerii* (*pers comm.* Steve Falk).

Tachinidae – Parasitic Flies

Tachina ursina: 11 April Hope Valley and at Sunny Hill, Clunton, 26 April. *Phasia hemiptera*: Sunny Hill, Clunton, 12 June; Attingham Park, 4 July; Riddles Wood, Westcott, 25 August.

Phasia obesa: Earlsdale, Pontesford, 23 June. A few *Phasia pusilla* were present at Brompton, near Atcham on 19 July and they were abundant at Attingham Park on 20 August. *Phasia barbifrons*: A second Shropshire record for this recent UK species was made at Bucknell Wood on 29 June. *Mintho rufiventris* is rarely recorded, but was in my garden in Shrewsbury for the second time in three years, 17 June. *Dexiosoma caninum* was present at Attingham Park, 13 and 20 August; and another one at Breidden Hill, Montgomeryshire, 1 September. There were numerous *Linnameya vulpina* amongst heather at Lower Shortditch Nature Reserve on 24 August. A single *Prosenia siberita* was observed at Stanmore Country Park, Bridgnorth, 3 September.

“Stilt flies”

Micropezidae: Several *Neria cibaria* at Attingham Park, 3 May. **Megamerinidae**: A single *Megamerina dolium* Earlsdale, Pontesford, 23 June.

Sciomyzidae – Snail-killing Flies

Sepedon sphegea, Attingham Park, 16 July. *Trypetoptera punctulatus*, Bucknell wood, 12 June.

Platypezidae – Flat-Footed Flies

Polyporivora ornata – I encountered a swarm of this strikingly marked, small fly around a dead tree in a field at Brompton, near Atcham, 19 July.

HYMENOPTERA

Symphyta-Sawflies

There were numerous larvae of *Tenthredo zona*, a local species, on *Hypericum* plants at Prees Heath, 11 June. I watched and photographed a magnificent *Urocerus gigas* at Wigmore Rolls, Herefordshire on 13 September.

Apidae – Bees

The surprise bee of the year was undoubtedly the occurrence of a single *Heriades truncorum* in my garden on 25 August. Although this rare species has been expanding its range northwards in recent years, this is a dramatic jump northwards in the recorded UK distribution. Previously, the most northerly record is from Wiltshire. It is possible that this bee was imported to Shrewsbury in timber, so I shall be keeping a watchful eye for the species in 2008, to see if it is established in Shrewsbury. Another surprise in the garden was the scarce *Hylaeus signatus*. There were up to three at a time (male and female) over a three week period between 26 August and 18 September. I had planted *Reseda odorata* with the specific intention of seeing if it would attract *H. signatus*, but had not expected it to turn up so readily in the first season!

Anthophora plumipes males were flying in my Shrewsbury garden on 14 March, the earliest date I have encountered them in Shropshire. There were unusually high numbers of *Osmia rufa* males about the garden during April. *Anthophora furcata*: Until 2007 I had never encountered *A. furcata* outside my garden, so it was pleasing to find one below Haughmond Hill, 3 June, and another at Earlsdale, Pontesford, 23 June. I encountered male and female *Andrena labiata* at Attingham Park, during May. There was a very late female *Andrena cineraria* above Rigmoroak, Stiperstones on 18 July. *Chelostoma florissomne* continues to occur in good numbers in Shropshire – several males coursed up and down a patch of buttercups in woodland at Eaton Mascott, 21 May; specimens were also observed near Conover, 2 June; below Haughmond Hill, 3 June; a single male on bramble flowers at Earlsdale, Pontesford, 23 June and two more at Bucknell Wood on 29 June. Specimens of *Hoplitis claviventris*

were observed at Bucknell Wood on 12 and 29 June. The nationally scarce *Sphecodes crassus*, was found at Presthope, Wenlock Edge, 20 April. Later in the year, on 14 July, a single female of the nationally rare *Stelis ornata* was found here along with a few diminutive *Chelostoma campanularum*. The latter, visiting flowers of *Campanula trachelium*. *Epeolus cruciger* In the Darnhope area, near Ratlinghope, on 9 September, two females were stranded in cool conditions on mint flowers, providing an excellent photo-opportunity. Another female *E cruciger* was investigating nests of *Colletes succinctus* on the main path leading to the summit of the Stiperstones on 11 September.

Chrysididae - Jewel Wasps

Three beautiful green and red *Chrysis viridula* were searching for host *Odynerus spinipes* nests in upturned root-plates in Oak's Wood, Habberley, 18 May; four more were seen at Radnor Wood, near Clun on 26 May and a singleton at Bucknell Wood on 12 June.

Tiphiidae

Tiphia minuta was present amongst a wide range of aculeate hymenoptera species at Bucknell Wood, 12 June.

Sphecidae

Ammophila sabulosa – a single specimen on Haughmond Hill, 3 June (Ian Cheeseborough had discovered several here earlier in the year). *Crossocerus walkeri* a single specimen of this nationally scarce wasp was at Earlsdale, Pontesford, 23 June. There were huge numbers of *Crossocerus quadrimaculata* and *Oxybelus uniglumis*, as well as good numbers of Crabro species, (including a male *C peltarius* which I managed to photograph) over a small area of exposed sand banks at Prees Heath on 28 June.

Ichneumonidae

An impressive *Rhyssa persuasoria* was investigating logs for its host *Urocerus* at Lee Brockhurst, 11 June.

COLEOPTERA

Silphidae: Two *Oiceoptoma thoracicum* were tackling a shrew carcass at Blakeridge Wood, Bishop's Castle, 24 August. **Cleridae:** *Thanasimus formicarius* is supposedly a common beetle, but I had never encountered it until I came across a specimen of this nicely marked red, black and white beetle amongst a log pile, at Lee Brockhurst, 11 June. **Scarabaeidae:** A well worn Bee Beetle *Trichius fasciatus* crawled across flowers at High Vinnalls, Mortimer Forest (Herefordshire) on 27 August. **Cerambycidae:** In January 2008 I was contacted by A wildlife trust member, Dennis Twist. Dennis sent me numerous dead specimens of the rare Welsh Oak Longhorn Beetle *Pyrrhidium sanguineum*, which had emerged from logs stored in his home at Mardu, near Clun. The logs were supplied by a woodfuel merchant in Bucknell, so it is quite likely that the beetle is of local provenance. Eventually around 200 specimens were found in Dennis' home. Two splendid longhorn beetles – *Leptura quadrifasciata* crawled over a fallen tree at Atcham, 16 August.

Lepidoptera - Butterflies

There were over twenty Wood White butterflies in woodland near Clun on 1 June.

Two Wall butterflies were present at Blakeridge Wood, Bishop's Castle on 24 August and another beneath the Stiperstones, at Gatten 11 September.

John Mason

This year we have divided our time between Shropshire and Somerset and most of the wildlife records relate to observations in (or from) our gardens at Bayston Hill and Wedmore respectively.

Astronomy: I have seen a few notable sights during the year including the total eclipse of the moon on a crystal clear cold night (3 March), a good view of Saturn through a 'scope (14 March) and several good views of Venus (brilliant in the evening sky 1 April). Towards the end of the year Comet Holmes has been a good naked eye object visible as a fuzzy spot in Perseus after its outburst in October.

Shropshire:

Birds: A huge flock of Lapwings (hundreds strong) regularly appeared flying over the landscape on the A49 route south of Bayston Hill during the winter months. One winter evening I noticed a small group of Goldfinches hovering like humming birds around the holly in our garden at dusk as they sought a

roosting place. Goldcrest seen in the garden 23/3. First swifts over Bayston Hill 5 May. On 11 August a male Sparrowhawk had pinned down a young starling on a neighbour's lawn but couldn't control it and eventually lost it, even after following the Starling when it bolted into the undergrowth. There was a cock Pheasant walking in the road at the front of our house on 5 October.

Mammals: 90 plus Noctules emerging from their roost in an empty block of flats at Dohill (SBG evening) 21 May. 14 Pipistrelles in one bat box at Apley Castle Park (SBG evening) 29 May. A Rabbit at Bayston Hill was surprisingly a first record for our garden 5 July.

Invertebrates: A succession of bright sunny days brought sightings of early spring insects to the garden from 3 February onwards when a few hoverflies (*Eristalis*), queen bumblebees and a Small Tortoiseshell appeared. These were followed by Brimstone 13 March; 3 Commas 17 March; 2 Peacocks 4 April; and a Holly Blue and male Orange Tip 7 April. I spotted 2 Common Blues in the car park at Gay Meadow 24 July. Summer sightings in the garden included Speckled Wood and Holly Blue 2 August; Red Admiral, Peacock, Gatekeeper, Small White and Meadow Brown 4 August; a Small Tortoiseshell 3 September and a Comma 4/9. There was a Small Copper in the field behind the house 5 August

Botany: another good show of Snowdrops at Attingham Park in February.

Somerset:

Birds: Huge flocks of Starlings use the reedbeds on the Somerset Levels at Shapwick and Meare Heath as winter roosting sites. On a few occasions we visited at dusk to see them arrive and display before dropping into the reeds. A Green Woodpecker visited our garden at Wedmore soon after we arrived 8 June and again on 12 October with a Greater Spotted Woodpecker.

Mammals: We saw plenty of Mole fortress mounds on the Somerset peat moors during the late winter months. There were at least 2 types of bat in the garden at Wedmore 8 June and we saw a Fox eating windfall apples in the road in front of the house 22 October.

Invertebrates: Garden sightings at Wedmore included: *Aeshna grandis* 15 July; Holly Blue and Gatekeeper 16 July; *Aeshna mixta* and Meadow Browns 27 July; Speckled Bush Cricket, Red Admiral, Small Tortoiseshell and *Sympetrum striolatum* 6 September. I saw a Vapourer moth in the street 13 October.

Botany: We saw daffodils in full flower at Axbridge at the beginning of February (but they must have been flowering in January before we spotted them).



Invertebrates from SIG field trips in 2007

Above larva of Cardinal Beetle, *Pyrochroa* spp. at Benthall Edge.

Top right *Nephrotoma appendiculata* at Hope Bowdler



Middle *Macrophya annulata* at Bury Ditches



Bottom left *Andrena angustior* at Bury Ditches

Bottom right Wood White *Leptidea sinapis* at Bury Ditches



Appendix 1

Scientific names of species mentioned in the text

Fungi

Field Mushroom *Agaricus campestris*
King Alfred's Cakes *Daldinia concentrica*

Scarlet Elf Cup *Sarcoscypha coccinea*
Stinkhorn *Phallus impudicus*

Flora

Ash *Fraxinus excelsior*
Beech *Fagus sylvatica*
Beech Fern *Phegopteris connectilis*
Bermuda-buttercup *Oxalis pes-caprae*
Bilberry *Vaccinium myrtillus*
Blackthorn *Prunus spinosa*
Bluebell *Hyacinthoides non-scripta*
Bog Asphodel *Narthecium ossifragum*
Bog Pondweed *Potamogeton polygonifolius*
Branched Bur-reed *Sparganium erectum*
Broad-leaved Pondweed *Potamogeton natans*
Brooklime *Veronica beccabunga*
Bracken *Pteridium aquilinum*
Bramble *Rubus fruticosus* agg.
Bristle Club-rush *Isolepis setacea*
Broom *Cytisus scoparius*
Buck's-horn Plantain *Plantago coronopus*
Bulrush *Typha latifolia*
Bush Vetch *Vicia sepium*
Canadian Waterweed *Elodea canadensis*
Common Bird's-foot-trefoil *Lotus corniculatus*
Common Centaury *Centaureum erythraea*
Common Dog-violet *Viola riviniana*
Common Nettle *Urtica dioica*
Common Marsh-bedstraw *Galium palustre*
Common Ragwort *Senecio jacobaea*
Common Spike-rush *Eleocharis palustris*
Common Duckweed *Lemna minor*
Common Vetch *Vicia sativa*
Cornish Heath *Erica vagans*
Cowberry *Vaccinium vitis-idaea*
Cowslip *Primula veris*
Cow Parsley *Anthriscus sylvestris*
Crab Apple *Malus sylvestris*
Creeping Forget-me-not *Myosotis secunda*
Creeping Thistle *Cirsium arvense*
Crested Dog's-tail *Cynosurus cristatus*
Cross-leaved Heath *Erica tetralix*
Cuckooflower *Cardamine pratensis*
Dandelion *Taraxacum* species
Dog's Mercury *Mercurialis perennis*
Early Dog-violet *Viola reichenbachiana*
Early Hair-grass *Aira praecox*
Field Maple *Acer campestre*
Flea Sedge *Carex pulicaris*
Foxglove *Digitalis purpurea*
Four-leaved Allseed *Polycarpon tetraphyllum*
Fringed Rupturewort *Herniaria ciliolata*
Garlic Mustard *Alliaria petiolata*

Germander Speedwell *Veronica chamaedrys*
Gorse *Ulex europaeus*
Great Willowherb *Epilobium hirsutum*
Great Wood-rush *Luzula sylvatica*
Greater Broomrape *Orobanche rapum-genistae*
Greater Stitchwort *Stellaria holostea*
Greater Quaking-grass *Briza maxima*
Green Field-speedwell *Veronica agrestis*
Grey Willow *Salix cinerea*
Ground-ivy *Glechoma hederacea*
Hairy Bird's-foot-trefoil *Lotus subbiflorus*
Hard Shield-fern *Polystichum acleatum*
Harebell *Campanula rotundifolia*
Hare's-tail Cottongrass *Eriophorum vaginatum*
Hart's-tongue *Phyllitis scolopendrium*
Hawthorn *Crataegus monogyna*
Hazel *Corylus avellana*
Heath Bedstraw *Galium saxatile*
Heather *Calluna vulgaris*
Herb-Robert *Geranium robertianum*
Holly *Ilex aquifolium*
Honeysuckle *Lonicera periclymenum*
Horse-chestnut *Aesculus hippocastanum*
Italian Lords-and-Ladies *Arum italicum*
Ivy-leaved Crowfoot *Ranunculus hederaceus*
Larch *Larix* species
Lesser Burdock *Arctium minus*
Lesser Celandine *Ranunculus ficaria*
Lesser Marshwort *Apium inundatum*
Lesser Quaking-grass *Briza minor*
Lesser Trefoil *Trifolium dubium*
Lesser Spearwort *Ranunculus flammula*
Lesser Stitchwort *Stellaria graminea*
Long-headed Clover *Trifolium incarnatum*
Lords-and-Ladies *Arum maculatum*
Maidenhair Spleenwort
Marsh Arrowgrass *Triglochin palustre*
Marsh Thistle *Cirsium palustre*
Mat-grass *Nardus stricta*
Mistletoe *Viscum album*
Musk-mallow *Malva moschata*
Navelwort *Umbilicus rupestris*

New Zealand Willowherb *Epilobium brunnescens*
 Oval Sedge *Carex ovalis*
 Oxeye Daisy *Leucanthemum vulgare*
 Parsley-piert *Aphanes arvensis*
 Pedunculate Oak *Quercus robur*
 Pendulous Sedge *Carex pendula*
 Pond Water-crowfoot *Ranunculus peltatus*
 Primrose *Primula vulgaris*
 Ramsons *Allium ursinum*
 Red Champion *Silene dioica*
 Rock Stonecrop *Sedum forsterianum*
 Rosebay Willowherb *Chamerion angustifolium*
 Rough Clover *Trifolium scabrum*
 Rowan *Sorbus aucuparia*
 Scarlet Pimpernel *Anagallis arvensis*
 Selfheal *Prunella vulgaris*
 Silver Birch *Betula pendula*
 Silver Hair-grass *Aira caryophyllea*
 Sitka Spruce *Picea sitchensis*
 Small Cudweed *Filago minima*
 Smaller Tree Mallow *Lavatera cretica*
 Small-flowered Catchfly *Silene gallica*
 Small Sweet-grass *Glyceria declinata*
 Soft Clover (synonymous with Knotted Clover)
 Trifolium striatum
 Soft-rush *Juncus effusus*
 Spindle *Euonymus europaeus*
 Spurge-laurel *Daphne laureola*
 Squirreltail fescue *Vulpia bromoides*

Star Sedge *Carex echinata*
 Sweet Violet *Viola odorata*
 Sycamore *Acer pseudoplatanus*
 Three-cornered Garlic *Allium triquetrum*
 Three-nerved Sedge *Carex trinervis*
 Thyme Broomrape *Orobanche alba*
 Toothwort *Lathraea squamaria*
 Tormentil *Potentilla erecta*
 Traveller's-joy *Clematis vitalba*
 Trailing St. John's-wort *Hypericum humifusum*
 Upright Clover *Trifolium strictum*
 Wall-rue *Asplenium ruta-muraria*
 Western Gorse *Ulex gallii*
 Western Ramping-fumitory *Fumaria occidentalis*
 White Champion *Silene latifolia*
 White Stonecrop *Sedum album*
 Wild Cherry *Prunus avium*
 Wild Strawberry *Fragaria vesca*
 Wild Teasel *Dipsacus fullonum*
 Wild Thyme *Thymus polytrichus*
 Wood Anemone *Anemone nemorosa*
 Wood Forget-me-not *Myosotis sylvatica*
 Wood Sage *Teucrium scorodonia*
 Wood-sorrel *Oxalis acetosella*
 Yellow Pimpernel *Lysimachia nemorum*
 Yellow-sedge *Carex viridula ssp. oedocarpa*

Coleoptera

Eyed ladybird *Anatis ocellata*
 Fourteen-spot ladybird *Propylea quattuordecimpunctata*
 Harlequin ladybird *Harmonia axyridis*
 Orange ladybird *Halyzia sedecimguttata*
 Pine ladybird *Exochomus quadripustulatus*

Seven-spot ladybird *Coccinella septempunctata*
 Ten-spot ladybird *Adalia decempunctata*
 Twentyfour-spot ladybird *Subcoccinella vigintiquatuorpunctata*
 Violet Ground Beetle *Carabus violaceus*
 Water ladybird *Anisosticta novemdecimpunctata*

Odonata

Azure Damselfly *Coenagrion puella*
 Banded Demoiselle *Calopteryx splendens*
 Blue-tailed Damselfly *Ischnura elegans*
 Broad-bodied Chaser *Libellula depressa*
 Brown Hawker *Aeshna grandis*
 Common Blue Damselfly *Enallagma cyathigerum*
 Common Darter *Sympetrum striolatum*
 Four-spotted Chaser *Libellula quadrimaculata*

Keeled Skimmer *Orthetrum coerulescens*
 Large Red Damselfly *Pyrrosoma nymphula*
 Scarce Blue-tailed Damselfly *Ischnura pumilio*
 Southern Hawker *Aeshna cyanea*

Orthoptera

Common Green Grasshopper *Omocestus viridulus*
 Common Ground-hopper *Tetrix undulata*
 Field Grasshopper *Chorthippus brunneus*

Mottled Grasshopper *Myrmeleotettix maculatus*

Lepidoptera

Antler Moth *Cerapteryx graminis*
Autumnal Moth *Epirrita autumnata*
Beaded Chestnut *Agrochola lychnidis*
Black Rustic *Aporophyla nigra*
Brick *Agrochola circellaris*
Brimstone *Gonepteryx rhamni*
Brimstone Moth *Opisthograptis luteolata*
Brindled Green *Dryobotodes eremita*
Brown Silver-line *Petrophora chlorosata*
Bulrush Wainscot *Nonagria typhae*
Cinnabar Tyria *jacobaeae*
Comma *Polygonia c-album*
Common Carpet *Epirrhoe alternata alternata*
Common Wainscot *Mythimna pallens*
Cream Wave *Scopula immutata*
Elephant Hawkmoth *Deilephila elpenor*
Flame Shoulder *Ochropleura plecta*
Flounced Rustic *Luperina testacea*
Fox Moth *Macrothylacia rubi*
Gatekeeper *Pyronia tithonus*
Green-veined White *Pieris napi*
Grey Pine Carpet *Thera britannica*
Grey Shoulder-knot *Lithophane ornitopus*
Holly Blue *Celastrina argiolus*
Large Skipper *Ochlodes venata*
Large White *Pieris brassicae*
Lime Hawkmoth *Mimas tiliae*
Little Emerald *Jodis lactearia*
Lunar Underwing *Omphaloscelis lunosa*
Meadow Brown *Maniola jurtina*
Mottled Umber *Erannis defoliaria*
Nettle-tap *Anthophila fabriciana*
Northern Winter Moth *Operophtera fagata*
Orange Tip *Anthocharis cardamines*
Painted Lady *Cynthia cardui*

Peacock *Inachis io*
Pale Brindled Beauty *Phigalia pilosaria*
Poplar Hawkmoth *Laothoe populi*
Red Admiral *Vanessa atalanta*
Ringlet *Aphantopus hyperantus*
Setaceous Hebrew Character *Xestia c-nigrum*
Shaded Broad-bar *Scotopteryx chenopodiata*
Shuttle-shaped Dart *Agrotis puta puta*
Silver Y *Autographa gamma*
Small Copper *Lycaena phlaeas*
Small Elephant Hawkmoth *Deilephila porcellus*
Small Engrailed *Ectropis crepuscularia*
Small Heath *Coenonympha pamphilus*
Small Pearl-bordered Fritillary *Boloria selene*
Small Skipper *Thymelicus sylvestris*
Small Tortoiseshell *Aglais urticae*
Small White *Pieris rapae*
Snout *Hypena proboscidalis*
Speckled Wood *Pararge aegeria*
Speckled Yellow *Pseudopanthera macularia*
Spring Usher *Agripis leucophaearia*
Square-spot Rustic *Xestia castanea*
Streak *Chesias legatella*
Sulphur Pearl *Sitochroa palealis*
Thrift Clearwing *Syansphecia muscaeformis*
Wall Brown *Lasiommata megera*
White-letter Hairstreak *Strymonidia w-album*
Winter Moth *Operophtera brumata*
Wood White *Leptidea sinapis*

Hemiptera

Birch Shieldbug *Elasmotethus stinctus*
Green Shieldbug *Palomena prasina*

Parent Bug *Elasmucha grisea*

Diptera

St. Mark's Fly *Bibio marci*

Hymenoptera

Bilberry Bumblebee *Bombus monticola*
Common Wasp *Vespa vulgaris*
Hornet *Vespa crabro*
Norwegian Wasp *Dolichovespula norwegica*

Red Wasp *Vespula rufa*
Tree Wasp *Dolichovespula sylvestris*

Reptiles

Common Lizard *Lacerta vivipara*
Grass Snake *Natrix natrix*

Mammals

Badger *Meles meles*
Fox *Vulpes vulpes*
Grey Squirrel *Sciurus carolinensis*
Mink (American) *Mustela vison*
Mole *Talpa europaea*

Birds

Blackbird *Turdus merula*
Blackcap *Sylvia atricapilla*
Black-headed Gull *Larus ridibundus*
Blue Tit *Cyanistes caeruleus*
Bullfinch *Pyrrhula pyrrhula*
Buzzard *Buteo buteo*
Canada Goose *Branta canadensis*
Carrion Crow *Corvus corone*
Chaffinch *Fringilla coelebs*
Chiffchaff *Phylloscopus collybita*
Coal Tit *Parus ater*
Cormorant *Phalacrocorax carbo*
Common Snipe *Gallinago gallinago*
Curlew *Numenius arquata*
Dipper *Cinclus cinclus*
Dunnock *Prunella modularis*
Goldcrest *Regulus regulus*
Goldfinch *Carduelis carduelis*
Great Spotted Woodpecker *Dendrocopos major*
Great Tit *Parus major*
Greenfinch *Carduelis chloris*
Green Woodpecker *Picus viridis*
Grey Wagtail *Motacilla cinerea*
House Martin *Delichon urbicum*
Jackdaw *Corvus monedula*
Jay *Garrulus glandarius*
Kestrel *Falco tinnunculus*
Linnet *Carduelis cannabina*
Long-tailed Tit *Aegithalos caudatus*
Magpie *Pica pica*
Mallard *Anas platyrhynchos*

Amphibians

Common Frog *Rana temporaria*
Common Toad *Bufo bufo*
Palmate Newt *Triturus helveticus*

Polecat *Mustela putorius*
Rabbit *Oryctolagus cuniculus*
Reeves's Muntjac *Muntiacus muntjac* race *reevesi*
Roe Deer *Capreolus capreolus*

Meadow Pipit *Anthus pratensis*
Mistle Thrush *Turdus viscivorus*
Moorhen *Gallinula chloropus*
Nuthatch *Sitta europaea*
Peregrine *Falco peregrinus*
Pheasant *Phasianus colchicus*
Pied Wagtail *Motacilla alba*
Raven *Corvus corax*
Redstart *Phoenicurus phoenicurus*
Robin *Erithacus rubecula*
Rook *Corvus frugilegus*
Shoveler *Anas clypeata*
Siskin *Carduelis spinus*
Skylark *Alauda arvensis*
Song Thrush *Turdus philomelos*
Sparrowhawk *Accipiter nisus*
Spotted Flycatcher *Muscicapa striata*
Starling *Sturnus vulgaris*
Swallow *Hirundo rustica*
Swift *Apus apus*
Teal *Anas crecca*
Treetreeper *Certhia familiaris*
Tree Pipit *Anthus trivialis*
Tufted Duck *Aythya fuligula*
Wheatear *Oenanthe oenanthe*
Whitethroat *Sylvia communis*
Willow Warbler *Phylloscopus trochilus*
Woodpigeon *Columba palumbus*
Wood Warbler *Phylloscopus sibilatrix*
Wren *Troglodytes troglodytes*
Yellowhammer *Emberiza citrinella*

Appendix 2

Scientific names of taxa other than species

Aeshnids Odonata: Aeshnidae	Ground Beetles Coleoptera:
Agromyzid Flies Diptera: Agromyzidae	Hoverflies Diptera: Syrphidae
Bees Hymenoptera	Ladybirds Coleoptera: Coccinellidae
Bee beetle	Leaf-cutter Bees Hymenoptera: Apidae
Bee Flies Diptera: Bombyliidae	Micromoths Lepidoptera
Beetles Coleoptera	Millipedes Diplopoda
Bugs Hemiptera	Mites Acari
Bumblebees Hymenoptera: Apidae	Mustelids Carnivora: Mustelidae
Butterflies Lepidoptera	Pseudoscorpions Pseudoscorpiones
Centipedes Chilopoda	Pyralid Moths Lepidoptera: Pyralidae
Chinamark Moths Lepidoptera:	Sawflies Diptera:
Crane-flies Diptera: Tipulidae	Shieldbugs Hemiptera: Pentatomidae
Crab Spiders	Snails
Codling Moths Lepidoptera: Tortricoidae	Solitary Bees Hymenoptera:
Cuckoo Bees Hymenoptera: Apidae	Spiders Aranae
Damselflies Odonata (Zygoptera)	Spider-hunting Wasps Hymenoptera:
Dragonflies Odonata	Pompiloidae
Ferns Pteropsida	Tachinid Flies Diptera:
Geometrids Lepidoptera: Geometridae	Weevils Coleoptera: Curculionidae