

Shropshire Invertebrates Group

Annual Report 2003

Text copyright A. G. Blunt, N. Jones, J. Mason, I. Thompson and C. Derry 2004
Photographs copyright N. Jones 2004

Contents

Field Meetings 2003

Whitcliffe, Ludlow, 23 February

Minton Batch, Long Mynd, 11 May

Bucknell Wood, 8 June

Easthope and Presthope Woods, Wenlock Edge, 6 July

Old River Bed, Shrewsbury, 31 August

Offa's Dyke at Llanfair Hill, 21 September

Brown Clee, 19 October

Members' individual activities 2003

Godfrey Blunt

Nigel Jones

John Mason

Ian Thompson

Charles Derry

References

Appendix A: Field Meeting to Whitcliffe, Ludlow, on 15 October 2000

Appendix B: Scientific names of organisms mentioned in the text

In Memoriam – Michael Stanley Smith 1947-2004

Shropshire Invertebrates Group Field Meetings 2003

23 February 2003: Whitcliffe, Ludlow (present: G. Vick, S. Butler, D. Pryce, I. Thompson, W. Rudge, J. Mason, C. Derry, R. Kemp, G. Blunt)

The group's first outing of the year was to the woodlands on the Shropshire side of the Mortimer Forest. Though icy conditions prevailed barely a week earlier, the weather had become mild and sunny on the day. Our target species on this occasion was ornithological – Hawfinch – but we were also hoping to add to our knowledge of the invertebrate fauna of this old woodland area, looking in particular for ground beetles.

From the Forestry Commission picnic site we walked down the road as far as the open common. The woods in this area had a variety of deciduous trees, with much Beech and Hornbeam, and the north-facing roadside verge had a verdant moss flora, among which we identified *Thuidium tamariscinum*, *Hookeria lucens* and *Hypnum cupressiforme* var. *tectorum*. Of the higher plants we noted an abundance of Great Wood-rush. Birds were in good numbers here, particularly Blue, Great and Coal Tits, while a flock of Fieldfares and a single Crossbill flew overhead near the Forestry Commission picnic site. Several Willow Tits were in evidence, both here and later by the River Teme.

From Whitcliffe Common we descended through the woods down to the bridge over the Teme. On the way we encountered a mixed flock of passerines which included Bullfinch, Chaffinch, Long-tailed Tit and Siskin. A Grey Squirrel was seen by some of the party, and molehills were abundant in the open grassland. We investigated several dead logs and tree trunks, but invertebrates were confined to very common species – the slug *Milax budapestensis*, the woodlouse *Oniscus asellus*, and unidentified springtails Collembola. A Holly bush gave us the blotch-mine of *Phytomyza ilicis*, while old mines of the nepticulid moth *Stigmella aurella* were readily found on Bramble leaves. On rotting stumps were fruiting bodies of the fungi *Nectria cinnabarina* and a *Ganoderma* species, most probably *applanatum*, together with the liverwort *Lophocolea cuspidata*. A seedling Yew by the river gave evidence of natural regeneration of this species.

We stayed for some while at the river bridge, partly looking for Hawfinches and partly sheltering from a sudden shower which set in at this point. Blackbird, Great Tit, Robin and Chaffinch were in full song, Magpie, Nuthatch and Woodpigeon flew into nearby trees, and a party of Mallard swam on the river. A birdwatcher reported a single Hawfinch here earlier in the day, so we waited. At long last John Mason spotted it near the top of a Beech, and we all admired the bird for several minutes before it flew away.

Turning from the bridge, we followed the minor road which runs westwards to Lower Whitcliffe. Snowdrops and Hazel were blossoming, and we found a few early Dog's Mercury flowers. On shadier banks were growing Intermediate Polypody and Hart's-tongue, and we were rather surprised to see the calcifuge Hard-fern along this road also. Other plants which could be identified included Opposite-leaved Golden-saxifrage, Woodruff, Lords-and-Ladies and Lesser Celandine. Bird-life continued in abundance, with Song Thrush and Goldcrest both in song, more Siskins and a couple of Wrens in the trees and bushes, plus Jackdaw, Pheasant and Mistle Thrush in the open fields. A hawk, perhaps a female Sparrowhawk, was seen to capture and pluck a hapless Blackbird. Some fine specimens of Scarlet Elf Cup were admired and photographed, while other fungi included Jew's Ear (on Elder) and Candle Snuff (on Hawthorn). The moss *Mnium undulatum* was also flourishing along this road.

A small quarry in the Aymestry Limestone gave us a chance to look for fossils, and a few small fossilised shell-fragments were readily uncovered. Though we turned over many slabs of stone, invertebrates continued to elude us; but a little further up the road we did locate a specimen of the hairy snail *Trichia hispida* and two spiders, *Meta menegi* and an *Amaurobius* species.

A short but exhausting climb across an open pasture, where molehills were again abundant, brought us to a plantation consisting largely of Douglas Fir, and a track back to our cars. We added little to the day's tally on this stretch, but a Buzzard did put in an appearance, a pair of Ravens flew low over us, and we spotted some deer tracks in the muddy ground. But not a single ground beetle anywhere on this field trip!

An account of an earlier SIG Field Meeting to Whitcliffe in 2000 is given in Appendix A.

11 May 2003: Minton Batch, Long Mynd (present: D. Pryce, W. Rudge, C. Derry, G. Blunt)

The start of this field meeting was delayed by a heavy downpour, after which our group set out from the entrance to the Gliding Club on the summit of Long Mynd and descended the gully of Minton Batch. We followed the stream down as far as a plantation of mature Norway Spruce, at which point we turned and retraced our steps. Further light showers occurred throughout the day, alternating with sunny spells; but despite these conditions we made good use of our sweep-nets and completed a valuable day's field-work.

In the exposed conditions on the summit of the Long Mynd spring arrives relatively late; and while the Hawthorns in the neighbouring vales were in full blossom by 11 May, those which flank the sides of Minton Batch were still in bud. We did, however, find some higher plants in flower, particularly Bilberry, which grows abundantly on the south-facing slopes of the Batch, and Common Sedge and Cuckooflower in wetter areas beside the stream. More locally we found a few flowering plants of Heath Milkwort (both blue and white varieties), Daisy and Tormentil; while in one or two shallow ponds the Round-leaved Crowfoot bloomed rather shyly. A good scatter of Hawthorns down the slopes of the Batch included many gnarled old specimens, and we located one or two mature Rowans plus, somewhat surprisingly, two Yew shrubs. Other higher plants not yet in flower included an abundance of Marsh Thistle and a sparse representation of Heather and Bracken.

The wet, acidic soils and relatively clean atmosphere at this altitude (300-340 metres above sea level) proved ideal conditions for mosses and lichens, and both were found growing in some abundance. Only a few of the more obvious species were identified. These were, among mosses, *Polytrichum commune* (abundant near the Gliding Club), *Sphagnum plumulosum*, *Dicranum scoparium* and *Pleurozium schreberi*; while lichens included *Platismatia glauca*, quite common on trunks and branches of Hawthorn and Heather; the characteristic balls of the terrestrial *Cladonia portentosa*; and a fruiting specimen of *C. floerkeana* on a dead stump.

Our invertebrate targets were microlepidoptera and other spring insects, with a particular focus on stoneflies (Plecoptera), a much under-recorded group whose national distribution records are being co-ordinated by one of our group, David Pryce. In view of the early rain, microlepidoptera were little in evidence and encountered only as single specimens; we found five species, among which *Adela reaumurella*, *Incurvaria masculella*, *Epiblema scutulana* and *Syndemis musculana* were not unexpected, though the last of these was near its altitudinal limit in the British Isles. The fifth species, however, *Ancylys myrtillana*, has been added only very recently to the Shropshire list, and the Mynd is its third county locality. While microlepidoptera were hard to find, the sunny spells did bring out a handful of butterflies of two species: Green-veined White (four specimens) and Small Copper (seven). At the base of a Hawthorn trunk we found part of the forewing of a noctuid, enough to identify it as the Light Knot Grass, a local and generally uncommon species in the county. Other macrolepidoptera were a single Brown Silver-line female, and a larva of the Northern Spinach on Bilberry

Sweep-netting, beating and searching of streamside vegetation rewarded us with a good range of invertebrates typical of hill streams. *Philopotamus montanus*, an attractively marked caddis (Trichoptera) was the most abundant of these, and three males of another caddis, *Agapetus fuscipes*, were also taken. Our quest for stoneflies was particularly well rewarded, with seven species of which *Leuctra inermis* and *Nemoura cambrica* were the most numerous. The other species were *Brachyptera risi*, *Chloroperla tripunctata*, *Leuctra hippopus*, *L. nigra* and *Protonemura meyeri*.

Quite a number of beetles (Coleoptera) came our way during the visit, especially the rather local weevil *Phyllobius calcaratus* which was beaten in numbers from Hawthorn bushes. Other species identified were:

<i>Abax paralellepipedus</i>	<i>Leistus spinibarbis</i>
<i>Adalia 10-punctata</i>	<i>Lochmaea crataegi</i>
<i>Aphodius prodromus</i>	<i>Propylea 14-punctata</i>
<i>Calvia 14-guttata</i>	<i>Rhynchaetes aequatus</i>
<i>Ctenicera cuprea</i>	<i>Sphaeridium scarabaeoides</i>
<i>Geotrupes stercorosus</i>	

Not many insects were on the wing, but these did include the bumble-bee *Bombus terrestris* (Hymenoptera) and the Diptera *Bibio marci*, *Dilophus febrilis* and *Rhingia campestris*. Terrestrial invertebrates found by searching were two species of ants - *Myrmica rubra* and *Formica fusca* - plus the Common Ground-hopper *Tetrix undulata* (Orthoptera). Sweep-netting among tussocks of *Juncus* sp. yielded a few specimens of the common spider *Pachygnathus degeeri*. At the Norway Spruce plantation we beat overhanging branches for lacewings (Neuroptera) and were well rewarded with two species, namely *Hemerobius humulinus* and *H. pini*, the latter being a nationally local and under-recorded species and one of our best invertebrate finds of the day. The most abundant invertebrate species, however, was the least obtrusive; for very large numbers

of roll-galls of the mite *Phyllocoptes goniothorax* were present on the leaves of almost all the Hawthorns we examined.

Several bird species were quite active in the sunnier periods. Good numbers of Skylark and Meadow Pipit were holding territory, and several Buzzards and Ravens shared the local thermals with the gliders. Down the Batch we located two pairs of Stonechats feeding young, and male Whinchat and Ring Ouzel were in song. A couple of Chaffinches, a Kestrel and Cuckoo were seen. Among mammals we saw two Rabbits and found traces of Fox.

8 June 2003: Bucknell Wood (present: N. Jones, J. Mason, G. Blunt)

This meeting was a repeat of the one held in 2002, but was timed later in the season to coincide better with the emergence of the red longhorn *Pyrrhidium sanguineum*. The weather on this day, however, proved unsuitable for finding this species; the meeting began in steady rain, which cleared by early afternoon leaving cool, breezy conditions with occasional sunny spells. The generally damp vegetation meant that beating and sweeping were out of the question, and all our finds were made by extensive searching of tree and shrub foliage and low herbage. In view of this, a respectable list of species was compiled for the visit.

Since the previous year an extensive area of conifers adjacent to the main track had been felled, and the clearing was filled with the purple of Foxgloves. Apart from these, however, rather few nectar sources were available to insects; plants noted in flower were Yellow Archangel, Wild Strawberry, Wood Avens, Changing Forget-me-not and Yellow Pimpernel. A few flowering specimens of Common Cow-wheat included one with a white corolla.

A noticeable difference from our previous visit was the reduced numbers of the wood ant *Formica rufa*. Felling operations had destroyed their nests by the main track, where the largest colonies had existed, and only a few small mounds were scattered throughout the wood. Consequently a specimen of the beetle *Clytra quadripunctata*, whose larvae live as inquilines in wood ant nests, was a welcome find. A few other beetles were also discovered, including several Garden Chafers *Phyllopertha horticola* and single specimens of *Abax parallelepipedus*, *Ctenicera pectinicornis*, *Chrysolina polita* and *Geotrupes stercorosus*. A few plants of Common Figwort supported larvae and adults of the weevil *Cionus scrophulariae*; and the characteristic leaf-rolls of *Deporaus betulae* occurred locally on Silver Birch saplings.

Searching the foliage of trees produced a range of invertebrates. Several signs of microlepidoptera were identified, namely:

Epinotia brunnichana leaf-rolls on Silver Birch
Eriocrania sparrmannella mines on Silver Birch
E. subpurpurella mines on Sessile Oak

Stigmella lapponica mine on Silver Birch
S. tityrella mines on Beech

A folded birch leaf was tenanted by a larva of the Yellow Horned moth, and a Parent Bug *Elasmucha grisea* was on another birch nearby. Honeysuckle leaves showed the mines of the agromyzid fly *Aulagromyza cornigera*. Several galls caused by the mites *Aceria lateannulatus* and *Eriophyes leiosoma* were present on Small-leaved Lime; and other plant galls were caused by the dipteran *Macrodiplosis volvens* on Sessile Oak, the hymenopterans *Pontania bridgmanii* on Goat Willow and *Liposthenes glechomae* on Ground-ivy; and the rust *Puccinia urticata* on Stinging Nettle.

Several Lepidoptera were about during the short sunny periods, most notably *Nemophora degeerella*, males of which were swarming in numbers. Seven or eight Speckled Yellows were seen, plus the occasional Silver-ground Carpet, Spruce Carpet, Bordered White, Larch Pug and Silver Y moths. The only butterfly on the wing all day was a single Speckled Wood; though we also found the caterpillar of the Small Tortoiseshell at our lunch stop. Microlepidoptera included larvae of the Mother-of-Pearl on Stinging Nettle, and imagines of Nettle Tap, *Adela reaumurella*, *Micropterix aureatella* and *M. aruncella*.

Other invertebrates encountered during the day were the spider *Araniella cucurbitina*, the robber-fly *Neoitamus cyanurus*, and an impressive sawfly of the genus *Trichiosoma*. A distinctive sawfly larva on Rough Meadow-grass was photographed but remains as yet unidentified.

Given the indifferent weather, birds were not very active and only Goldcrest and Robin were singing in any numbers. Single males holding territory included Tree Pipit, Blackcap, Wren, Chaffinch and Willow Warbler; and a Buzzard was heard calling overhead. The only signs of mammals were the characteristic excavations of the Mole.

Among the most impressive finds of the day was the great abundance of corticolous lichens especially on Sessile Oak. Two of the commonest were identified to species level and proved to be *Evernia prunastri* and *Usnea subfloridana*.

6 July 2003: Easthope and Presthope Woods, Wenlock Edge (present: J. Mason, I. Thompson, R. Kemp, W. Rudge, C. Derry, N. Jones, G. Blunt)

A still, dry day with sunny periods brought out a good attendance to look for evidence of the continuing presence of Lunar Hornet Moth in Easthope Wood. Immediately on leaving the car park we found that tree-felling had recently taken place along the disused railway track, and many mature trees of Goat Willow remained only as stumps. Several of these were riddled with the Lunar Hornet Moth's larval galleries, and a recently emerged pupa extruded from a pile of logs. The moth clearly remains at this site; though how the population will react to the felling of many of its favoured trees remains to be seen.

Having located our target species quickly, our group further explored the railway track and an adjacent meadow. Ash and Wych Elm were the commonest trees along the track, with a few Pedunculate Oak and a hybrid Lime in the meadow; the main understorey shrubs included Hawthorn, Dog Rose and Hazel. Several Speckled Woods, Green-veined Whites and Meadow Browns were on the wing, and resting on low herbage were a couple each of Clouded Magpie and Clouded Border, the former a local species in Shropshire. A well-grown Comma larva was beaten from Wych Elm and placed on Stinging Nettle to be photographed; when we passed by on our return it was eating this new foodplant readily. The nettles here also produced a few Nettle Taps and a pupa of the Mother-of-Pearl moth. From a conifer plantation behind the vegetation fringing the railway track a Grey Pine Carpet was disturbed. Other Lepidoptera found here were the micro-moths *Argyresthia bonnetella*, *Scoparia subfusca* and *Paraswammerdamia lutarea* plus the macro-moths Gold Swift (a very small specimen) and Large Yellow Underwing.

A notable feature of the trackside vegetation was the abundance of flowering Enchanter's-nightshade. The striking bug *Metatropis rufescens* (Hemiptera: Berytinidae) was located on this, its larval foodplant; perhaps the bug's first Shropshire record, as it has been spreading slowly northward from southern England in the last half-century. Another local bug taken in the same area was *Cixius cunicularius*. A diverse range of invertebrates turned up during our searches along the track: among Odonata, a Southern Hawker and a few Common Blue Damselflies; several immature Oak Bush Crickets beaten from shrubs; the spiders *Araniella cucurbitina* and *Pachygnatha degeeri* on low herbage; a nest of *Bombus lucorum* in a bank which had been dug out by a Badger, and which the adults were busy trying to repair; and single specimens of Violet Ground Beetle *Carabus violaceus* and Hornet *Vespa crabro*. The flora, besides Enchanter's-nightshade and Stinging Nettle, included Nipplewort, Yellow Pimpernel, Hogweed, Honeysuckle and Broad-leaved Willowherb flowering quite commonly, plus a few plants of Wood and Remote Sedges, Wall Lettuce and Perennial Sow-thistle. Vertebrates in Easthope Wood were unobtrusive, but both Common Frog and Common Toad were present and birds included Pheasant, Nuthatch and singing Chiffchaff.

In contrast to this diversity along the railway track, the meadow proved disappointing. The vegetation was strongly dominated by Marsh Thistle, with only a few common species of insects present, notably Ringlet, Silver Y and the pyralid *Chrysoteuchia culmella*.

During our lunch-break we explored the edges of the car park, where sunlit vegetation attracted several hoverflies including *Volucella pellucens*, *Leucozonia laternaria*, *Xylota sylvarum*, *Cheilosia illustrata*, and the uncommon *Volucella inflata*, one of the group's best finds of a successful outing. Bird-life was more evident here, and we noted Coal, Great and Long-tailed Tits, Wren, Buzzard and a pair of Ravens. A Stock Dove sang loudly from the bridge by the car park, and appeared to be nesting there.

After lunch we drove to the National Trust car park at Presthope Wood, and worked our way through the wood to the edge of a large quarry. The vegetation was reminiscent of Easthope Wood, with the addition of abundant Blackthorn, Field Maple, Silver Birch and Dogwood. A small clearing had a typical flora of shallow limestone soils, with a few plants of Wild Thyme, Pyramidal Orchid, Common Centaury and Fairy Flax in bloom. These species were in greater abundance by the long open path next to Lea Quarry, with the addition of other flowers including Musk-mallow, Wild Basil, Rough Hawkbit, Nettle-leaved Bellflower, Weld, Wild Mignonette, Musk Thistle, Common Ragwort, Perforate and Imperforate St John's-worts. A fine specimen of Bee Orchid drew the attention of the group's photographers.

In the afternoon sunshine this area was busy with insects. Lepidoptera were in some numbers, including the Small Tortoiseshell, Red Admiral, Ringlet, and Meadow Brown; Ragwort plants supported groups of Cinnabar caterpillars; other macro-moths included Large Yellow Underwing, Silver Y and Six-spot Burnet; and micros were well represented by the following species:

<i>Agapeta hamana</i>	<i>Epiblema sticticana</i>	<i>Paraswammerdamia lutarea</i>
<i>Celypha striana</i>	<i>Evergestis forficalis</i>	<i>Pyrausta purpuralis</i>
<i>Coleophora gryphipennella</i>	<i>Olethreutes lacunana</i>	
<i>Dichrorampha plumbaginana</i>	<i>Pandemis cinnamomeana</i>	

Among other invertebrate groups we noted Common Darter and Brown Hawker (Odonata); Common Ground-hopper, Field Grasshopper, and Oak Bush-cricket (Orthoptera); *Arianta arbustorum* and *Helix aspersa* (Mollusca), the soldierfly *Sargus irridatus* (Diptera), and the hoverfly *Ferdinandea cuprea*, a widespread but rarely common dipteran whose larvae are associated with sap runs.

Throughout the day we gathered a wide range of plant galls and leaf mines. These were subsequently identified as follows, with their localities denoted as E (Easthope Wood) and P (Presthope Wood and quarry):

(Acari)

<i>Aceria aceriscampestris</i> galls on Field Maple (P)	<i>Eriophyes convolvens</i> gall on Spindle (P)
<i>A. cephaloneus</i> gall on Sycamore (P)	<i>E. prunispinosae</i> gall on Blackthorn (P)
<i>A. eriobius</i> gall on Field Maple (P)	<i>Phyllocoptes goniothorax</i> galls on Hawthorn
<i>A. macrochelus</i> gall on Field Maple (P)	(E, P)

(Diptera)

<i>Agromyza alnibetulae</i> mine on Silver Birch (P)	<i>Paraphytomyza hendeliana</i> mine on Honeysuckle (E)
<i>A. reptans</i> mine on Stinging Nettle (E)	<i>Phytomyza conyzae</i> mine on Ploughman's-spikenard (P)
<i>Amauromyza labiatarum</i> mine on Hedge Woundwort (E)	<i>P. ilicis</i> mine on Holly (P)
<i>A. verbasci</i> mine on Great Mullein (P)	<i>P. lappae</i> mines on Lesser Burdock (E, P)
<i>Dasineura kiefferiana</i> gall on Rosebay Willowherb (E)	<i>P. spondylii</i> mines on Hogweed (E, P)
<i>D. tympani</i> gall on Field Maple (P)	<i>P. syngenesiae</i> mine on Common Ragwort (P)
<i>D. urticae</i> gall on Stinging Nettle (E)	

(Hemiptera)

Dysaphis ranunculi gall on Hawthorn (P)
Eriosoma ulmi gall on Wych Elm (E)

E. grossulariae gall on Wych Elm (E)
Psyllopsis fraxini gall on Ash (E)

(Hymenoptera)

Blennocampa phyllocolpa gall on Rose (E)

Diplolepis rosae gall on Rose (P)

(Lepidoptera)

Mompha raschkiella mine on Rosebay Willowherb (P)
M. langiella mine on Enchanter's-nightshade (E)

Stigmella aurella mine on Bramble (P)
S. floslactella mine on Hazel (P)

(Fungi: Taphrinales)

Taphrina pruni gall on Blackthorn (P)

For several minutes towards the end of the outing the group watched the pursuit of a Rabbit by a Stoat. The pair crossed and re-crossed the path several times, the Rabbit clearly tiring as it tried in vain to shake off the Stoat, which followed with a distinctive bounding gait. A scream deep inside the woodland marked the end of the chase. We departed, well satisfied with a most rewarding day's activities.

31 August 2003: Old River Bed, Shrewsbury (present: I. Thompson, C. Derry, D. Pryce, W. Rudge, G. Blunt)

Our group set out to explore an area of dyke, marsh and grassland along the old course of the River Severn at Mount Pleasant, just north of the centre of Shrewsbury. The site consists of a much overgrown floodplain beside an old oxbow of the Severn, plus a narrow belt of deciduous woodland and scrub along a ridge to the north-east, which once formed the river bank. Old photographs of the late 1940s show the site as much more open, with no nearby housing and no woodland on the ridge; it is said that wildfowl frequented the area during winter flooding at that period, but the site is too disturbed for them nowadays.

We found Downy Birch, Blackthorn, Hawthorn and Dogwood dominating the drier areas on the old river bank, and the last three were fruiting prolifically at the time of our visit. Plentiful Holly, Ivy and Elder also attested the secondary nature of the woodland vegetation; though a small patch of Hairy Wood-rush there seemed to be a remnant from a more ancient flora. A spinney of Crack-willow, Pedunculate Oak and Alder marked the site of a former island in the river, now accessible on foot, though with some difficulty. The river was now but a narrow dyke supporting emergent Water Horesetail and Branched Bur-reed; beside it grew a tall, lush swamp community of Bulrush, Reed Canary-grass, Meadowsweet, Common Valerian, Great Willowherb, Purple-loosestrife and Wild Angelica; while more locally within this swamp we located False Fox-sedge and flowering plants of Gypsywort, Lesser Water-parsnip, Water Mint, Ragged-robin and Greater Bird's-foot-trefoil, with here and there the furtive blue Skullcap.

In dry but rather dull weather flying insects were not numerous, though we still recorded a good range of Lepidoptera and Odonata. Among the butterflies a few specimens each of Peacock, Painted Lady, Small Tortoiseshell, Speckled Wood, Large, Small and Green-veined Whites were noted, plus a couple of Silver Y moths. An Angle Shades was beaten from an Oak tree on the former island. Five species of dragonfly and damselfly were seen – Common Darter, Brown, Southern and Migrant Hawkers, and Blue-tailed Damselfly. Microlepidoptera were readily disturbed from the herbage, and included abundant species such as *Anthophila fabriciana*, *Bactra lancealana* and *Olethreutes lacunana*, the more local pyralid *Agriphila geniculea*, and the day's most exciting find, the tortricid *Epiphyas postvittana*, an adventive species which arrived in Shropshire only this year.

We spent much time in beating, sweeping and searching the wide range of plant species on site, and were rewarded with a mixed bag of invertebrates from several Orders. Damper areas produced the snail *Succinea putris* and the distinctive green homopteran *Cicadella viridis*, while a couple of larger brown homopterans beaten from Oaks proved to be *Aphrophora alni*; Heteroptera were represented by the Hawthorn Shieldbug

Acanthosoma haemorrhoidale, and Hymenoptera by the common bumblebee *Bombus pascuorum*; while two species of Diptera identified were *Episyrphus balteatus* (Syrphidae) and *Sepedon spegeus* (Sciomyzidae). The abundant ladybirds *Coccinella 7-punctata* and *Calvia 14-guttata* were our only identified species of Coleoptera. Among Rosebay Willowherb and Common Figwort in the drier parts of the marsh the many large webs of the spiders *Araneus diadematus* and *A. quadratus* were a notable feature.

Searching the diversity of flora produced a wide range of leaf mines and plant galls, of which the following were identified:

(Acari)

Aculus laevis gall on Grey Willow
Eriophyes prunispinosae galls on Blackthorn

Phyllocoptes goniothorax galls on Hawthorn

(Diptera)

Amauromyza labiatarum mine on Hedge
Woundwort
Dasineura ulmaria galls on Meadowsweet
Phytomyza autumnalis mine on Creeping Thistle
P. ilicis mines on Holly

P. ranunculi mine on Creeping Buttercup
P. spondylii mine on Hogweed
Wachtliella persicariae galls on Amphibious
Bistort
W. rosarum galls on Dog-rose

(Hemiptera)

Eriosoma ulmi galls on Wych Elm

(Hymenoptera)

Andricus kollari gall on Pedunculate Oak
A. quercuscalicis galls on Pedunculate Oak
Diplolepis nervosa galls on Dog-rose
Neuroterus numismalis galls on Pedunculate Oak

N. quercusbaccarum galls on Pedunculate Oak
Pontania bridgmanii galls on Grey Willow
P. proxima galls on Crack-willow

(Lepidoptera)

Acleris emargana spinning on Grey Willow
Ectoedemia angulifasciella mines on Dog-rose
Mompha langiella mine on Enchanter's-
nightshade
M. raschkiella mine on Rosebay Willowherb
Parornix torquilella mines on Blackthorn
Phyllonorycter heegeriella mine on Pedunculate
Oak

P. schreberella mines on Elm
P. tristrigella mines on Elm
Stigmella aurella mines on Bramble
S. malella mine on Crab Apple
S. splendidissimella mine on Wood Avens
Tischeria ekebladella mine on Pedunculate Oak

Twenty-three species of birds were encountered during the day, including the summer visitors House Martin, Swallow, Chiffchaff and Sedge Warbler, and the raptors Buzzard, Kestrel and Sparrowhawk. Most others were common woodland birds, though wetland species were represented by Kingfisher, Moorhen and Reed Bunting. The only mammal seen was a single Grey Squirrel.

21 September 2003: Offa's Dyke at Llanfair Hill (present: G. Blunt)

This field meeting aimed to investigate the nature and extent of insect and bird migration along a stretch of the Offa's Dyke Path adjacent to Llanfair Hill, between Newcastle on Clun and Knighton. The section chosen runs from the tumulus by the minor road south of Springhill Farm to a narrow shelter-belt of conifers just south-east of the triangulation point, where a farm track cuts through the Dyke. This stretch of Offa's Dyke crosses extensive upland sheep-pasture at 430 metres above sea level; its open, exposed nature affords little diversity of habitat; and there is a strong likelihood that many invertebrates encountered here in September are transient through the area.

At the start of this section a triangular piece of damp ground was dominated by a rough tangle of Rosebay Willowherb, Raspberry and Grey Willow, plus a single Rowan and a few flowering specimens of Perennial Sow-thistle. After a few metres the track turns to run parallel with Offa's Dyke, which is orientated roughly SSE-NNW at this point. From here onwards the sward became closely grazed by sheep and rabbits; a few flowers of Cat's-ear, Autumn Hawkbit, Yarrow and Harebell were scattered along the Dyke, and Mouse-ear Hawkweed occurred very locally also. In places were patches of disturbed and enriched ground which supported a taller ruderal flora including Creeping Thistle, Cock's-foot, Stinging Nettle and one or two stunted Elders. The sloping banks of the Dyke, which reached over two metres in places, were mostly dominated by short turf; but here and there stretches of Western Gorse, Bracken, and small patches of Heather and Bilberry could be found.

Observations began at 11:00 and continued up to 14:30; bird and butterfly passage occurred throughout this time; but it was somewhat desultory except for the period 12:30-13:40, when the dull, cloudy weather gave way to warm sunshine. Suddenly the volume of both bird and insect migration increased, and for just over an hour an almost continuous stream of migrants was observed. Many Red Admirals could be seen beating their way low over the sheep pastures from the north, and on reaching the banks of Offa's Dyke they were funnelled along it in a south-easterly direction. The narrow shelter-belt of mixed conifers about 4.5 metres high at the end of the transect temporarily halted a number of migrant butterflies and proved to be the best point to observe and count them. Bird migration was at a higher altitude, and consisted of small parties of various species of which the Meadow Pipit was most numerous. During the 3.5 hours of observation the following visible passage of insects and birds was recorded:

Red Admiral:	62, mostly singly (mean 1.34 individuals per observation), almost all heading S-SE
Painted Lady:	5 singles heading in various directions
Small Tortoiseshell:	2 singles heading broadly W
Large White:	2 singles heading SW
Meadow Pipit:	91, in small parties of between 1 and 10 birds (mean 3.0) mostly heading S-SE
Goldfinch:	party of 60 in fields among thistles plus 8 moving over, mostly N
Pied Wagtail:	5, mostly singly, moving in various directions
Linnet:	14 in small parties (mean 2.0) mostly heading S
Woodpigeon:	12 in three parties, all heading N
Skylark:	5 singles all heading S-SE
Grey Wagtail:	1 heading S

In addition several grounded migrants or probable migrants were observed. These included single Small White, Silver Y and Rush Veneer among the Lepidoptera; the hoverflies *Eristalis tenax* and *E. nemorum*, again singly; plus a Chiffchaff and Marsh Tit in the conifer shelter-belt and a Golden Plover calling from sheep-pasture near the triangulation point. Other birds encountered were probably a part of the regular local fauna; these were numerous Carrion Crows and Rooks, plus small numbers of Raven, Buzzard, Chaffinch, and Goldcrest. The only invertebrates seen which could be presumed resident to the area were the bumblebee *Bombus terrestris* and many unidentified craneflies (Diptera: Tipulidae).

19 October 2003: Brown Cleve (present: R. Kemp, G. Blunt, I. Thompson, J. Mason)

Once again our autumn field meeting focussed on fungi, leaf mines and galls; though we knew from the outset that the long, dry spell before the meeting was little suited to a good fungal display. Our group began by searching the sheep-pasture on the Burwarton estate on the lower eastern flank of Brown Cleve. As predicted, fungi were sparse in the grassland and woodland fringes, and a high proportion of specimens were in a depauperate condition. Through persistence, however, we managed to find and identify fourteen species, plus two others to the level of genus. Almost all were common and widespread species, with the exception of the more local *Volvariella gloiocephala*, of which we found one good specimen in the pasture. This area produced a few other species typical of acidic grasslands; while the adjacent mature plantations of Larch and Spruce had their associated fungi, respectively *Suillus grevillei* and *Lactarius deterrimus*.

The full list of recorded species is:

<i>Clavaria</i> sp.	<i>Lactarius deterrimus</i>	<i>Rhytisma acerinum</i>
<i>Collybia butyracea</i>	<i>Lepiota procera</i>	<i>Russula</i> sp.
<i>Cuphophyllus niveus</i>	<i>Lycoperdon pyriforme</i>	<i>Suillus grevillei</i>
<i>Grifola frondosa</i>	<i>Melanoleuca vulgaris</i>	<i>Volvariella gloiocephala</i>
<i>Hypholoma fasciculare</i>	<i>Pholiota squarrosa</i>	
<i>H. subericaeum</i>	<i>Piptoporus betulinus</i>	

Scattered across the pasture and beside the neighbouring driveway were some large trees of Sweet Chestnut, Beech, Cherry (an ornamental species, of which two old, broken specimens were just about surviving), plus native Sessile and Pedunculate Oaks and Silver Birch. These were searched diligently for mines and galls, as were saplings of Wild Cherry and shrubby Hazels. A notable find was the mine of the Lepidoptera *Phyllonorycter cerasicolella*, which was still present in the same shrubbery from which it was added to the Shropshire list in 1997. The full list is as follows:

(Coleoptera)

Rhynchaenus fagi old mine on Beech

(Diptera)

Dasineura urticae galls on Stinging Nettle

(Hemiptera)

Phyllaphis fagi galls on Beech

(Hymenoptera)

Neuroterus albipes galls on Pedunculate Oak

N. numismalis galls on Pedunculate Oak

N. quercusbaccarum galls on Pedunculate Oak

(Lepidoptera)

Ectoedemia quercifoliae mines on Pedunculate Oak

E. subbimaculella mine on Pedunculate Oak

Lyonetia clerkella mines on Wild Cherry

Parornix devoniella mine on Hazel

Phyllonorycter cerasicolella mine on Wild Cherry

P. coryli mines on Hazel

P. harrisella mines on Sessile and Pedunculate Oaks

P. heegeriella mines on Sessile and Pedunculate Oaks

P. maestingella mine on Beech

P. nicellii mine on Hazel

Stigmella floslactella mines on Hazel

S. luteella mine on Silver Birch

S. roborella mine on Pedunculate Oak

S. tityrella mine on Beech

After lunch we moved to Cockshutford on the western flank of Brown Clee and explored part of the way up the stream. This was dry in its more open stretches, with small pools remaining where overhanging tree branches had prevented desiccation. A shallow ditch which emerged briefly from the thick stand of Bracken, however, was still quite wet, and supported a luxuriant, erect form of the liverwort *Pellia epiphylla*. The filiform yellow fungus *Clavaria juncea* was also present here. The normally abundant galls of the midge *Dasineura urticae* were scarce here on Stinging Nettle: perhaps it does not thrive at higher altitudes in Shropshire.

Scrambling our way down stream we again encountered the Sulphur Tuft fungus, plus *Daedaleopsis confragosa* on Ash; galls of *Iteomyia capreae* (Diptera) and *Aculus laevis* (Acari) were present on Grey Willow, and *Eriophyes inangulis* (Acari) on Alder. The only lepidopterous leaf-mine was that of *Phyllonorycter coryli* on Hazel; but we did disturb a fresh specimen of the tortricid *Acleris emargana*. In the deepest shade beside the stream were flourishing patches of the liverworts *Conocephalum conicum* and *Marchantia polymorpha*. Overhead, flocks of 60 Redwing and over 100 Fieldfare gave notice that winter was fast approaching, as too did the 20 Siskins inhabiting the tops of Alders along the stream.

Shropshire Invertebrates Group Annual Report: Members' individual activities 2003

Godfrey Blunt

Long Mynd

Other than the SIG field meetings, my recording activities in Shropshire were rather limited this year. In May and June I managed a couple of visits to the Long Mynd, searching principally for microlepidoptera on the National Trust property. As in 2002 no great number of species was encountered, though *Rhopobota naevana* was predictably abundant wherever Bilberry flourished, and the Laburnum trees on Plush Hill were host to *Leucoptera laburnella*; in Minton Batch two specimens of *Argyresthia conjugella* were collected from the trunk of an old Rowan, and an imago of *Stigmella hybnerella* was found between Wordsley and Plush Hill. An attractive stream on the northern boundary of the Trust's property between Womerton and Inwood produced no micros of note, but I did beat a Copper Underwing larva from Field Maple there. Other interesting insects noted during my visits were the longhorn beetles *Rhagium bifasciatum* and *Anaglyptus mysticus* and the bark-louse *Trichadenotecnum fasciatum* (Psocoptera: Psocidae) from Minton Batch, and the moorland bumblebee *Bombus monticola* in Callow Hollow.

My endeavours culminated in a presentation at a symposium on the Long Mynd at the University of Wolverhampton on 19 July (Musgrove *et al.*, in prep); however it only served to underline how inadequate is our current knowledge of the Mynd's Lepidoptera when compared with what we know about its geology, flora and vertebrate fauna.

Bedstone Hill and Hopton Castle

My ongoing survey of the microlepidoptera of Shropshire with my friend Mike Smith was rather curtailed this year by Mike's long illness, though we did manage one day of fieldwork on 12 October. We explored several sites at Ludlow, Wenlock Edge and Hopton Titterhill, adding a good number of records of commoner species to our files. At Bedstone Hill, however, we struck a rich vein of leaf-mining Lepidoptera, including four species of *Ectoedemia* (*E. albifasciella*, *E. subbimaculella*, *E. occultella* and *E. heringi*) plus a new species for Shropshire, *Stigmella basigutella*, of which we found a vacated mine on Pedunculate Oak. Descending from Bedstone Hill we next stopped to examine the roadside hedgerow at Hopton Castle: no micros here, but two interesting specimens on Ground-elder, namely the leaf-mine of *Phytomyza obscurella* (Diptera: Agromyzidae) and pimple-galls of the rust *Puccinia aegopodii* (Uredinales: Pucciniaceae).

Whittington

On 18 October I paid a short visit to Whittington near Oswestry and made several entomological finds associated with non-native trees and shrubs. A large Walnut in the grounds of the Castle was infested with galls of the mite *Aceria erineus*; two forms of gall were present, a pustulous swelling on the upper surface, and a large felt-like patch on the under surface, the latter growth not associated with upper surface pustules. British literature on galls (e.g. the recent AIDGAP key - Redfern & Shirley, 2002) does not describe or illustrate the latter form; but reference to a Dutch website (www.plantengallen.com/collectie/galmijten.htm) shows both forms as belonging to the same mite species. In a nearby public garden a Cotoneaster shrub of an erect species (probably *Cotoneaster simonsii*) had leaf-mines of the nepticulid moth *Stigmella oxyacanthella*. But the most exciting find was the characteristic mine of *Phyllonorycter platanoidella*, two specimens of which were present on a young Norway Maple in the churchyard; formerly very local in western England, this moth has increased considerably in Worcestershire since 1990, and the Whittington find shows that it has now reached our county. Native plant species in this village had little of interest in comparison, though I was surprised to discover some small, weak plants of Traveller's-joy on the castle ruins, and even more surprised that they were host to mines of the dipteran *Phytomyza vitalbae*. On the same afternoon I called in at The Mere, Ellesmere, where a late third-brood specimen of Small Copper was still on the wing.

Preston Montford, Coalbrookdale and Alveley

David Pryce's malaise trap on the riverside at Preston Montford (grid reference SJ 433 143) trapped quite a number of microlepidoptera between April and September, a by-catch from his sampling of the river's Plecoptera and Trichoptera. He passed the samples to me, and though many were too damaged for identification without dissection of the genitalia (which I did not attempt), there were still 29 identifiable species. Preston Montford is about the only Shropshire locality where micros have been thoroughly studied in recent years, thanks to the Rothamsted trap operating at the Field Centre above David's riverside site. Nonetheless, the malaise trap produced two potential additions to the county fauna, *Eulamprotes atrella* and *Carpatolechia fugitivella*, an indication that even small shifts in sampling locality or sampling method can produce new species.

During the year Charles Derry handed me a couple of interesting specimens from his garden in Coalbrookdale: a gall on Azalea proved to be that of *Exobasidium japonicum* (Exobasidiales: Exobasidiaceae), and a leaf-mine on Hop was that of *Agromyza flaviceps* (Diptera: Agromyzidae). In my own garden in Alveley a small colony of the tortricid moth *Lobesia littoralis* was still present on Thrift, having originally been introduced with plants from a South Yorkshire garden centre in 1999. Other Tortricidae of note here during 2003 were *Cacoecimorpha pronubana*, *Clepsis consimilana* and *Epiphyas postvittana*. This last species has an interesting history: a native of Australia, where it is a pest of apples and known as the Light Brown Apple Moth or Apple Leaf Roller, it was sporadically recorded as an adventive in southern England until 1933, when it was found breeding in Cornwall. It has since spread slowly northward, its advance accelerating in the 1990s, and my Alveley record on 8 June appears to be the first for Shropshire. It appeared again in my garden later in the summer, and on our SIG field meeting to the Old River Bed, Shrewsbury, as described earlier.

The hot summer was clearly beneficial to many insect species, and I witnessed a notable movement of Lepidoptera through my garden in late August and September. The peak was on 14 September, a scorching Sunday, when amid the dozens of Red Admirals, Small Tortoiseshells, Large and Small Whites passing through were a Small Skipper and a Hummingbird Hawkmoth.

Outside Shropshire

Since moving to the West Midlands in 1978 I have seldom had the chance to return to my old Worsbrough, South Yorkshire haunts on a hot weekend at the height of the recording season, and I have duly missed the excitement of seeing many new insects colonise that area during their recent northward range expansions. On 31 May this year I made good this omission and was rewarded with six Lepidoptera and Odonata species which have established themselves in the Worsbrough district since I was active there: Holly Blue, Speckled Wood and Green Hairstreak among butterflies, plus the Banded Demoiselle and Four-spotted and Broad-bodied Chaser dragonflies. For good measure I added a new plant species to my Worsbrough list – Shining Crane's-bill – and a first sighting of nesting Common Terns, two pairs of which had young on rafts on Worsbrough reservoir. At nearby Barrow a reclaimed colliery waste site held a large colony on vetch plants of the tortricid *Cydia lunulana*, normally a scarce moth in Yorkshire; but even this insect was outnumbered by the hordes of Six-spot Burnet larvae and cocoons which were everywhere evident.

On 11 June I found that the Six-spot Burnet phenomenon was not confined to northern England, for on that day I encountered thousands on the wing in the translocated grassland which the University of Wolverhampton is monitoring at Long Ashton, Bristol. I estimated that the one field had as many as 10,000 Burnets flying that day. Strangely, the grassland management which had so favoured this moth seemed inimical to most other species, for the invertebrate diversity of the site dropped markedly in 2003. In early September, however, I did find a flowering spike of Autumn Lady's-tresses there, the first we have observed in the translocated grassland.

During the winter I worked through the year's catch from the Rothamsted trap at Compton Park, Wolverhampton. It contained two good finds - the Gem, a scarce migrant geometrid which I had never seen before, and the micro *Epiphyas postvittana*. Clearly the latter species had a good year in the region!

Nigel Jones

Belle Vue, Shrewsbury

2003 was my first reasonably active year for some time. Much of my invertebrate work was carried out in my garden in Belle Vue, Shrewsbury, where aculeate hymenopterans were the main source of entertainment. Thus my report begins with aculeate and associated records from my garden.

The year got off to a good start with a male Hairy-footed Flower Bee *Anthophora plumipes* visiting Lungwort *Pulmonaria* flowers on 23 March. *A. plumipes* males and females were present until early June, almost exclusively attending *Pulmonaria* and *Symphytum* flowers. The next identifiable bees to appear were the early spring species *Andrena haemorrhoa* and *Andrena fulva* on 5 April, accompanied by the bee-fly parasitoid *Bombylius major*. By 12 April the familiar Red Mason Bee *Osmia rufa* was active. I have three posts with variously sized holes drilled in them, and *O. rufa* is particularly attracted to these for nest building. I trapped one post's emergent *Osmia* one morning, by covering the post in netting. Some twelve females and males were present, plus a few other species I have not yet determined. By 27 April *Osmia*'s constant companion was present, the fabulously metallic-coloured parasitoid cuckoo wasp *Chrysis*; probably *C. ignita*, but this species is part of a hideously difficult complex of very similar wasps, that tend to defy identification - thus its true identity remains uncertain. On 18 May a most unusual Megachilid bee turned up in the garden. Resting on bare soil and garden bark was a green-eyed, beautifully shiny bronze and silvery-haired male *Megachile leachella*. This lovely bee is a sand dune specialist. I can only suppose that it had been carried to Shrewsbury from a beach in a neighbour's car. This bee was resident until 14 June, often using the bee post-holes for overnight 'roosting'. Flying around the bee post on 30 May was a pretty *Osmia* bee with a brick-red pollen scopa. This was *Osmia leaiana*, a much less common relative of *O. rufa*. Several *O. leaiana* 'roosted' in the bee posts and may well have nested. On 1 June the *Osmia* parasitoid *Sapyga quinquepunctatum* was present. This uncommon, distinctive black, red and white wasp first turned up on the bee posts about ten years ago. It is now well established in the garden, with two or three often present at any one time. On 14 June another of *Osmia*'s numerous hangers-on appeared - a curiously shaped wasp of the Genus *Gasteruption*. This small, slender wasp has a distinctive neck-like structure behind the head, swollen hind femur, very thin waist and extremely long, hair-thin ovipositor. The wasp investigated many sealed *Osmia* nest entrances, eventually drilling through one to deposit an egg. *Gasteruption* larvae eat the bee larvae and then consume the stored pollen in the nest chamber. These *Gasteruption* wasps were present for some few weeks in June and July. Mid-June saw the emergence of the male Wool Carder Bee *Anthidium manicatum*. This large solitary bee first appeared in the garden about ten years ago and a good-sized population has built up in association with various hairy-leaved plants and an abundance of narrow-lipped garden plant species. On 28 June at least six females and two males were active around *Stachys* plants and the bee posts. The last *A. manicatum* seen were two males patrolling on 2 August. On 21 June the dull-metallic Blue Mason Bee *Osmia caerulescens* was active for the first time around *Penstemon* flowers. *O. caerulescens* made use of the bee posts for roosting and probably nesting too, using smaller holes than its larger relative *O. rufa*. *O. caerulescens* is much more specialised than *O. rufa* in its choice of flowers. It confines itself to *Salvia* and *Penstemon*-like flowers, whereas *O. rufa* will take pollen from just about any flower. On 4 July a new species of *Anthophora* bee appeared: provisionally identified as *A. furcata*. During June, July and August various bees from the genus *Colletes*, *Hylaeus*, *Lasioglossum* and *Megachile* were present in good numbers. Next year I shall be attempting to identify some of them.

Apart from the aculeate Hymenoptera, several other interesting insects were recorded in my garden during 2003. These are listed below.

9 May - the family cat looked very pleased with itself for capturing a large insect which turned out to be a rather splendid Hawthorn Sawfly, *Trichosoma* sp. (Hymenoptera: Cimbicidae).

1 June - a very worn Convolvulus Hawkmoth.

14 June - inexplicably, a lone Slender Ground-hopper.

15 June - Lilac Beauty Moth.

May and June - a good population of the shield bug *Eysarcoris fabricii* (Hemiptera: Pentatomidae) on *Stachys* plants.

21 June- the hoverfly *Eristalis intricarius* (Diptera: Syrphidae).

9 August - a very good hoverfly day, with the very uncommon *Didea fasciata* appearing on a Fennel plant.

What was more remarkable was that one appeared on the same plant in 2002! *Chrysotoxum bicinctum*, an uncommon and very striking hoverfly, was also present, investigating around the bottoms of plants for somewhere to oviposit on root aphids or possibly into ants' nests. A splendid bright yellow *Helophilus trivittatus* graced *Lysimachia* flowers. Interestingly, a single specimen also occurred in 2002. Lastly, a Conopid fly *Conops quadrifasciata* (Diptera: Conopidae) was searching for hymenopteran victims.

Finally, on 20 October a fresh specimen of the autumnal soldierfly *Sargus bipunctatus* (Diptera: Stratiomyidae) was trapped under a window in the house.

Away from the garden I made the following more interesting records around Shropshire:

Wenlock Edge

5 May - at Stanway Coppice: the hoverfly *Leucozona lucorum* and the biggest mass emergence of the black fly *Bibio marci* (Diptera: Bibionidae) I have ever witnessed. There were countless thousands, probably tens of thousands, along the edge of a field above the Coppice.

28 May - Blakeway Hollow area: a single robberfly *Leptarthrus brevirostris* (Diptera: Asilidae) was resting on a fence post. This fly has a particular association with calcareous or base-rich grasslands. It is described by Stubbs & Drake (2001) as "for the most part absent or at very best localised" in the Midlands. In the woodlands the hoverfly *Portevinia maculata*, a specialist of Ramsons, was abundant, sunning itself on Ramsons leaves throughout.

Ludlow area

7 June - The Vinnals: several longhorn beetles *Judolia cerambyciformis* (Coleoptera: Cerambycidae) were on flowers around the edge of the car park.

Hope Valley and Stiperstones area

16 June - Santley (Hope Valley) and Shelve areas. The horsefly *Haematopota crassicornis* (Diptera: Tabanidae) was about in numbers throughout this area. A couple of *Ferdinandea cuprea* hoverflies flew around woodland edge at Buxton Wood near Tankerville. There were very many Chimney Sweeper moths flying in meadows at the Napp, near Pennerley.

17 June - The Vessons and Eastridge Wood near Habberley. Several of the longhorn beetle *Strangalia maculata* and one of its much less common cousin *Judolia cerambyciformis* (Coleoptera Cerambycidae) were on flowers close to the woodland edge. From a wet meadow on the edge of Eastridge Wood I captured two very freshly emerged male horseflies *Tabanus bromius*, which I took home to photograph its distinctive single-banded eyes. *T. bromius* is regarded as rare in the Midlands. I have found it once before in Shropshire, at Melverley Farm Nature Reserve, Whitchurch in 2002. There were also a number of the excellent bumblebee-mimicking hoverfly *Volucella bombylans* about, including both red-tailed and white-tailed forms. A single *Epistrophe grossulariae* hoverfly was also seen. On a post in a woodland edge field I was pleased to photograph a zebra spider with its dipteran prey. The spider was identified from the photograph as the rather uncommon *Salticus cingulatus* (Araneae: Salticidae).

20 June - Hope Valley Nature Reserve, near Minsterley. On flowers in a marshy area at the bottom edge of woodland there were many hoverflies and a large emergence of the common soldierfly *Chloromya formosa*. Amongst the hoverflies were numerous *Platycheirus granditarsa* and *P. rosarum*, *Volucella bombylans* var *plumata*, and two *Cheilosia illustrata*.

Montgomery Canal

7 July – Just over the Shropshire border I photographed a splendid and very uncommon soldierfly *Stratiomys potamida*, feeding on Hogweed flowers beside the canal at Wern (Gwynedd). Nearby, at Tredewern a single specimen of the hoverfly *Chrysotoxum bicinctum*. At Pool Quay (Powys), a single conopid fly *Conops flavipes*. All along the canal there were numerous *Cheilosia illustrata* hoverflies and several Emperor Dragonflies.

John Mason

Birds

Very cold weather on 8 January brought Bramblings to Attingham Park, where they joined flocks of up to 100 Chaffinches under the Beech trees near our office. A month later on 9 February there was a flock of nine Bullfinches in the Ironbridge Gorge near Coalport Bridge. The SIG visit to Whitcliffe Common to look for Hawfinch produced one handsome specimen that flew off overhead. On 7 May, just after returning to my home in Bayston Hill from Italy, I was dismayed to see that a Sparrowhawk had caught a Song Thrush on our bottom lawn (possibly the very same bird that had been singing beautifully only the previous evening from the Apple tree) and I had to watch it mantle its prey and then pluck it in full view. I popped in to the Shropshire Ornithological Society's hide at Venus Pool on 28 August and spotted a small flock of eight Black-tailed Godwits visiting. Just at dusk a couple of days later (30 August) I saw a bird flying loop-the-loop at the bottom of our garden. It took me a few moments to realise that it was a Sparrowhawk and that it was after the bats. It flew off after a while looking as if it had caught one. There were a few RTAs (road traffic accidents) reported: a male Indian Peafowl was the strangest, on the A49 near Longnor.

Mammals

This year produced the usual crop of road casualties, with Badgers (including an erythristic one at Emstrey Island on 23 August) and Foxes being the most noteworthy. One of the live Badgers I have seen this year was a youngster under my window two nights running digging furiously at roots in the hedge. It was only in daylight that I could detect the remains of the wasps' nest that must have been its motivation. By the autumn there seemed to be a slight surplus in the Wood Mouse department: I found no fewer than six under a sheet of plywood near Harlescott. Since then I have caught three in my house (two in the bathroom and one in the garage) and seen one on a bird feeder at the office.

Invertebrates

My garden produced a Brimstone butterfly in early spring sunshine on 2 March; three Wasp Beetles *Clytus arietis* (Coleoptera: Cerambycidae) sunning themselves on leaves on 23 May; the first (of many) Painted Ladies on 16 June; an Old Lady moth on the sitting-room window on 21 July followed by a Red Underwing on the garage door a few days later (13 August); a Migrant Hawker on 17 August; and a Hummingbird Hawkmoth feeding from Red Valerian. A good show of butterflies on *Echinacea* flowers at Dudmaston on 17 August included several Red Admirals and Painted Ladies together with one Hornet *Vespa crabro* (Hymenoptera: Vespidae). I watched a female Grayling laying eggs in a grassy hollow at The Bog during an office outing to the Stiperstones. Painted Ladies were everywhere by this stage – even on the top of Pole Bank (2 August).

Botany

The late winter produced lots of fungi: there were Scarlet Elf Cups and Small Earthstars in Ironbridge Gorge on 7 February; lots more (huge) Elf Cups along the Shropshire Union Canal at Tyrley; and a group of Giant Puffballs looking like elephant droppings. Ivy Broomrape managed a total of six flower spikes in the garden this year (the first to appear was 21 June and the last 21 September). A Broomrape reported from Yell Bank on 8 July proved to be the Greater Broomrape, which prompted me to make a pilgrimage to Shropshire's strongest colony at Oswestry Old Hill Fort where I counted 28 flowering spikes on the left-hand side of the entrance track (all well over and browned off). On 7 June the official opening of

Venus Pool was an opportunity to see the success of Prof. Ian Trueman's herb-rich grassland using strewn hay from several donor sites in Shropshire.

Astronomy

I missed seeing most of this year's events. During the transit of Mercury on 7 May I was off sick with a cold but couldn't organise myself to project the sun's image to view it. However, I did catch the massive sunspots at the end of October and a month later after they came round again. I took my telescope to the office to share a view of the impressive spots but poor night-time weather spoiled any chance of seeing a decent auroral display following the huge sun flares associated with the spots. The partial eclipse of the sun at dawn on 31 May was obscured by cloud from my viewpoint at Lisdoonvarna, Co. Clare in Ireland. I missed the total eclipse of the moon en route to Costa Rica on 9 November.

Elsewhere in Britain

Birds

Kestrels nested in a small Scots Pine in the garden of my wife's mother's house near Hull (Yorkshire East Riding). I was regularly updated on progress at the nest, which was first revealed as the parents brought food to the young. By the time of my first visit (14 June) the young were losing their down and starting to fledge. When the male returned with small mammals for the brood they were brusquely snatched by the female after he called her off the nest. By my second visit (28 June) one of the chicks had been muscled out of the nest by its siblings and had starved to death on the ground while the others had fully fledged and looked in prime condition (in contrast to their tired parents). Other sights of the year were: on 8 August, Dartford Warblers at Greenham Common (Berkshire), now established well away from the south coast; Little Egrets in the river near Truro (Cornwall), and nearby a group of wintering Spotted Redshanks.

Invertebrates

Hagenella clathrata (Trichoptera: Phryganeidae) had an early season at Chartley Moss (Staffordshire), but I just caught the end of it and saw two of them flitting about their favourite patch. During the walk with my wife Ann on the Wolds Way (Yorkshire East Riding) we saw clusters of up to 20 Green-veined Whites gathered on horse droppings. At Greenham on 8 August I saw my first Clouded Yellow of the year (and two more on clifftops in Cornwall in September). Later the same day Roesel's Bush-crickets were singing from long grass at Otmoor (Oxfordshire).

Plants

I spotted the big pink Hairy Bindweed in a hedge at Cottingham near Hull. Other notable plants of the year included Dwarf Gorse at Greenham, Greater Bladderwort in flower at Otmoor, and Shore Dock in Cornwall. The latter is said to be the world's rarest Dock. I'm not sure I have ever seen the genuine plant before but on this occasion I was sure because it was in ripe fruit and I had the national expert on the species on hand to confirm its identity. Other highlights of the Cornish trip were Blue-eyed-Mary in leaf only near Truro; a female Ginkgo in fruit in the city itself; and Sea Knotgrass on The Lizard. At Waddesdon Manor (Buckinghamshire) I spotted some big brown fruits in a hedge of Japanese Plum Yew.

Ian Thompson

The following records and observations exclude those made whilst on SIG field trips.

Mammals

There were no signs of Mink at all this year whilst I was fishing on the Tanat. The survey of road traffic accident (RTA) Polecats and Mink for the Vincent Wildlife Trust produced three Polecat records in the first few days of October, all quite near to Shrewsbury on A-roads or trunk roads. A new Polecat distribution survey is being carried out by the Mammal Society jointly with the Vincent Wildlife Trust in 2004-06. This is separate from the RTA survey in the autumn. It will be based mainly on collecting bodies and sending them, or photos of them, to one or other of the organisations. Feral Ferrets are being included in this survey. On 4 February, while on a coach travelling towards Hodnet, I saw two Fallow Deer in a pasture field near the A53 just east of the A49/A53 road junction. These may be part of the herds from the Haughmond Abbey/New Coppice and Colins Rough woods area.

Birds

No unusual or new species came to my garden at Meole Brace this year. Our local House Sparrows seem to be maintaining their numbers at around eighteen. It seems to have been a good year for Buzzards: they have been seen from the car on most journeys and on virtually every other field outing. Seven were seen together soaring (some at a great height) near Hook-a-gate on 23 March.

My first sightings this year were:

27 April – House Martin at Meole Brace (twelve days later than in 2002)

28 April – Swift at Meole Brace

1 May – Sand Martin at Hampton Loade

5 May – Cuckoo at Weir Coppice, Hook-a-gate

Some other sightings included three Mistle Thrushes at Earl's Hill car park on 23 January; Goosander on the River Severn at Alveley on 21 March; five Jays together at Weir Coppice two days later; Peregrine at Titterstone Clee on 3 April; a pair of Ravens (now common in Shropshire) nesting in a conifer at Wilstone Hill near Cardington (8 April) – several in evidence in the area on that day; a pair of Mandarin Ducks at Hampton Loade (1 May); on 21 May two Lapwings near Annscroft; and a Great Spotted Woodpecker in my garden on a feeder taking mixed feeder seed (largely sunflower) through the feeding port in July.

Kingfishers appear to be in good numbers on the Rea Brook and River Tanat. I saw seven or eight Pied Wagtails feeding in the road after rain at Llyncllys on 4 October and on the same day in the same area two Magpies were harrying a Kestrel. Wheatears were very numerous as well-grown young in Small Batch near Little Stretton on 13 August.

Fish

Interestingly, whilst sampling for the Riverfly Survey on the two stretches of the Rea Brook I caught Bullheads; more than ten, but none larger than 50mm, with many much smaller. At the upstream site (above Hook-a-gate weir) I also caught Stone Loaches. I would not have thought the Rea Brook quite clean enough, with too much turbidity for these fish, as they require clean rivers and a level of dissolved oxygen to about the same requirements as salmonids. It is good to think that this water is good enough for them.

Invertebrates

I started work on the Riverfly Survey in Shropshire. The original intention was to monitor two sites on two rivers on two occasions. The sites were the Rea Brook at Meole Village and Hook-a-gate, and the Tanat near Pont Rhyd-meredydd and at Llangedwyn (Powys). Because of low water exposing the bed in some parts of the sites previously sampled, the second visits were not proceeded with. The results are not yet finalised. The survey is primarily to establish which species in the Orders Ephemeroptera, and to a lesser extent Trichoptera, are present. There tended to be many more Trichoptera as adult insects; overall the

ephemeropterans were disappointing except for large numbers of *Ephemerella ignita* (Blue-winged Olive) on the Tanat at both sites. Whilst doing this survey I noted numerous Banded Demoiselles and White-legged Damselflies (all males) on the Rea, and a good head of Beautiful Demoiselles on the Tanat.

My earliest butterfly records were: Small Tortoiseshell at Alveley on 18 March; Comma there three days later; Brimstone and Peacock (23 March) at Hook-a-gate; Orange Tip on 16 April near Llanyblodwell; Large White in my garden on 23 April; Speckled Wood (5 May) at Weir Coppice; and Painted Lady in my garden on 1 June.

On a walk up Small Batch and round into Ashes Hollow on 13 August there were more Heather Flies *Bibio pomonae* (Diptera: Bibionidae) than I have ever seen outside Scotland. The air above the Heather was shimmering with them. On the way down into Ashes Hollow I found a small colony of Grayling which have apparently “returned” to the Long Mynd.

Other interesting records include a Hummingbird Hawkmoth in my garden on 30 June; numerous Two-spot Ladybirds *Adalia 2-punctata* (Coleoptera: Coccinellidae) in the house and garden – they appear to have hibernated around the frames of the opening lights of the bathroom window; and an Orange Ladybird *Halyzia 16-guttata* (found by my wife Jo) in leaf litter on Haughmond Hill on 11 October. It looks to have been a particularly good year for Buff-tailed Bumblebees *Bombus terrestris* (Hymenoptera: Apidae) as very many queens were in evidence in the spring.

Plants

I have been involved in several botanical surveys this year. I revisited Alveley Country Park twice (once with Jo and once with Bob Kemp, Bill and Pam Rudge) and noted on the first trip that several spring flowers were later this year than on the SIG outing in 2002. The Yellow Star-of-Bethlehem only had four flowers in bloom on 18 March and the plants seemed less robust. Some clearance of Brambles was done.

I walked the new permissive footpaths around Whitley Grange near Hanwood on 26 May. On the conservation headlands I found Fumitory and a fine lot of Vetches, but if these headlands are not cut then tall ruderals and aggressive species will probably crowd them out.

Tailpiece

On 8 April beside the track from Wilstone to Cwm Cottages, on a day of warm sunshine, I watched frog spawn hatching in a shallow acidic runnel.

Charles Derry

The following observations were all made in the Coalbrookdale-Ironbridge area unless otherwise stated.

The year’s activities began slowly, with nothing out of the ordinary by way of birds in my garden, apart from regular sightings of a pair of Ravens, suggesting that they were nesting locally. I never saw more than four Siskins on the feeders at any one time, although they regularly ate black sunflower seed, a behaviour which I had not seen previously. A flock of about 40 Siskins were observed feeding in the top of Larches in the Arboretum off Darby Road, Coalbrookdale.

The first butterfly of the year in my garden was a Peacock on 3 March, followed by a Small Tortoiseshell on 15 March, the day after I had heard my first Chiffchaff. The first moth of any interest was an Orange Underwing on 23 March flying round a garden on Hermitage Way, Madeley, the nearest Silver Birch being some considerable distance away.

A Curlew was calling on 30 March between Darby Road and the A4169, Buildwas Bank, but it was not heard subsequently. The first non-hibernating butterfly of the year was a Holly Blue on 3 April on Lincoln Hill, Ironbridge, followed by three or more Small Whites or Green-veined Whites the next day at home,

with the first Orange Tip and Bee-fly *Bombylius major* (Diptera: Bombyliidae) on 5 April. On the same night (5 April) the moth trap produced fourteen species of moths, including the Streamer (four specimens), Early Grey (three), and singles each of Early Tooth-striped and Water Carpet. Even more of a bonus, however, were about 20 Marbled Beauty larvae feeding on lichen on our concrete garage. For the second year running the light trap produced a Pale Pinion, on 12 April; while three days later I caught the first Chocolate-tip of the year, followed on 18 April by a Frosted Green, Lunar Marbled Brown, Nut-tree Tussock and Pebble Hook-tip, this last species being particularly early in the year. On the following night I caught my first-ever Grey Shoulder-knot, plus a Pale Prominent and White Ermine; both of these last two species, and particularly the White Ermine, were very early.

May began with a Dunnock's nest in the garden being raided and all four eggs taken, though better news was that I rescued a Slow Worm *Anguis fragilis* on the road outside my house after it had been picked up and dropped by a Magpie. On 15 May I discovered a Small Emerald larva feeding on a *Clematis* cultivar in my garden. I observed it over the next ten days, after which it presumably pupated. On 19 May I saw the year's first Small Phoenix, V-Pug, Poplar Hawkmoth and Mullein in the moth trap; while on 27 May further firsts for the year were the Spectacle and Green Carpet. The month ended with finding a longhorn beetle, *Pogonochaerus hispidulus* (Coleoptera: Cerambycidae) in my sun-room.

June opened with my hearing and subsequently seeing two Peregrines flying directly over the garden; this was not to be a regular occurrence, however, as I saw only one other fly over all year. The month ended with my brother handing to me a Varied Coronet which had flown into his home in Priorslee, Telford, on 29 June. Having seen Painted Ladies regularly in the garden throughout June, I found larvae on a Spear Thistle, but none of these survived, the last being taken by a Crab Spider (Araneae: Thomisidae).

On 13 August I was called to a friend's house in Madeley to identify a "large moth", and much to my surprise it turned out to be a *Convolvulus* Hawkmoth: apparently, 2003 was an exceptional year nationally for this species. My moth-trap two nights later produced another migrant, a Rush Veneer, along with a Currant Pug. A Red-green Carpet came to the trap on 18 September, and was the last catch of interest in the year. The only other sighting of note for me was a late Large White on 7 November.

References

- Musgrove, N.J., Carty, P., Packham, J.R. and Uff, C. (eds) (in prep) *The Ecology of the Long Mynd: Past, Present and Future*. Proceedings of a Symposium held at The University of Wolverhampton and Cardingmill Valley, 19 and 20 July 2003.
- Redfern, Margaret and Shirley, Peter (2002) *British Plant Galls: Identification of galls on plants and fungi*. Field Studies, **10**, 207-531
- Stubbs, Alan and Drake, Martin (2001) *British Soldierflies and their allies*. British Entomological and Natural History Society.

Shropshire Invertebrates Group Annual Report 2003: Appendix A

Field Meeting to Whitcliffe, Ludlow, on 15 October 2000 (present: R. Kemp, J. Mason, G. Blunt)

Three members attended this field meeting to explore the open grassland of Whitcliffe Common and the neighbouring deciduous woodlands. The day was very productive of fungi, plant galls and leaf mines, the full list of species recorded being as follows:

Fungi

Abortiporus biennis
Amanita rubescens
Boletus badius
B. chrysenteron
Cystoderma amianthinum
Clavulinopsis corniculata
C. fusiformis
Clitocybe brumalis
C. nebularis
Collybia butyracea
C. maculata

Hygrocybe ceracea
H. coccinea
Laccaria laccata
Lactarius blennius
Lepiota felina
L. rhacodes
Nectria cinnabarina
Oudemansiella radicata
Schizophyllum commune
Tricholoma virgatum
Xylaria hypoxylon

Galls

Aceria macrorhynchus on Field Maple
A. macrochelus on Field Maple
Andricus curvator on Sessile Oak
A. lignicola on Sessile Oak
Blennocampa phyllocolpa on *Rosa* sp.
Dasineura urticae on Stinging Nettle
Hartigiola annulipes on Beech
Macrodiplosis dryobia on Pedunculate Oak

Macrodiplosis dryobia on Sessile Oak
M. volvens on *Quercus* sp.
Neuroterus anthracinus on Pedunculate Oak
“ “ on Sessile Oak
N. quercusbaccarum on Pedunculate Oak
Phyllocoptes goniothorax on Hawthorn
Phytomyza ilicis on Holly
Phytoptus avellanae on Hazel

Leaf Mines (all microlepidoptera)

Bucculatrix bechsteinella on Hawthorn
Lyonetia clerkella on Hawthorn
Parornix anglicella on Hawthorn
P. devoniella on Hazel
Phyllonorycter cerasicolella on Wild Cherry
P. coryli on Hazel
P. harrisella on Pedunculate Oak
P. heegeriella on Pedunculate Oak
P. maestingella on Beech
P. messaniella on Beech
P. nicellii on Hazel

Phyllonorycter oxyacanthae on Hawthorn
P. quinnata on Hornbeam
P. sorbi on Rowan
P. acerifoliella on Field Maple
Stigmella nylandriella on Rowan
S. aurella on Bramble
S. floslactella on Hazel
S. microtheriella on Hazel
“ on Hornbeam
S. splendidissimella on Bramble
S. tityrella on Beech

Other species recorded during the day were the dung beetle *Geotrupes stercorosus* (Coleoptera: Geotrupidae) and the slug *Limax marginatus* (Stylommatophora: Limacidae).

Shropshire Invertebrates Group Annual Report 2003: Appendix B

Scientific names of species mentioned in the text

Flora

Alder *Alnus glutinosa*
Amphibious Bistort *Persicaria amphibia*
Apple *Malus* sp.
Ash *Fraxinus excelsior*
Autumn Hawkbit *Leontodon autumnalis*

Autumn Lady's-tresses *Spiranthes spiralis*
Azalea *Rhododendron* sp.
Beech *Fagus sylvatica*
Bee Orchid *Ophrys apifera*
Bilberry *Vaccinium myrtillus*

Blackthorn *Prunus spinosa*
 Blue-eyed-Mary *Omphalodes verna*
 Bracken *Pteridium aquilinum*
 Bramble *Rubus fruticosus* agg.
 Branched Bur-reed *Sparganium erectum*
 Broad-leaved Willowherb *Epilobium montanum*
 Bulrush *Typha latifolia*
 Cat's-ear *Hypochaeris radicata*
 Changing Forget-me-not *Myosotis discolor*
 Cherry *Prunus* sp.
 Cock's-foot *Dactylis glomerata*
 Common Centaury *Centaureum erythraea*
 Common Cow-wheat *Melampyrum pratense*
 Common Figwort *Scrophularia nodosa*
 Common Ragwort *Senecio jacobaea*
 Common Sedge *Carex nigra*
 Common Valerian *Valeriana officinalis*
 Crab Apple *Malus sylvestris*
 Crack-willow *Salix fragilis*
 Creeping Buttercup *Ranunculus repens*
 Creeping Thistle *Cirsium arvense*
 Cuckooflower *Cardamine pratensis*
 Daisy *Bellis perennis*
 Dog-rose *Rosa canina*
 Dog's Mercury *Mercurialis perennis*
 Dogwood *Cornus sanguinea*
 Douglas Fir *Pseudotsuga menziesii*
 Downy Birch *Betula pubescens*
 Dwarf Gorse *Ulex minor*
 Elder *Sambucus nigra*
 Elm *Ulmus* sp.
 Enchanter's-nightshade *Circaea lutetiana*
 Fairy Flax *Linum catharticum*
 False Fox-sedge *Carex otrubae*
 Fennel *Foeniculum vulgare*
 Field Maple *Acer campestre*
 Foxglove *Digitalis purpurea*
 Fumitory *Fumaria* sp.
 Ginkgo *Ginkgo biloba*
 Goat Willow *Salix caprea*
 Greater Bird's-foot-trefoil *Lotus pedunculatus*
 Greater Bladderwort *Utricularia vulgaris*
 Greater Broomrape *Orobanche rapum-genistae*
 Great Mullein *Verbascum thapsus*
 Great Willowherb *Epilobium hirsutum*
 Great Wood-rush *Luzula sylvatica*
 Grey Willow *Salix cinerea*
 Ground-elder *Aegopodium podagraria*
 Ground-ivy *Glechoma hederacea*
 Gypsywort *Lycopus europaeus*
 Hairy Bindweed *Calystegia pulchra*
 Hairy Wood-rush *Luzula pilosa*
 Hard-fern *Blechnum spicant*
 Harebell *Campanula rotundifolia*
 Hart's-tongue *Phyllitis scolopendrium*
 Hawthorn *Crataegus monogyna*
 Hazel *Corylus avellana*
 Heather *Calluna vulgaris*
 Heath Milkwort *Polygala serpyllifolia*
 Hedge Woundwort *Stachys sylvatica*
 Hogweed *Heracleum sphondylium*
 Holly *Ilex aquifolium*
 Honeysuckle *Lonicera periclymenum*
 Hop *Humulus lupulus*
 Hornbeam *Carpinus betulus*
 Imperforate St John's-wort *Hypericum maculatum*
 Intermediate Polypody *Polypodium interjectum*
 Ivy *Hedera helix*
 Ivy Broomrape *Orobanche hederaceae*
 Japanese Plum Yew *Taxus cuspidata*
 Laburnum *Laburnum anagyroides*
 Larch *Larix* sp.
 Lesser Burdock *Arctium minus*
 Lesser Celandine *Ranunculus ficaria*
 Lesser Water-parsnip *Berula erecta*
 Lime *Tilia x vulgaris*
 Lords-and-Ladies *Arum maculatum*
 Lungwort *Pulmonaria* sp.
 Marsh Thistle *Cirsium palustre*
 Meadowsweet *Filipendula ulmaria*
 Musk-mallow *Malva moschata*
 Musk Thistle *Carduus nutans*
 Nettle-leaved Bellflower *Campanula trachelium*
 Nipplewort *Lapsana communis*
 Norway Maple *Acer platanoides*
 Norway Spruce *Picea abies*
 Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolium*
 Pedunculate Oak *Quercus robur*
 Perennial Sow-thistle *Sonchus arvensis*
 Perforate St John's-wort *Hypericum perforatum*
 Ploughman's-spikenard *Inula conyzae*
 Purple-loosestrife *Lythrum salicaria*
 Pyramidal Orchid *Anacamptis pyramidalis*
 Ragged-robin *Lychnis flos-cuculi*
 Ramsons *Allium ursinum*
 Raspberry *Rubus idaeus*
 Red Valerian *Centranthus ruber*
 Reed Canary-grass *Phalaris arundinacea*
 Remote Sedge *Carex remota*
 Rose *Rosa* sp.
 Rosebay Willowherb *Chamerion angustifolium*
 Rough Hawkbit *Leontodon hispidus*
 Rough Meadow-grass *Poa trivialis*
 Round-leaved Crowfoot *Ranunculus omiophyllus*
 Rowan *Sorbus aucuparia*
 Scots Pine *Pinus sylvestris*
 Sea Knotgrass *Polygonum maritimum*
 Sessile Oak *Quercus petraea*
 Shining Crane's-bill *Geranium lucidum*

Shore Dock *Rumex rupestris*
Silver Birch *Betula pendula*
Skullcap *Scutellaria galericulata*
Small-leaved Lime *Tilia cordata*
Snowdrop *Galanthus nivalis*
Spear Thistle *Cirsium vulgare*
Spindle *Euonymus europaeus*
Spruce *Picea* sp.
Stinging Nettle *Urtica dioica*
Sweet Chestnut *Castanea sativa*
Sycamore *Acer pseudoplatanus*
Thrift *Armeria maritima*
Tormentil *Potentilla erecta*
Traveller's-joy *Clematis vitalba*
Vetch *Vicia* sp.
Wall Lettuce *Mycelis muralis*
Walnut *Juglans regia*
Water Horsetail *Equisetum fluviatile*

Water Mint *Mentha aquatica*
Weld *Reseda luteola*
Wild Angelica *Angelica sylvestris*
Wild Basil *Clinopodium vulgare*
Wild Cherry *Prunus avium*
Wild Mignonette *Reseda lutea*
Wild Strawberry *Fragaria vesca*
Wild Thyme *Thymus polytrichus*
Wood Avens *Geum urbanum*
Woodruff *Galium odoratum*
Wood-sedge *Carex sylvatica*
Wych Elm *Ulmus glabra*
Yarrow *Achillea millefolium*
Yellow Archangel *Lamium galeobdolon*
Yellow Pimpernel *Lysimachia nemorum*
Yellow Star-of-Bethlehem *Gagea lutea*
Yew *Taxus baccata*

Fungi

Candle Snuff Fungus *Xylaria hypoxylon*
Giant Puffball *Langermannia gigantea*
Jew's Ear Fungus *Auricularia auricula-judae*

Scarlet Elf Cup *Sarcoscypha coccinea*
Small Earthstar *Geastrum rufescens*
Sulphur Tuft *Hypholoma fasciculare*

Odonata

Banded Demoiselle *Calopteryx splendens*
Beautiful Demoiselle *Calopteryx virgo*
Blue-tailed Damselfly *Ischnura elegans*
Broad-bodied Chaser *Libellula depressa*
Brown Hawker *Aeshna grandis*
Common Blue Damselfly *Enallagma cyathigerum*

Common Darter *Sympetrum striolatum*
Emperor Dragonfly *Anax imperator*
Four-spotted Chaser *Libellula quadrimaculata*
Migrant Hawker *Aeshna mixta*
Southern Hawker *Aeshna cyanea*
White-legged Damselfly *Platycnemis pennipes*

Orthoptera

Common Ground-hopper *Tetrix undulata*
Field Grasshopper *Chorthippus brunneus*
Oak Bush-cricket *Meconema thalassinum*

Roesel's Bush-cricket *Metrioptera roeselii*
Slender Ground-hopper *Tetrix subulata*

Lepidoptera

Angle Shades *Phlogophora meticulosa*
Bordered White *Bupalus piniaria*
Brimstone *Gonepteryx rhamni*
Brown Silver-line *Petrophora chlorosata*
Chimney Sweeper *Odezia atrata*
Chocolate-tip *Clostera curtula*
Cinnabar *Tyria jacobaeae*
Clouded Border *Lomaspilis marginata*
Clouded Magpie *Abraxas sylvata*
Clouded Yellow *Colias croceus*
Comma *Polygona c-album*

Convolvulus Hawkmoth *Agrius convolvuli*
Copper Underwing *Amphipyra pyramidea*
Currant Pug *Eupithecia assimilata*
Early Grey *Xylocampa areola*
Early Tooth-striped *Trichopteryx carpinata*
Frosted Green *Polyploca ridens*
Gem *Orthonama obstipata*
Gold Swift *Hepialus hecta*
Grayling *Hipparchia semele*
Green Carpet *Colostygia pectinataria*
Green Hairstreak *Callophrys rubi*

Green-veined White *Pieris napi*
 Grey Pine Carpet *Thera obeliscata*
 Grey Shoulder-knot *Lithophane ornitopus*
 Holly Blue *Celastrina argiolus*
 Hummingbird Hawkmoth *Macroglossum stellatarum*
 Larch Pug *Eupithecia lariciata*
 Large White *Pieris brassicae*
 Large Yellow Underwing *Noctua pronuba*
 Light Knot Grass *Acronicta menyanthidis*
 Lilac Beauty *Apeira syringaria*
 Lunar Hornet Moth *Sesia bembeciformis*
 Lunar Marbled Brown *Drymonia ruficornis*
 Marbled Beauty *Cryphia domestica*
 Meadow Brown *Maniola jurtina*
 Mother-of-Pearl *Pleuroptya ruralis*
 Mullein *Shargacucullia verbasci*
 Nettle Tap *Anthophila fabriciana*
 Northern Spinach *Eulithis populata*
 Nut-tree Tussock *Colocasia coryli*
 Old Lady *Mormo maura*
 Orange Tip *Anthocharis cardamines*
 Orange Underwing *Archiearis parthenias*
 Painted Lady *Cynthia cardui*
 Pale Pinion *Lithophane hepatica*
 Pale Prominent *Pterostoma palpina*
 Peacock *Inachis io*

Fish

Bullhead *Cottus gobio*
 Stone Loach *Noemacheilus barbatulus*

Mammals

Badger *Meles meles*
 Fallow Deer *Dama dama*
 Ferret *Mustela furo*
 Fox *Vulpes vulpes*
 Grey Squirrel *Sciurus carolinensis*
 Mink *Mustela vison*

Birds

Blackbird *Turdus merula*
 Blackcap *Sylvia atricapilla*
 Black-tailed Godwit *Limosa limosa*
 Blue Tit *Parus caeruleus*
 Brambling *Fringilla montifringilla*
 Bullfinch *Pyrrhula pyrrhula*
 Buzzard *Buteo buteo*
 Carrion Crow *Corvus corone corone*
 Chaffinch *Fringilla coelebs*
 Chiffchaff *Phylloscopus collybita*
 Coal Tit *Parus ater*
 Common Tern *Sterna hirundo*

Pebble Hook-tip *Drepana falcataria*
 Poplar Hawkmoth *Laothoe populi*
 Red Admiral *Vanessa atalanta*
 Red-green Carpet *Chloroclysta siterata*
 Red Underwing *Catocala nupta*
 Ringlet *Aphantopus hyperantus*
 Rush Veneer *Nomophila noctuella*
 Silver-ground Carpet *Xanthorhoe montanata*
 Silver Y *Autographa gamma*
 Six-spot Burnet *Zygaena filipendulae*
 Small Copper *Lycaena phlaeas*
 Small Emerald *Hemistola chrysoprasaria*
 Small Phoenix *Ecliptopera silaceata*
 Small Skipper *Thymelicus sylvestris*
 Small Tortoiseshell *Aglais urticae*
 Small White *Pieris rapae*
 Speckled Wood *Pararge aegeria*
 Speckled Yellow *Pseudopanthera macularia*
 Spectacle *Abrostola tripartita*
 Spruce Carpet *Thera britannica*
 Streamer *Anticlea derivata*
 Varied Coronet *Hadena compta*
 V-Pug *Chloroclystis v-ata*
 Water Carpet *Lampropteryx suffumata*
 White Ermine *Spilosoma lubricipeda*
 Yellow Horned *Achlya flavicornis*

Amphibians

Common Frog *Rana temporaria*
 Common Toad *Bufo bufo*

Mole *Talpa europaea*
 Polecat *Mustela putorius*
 Rabbit *Oryctolagus cuniculus*
 Stoat *Mustela erminea*
 Wood Mouse *Apodemus sylvaticus*

Crossbill *Loxia curvirostra*
 Cuckoo *Cuculus canorus*
 Curlew *Numenius arquata*
 Dartford Warbler *Sylvia undata*
 Dunnock *Prunella modularis*
 Fieldfare *Turdus pilaris*
 Goldcrest *Regulus regulus*
 Golden Plover *Pluvialis apricaria*
 Goldfinch *Carduelis carduelis*
 Goosander *Mergus merganser*
 Great Spotted Woodpecker *Dendrocopos major*
 Great Tit *Parus major*

Grey Wagtail *Motacilla cinerea*
Hawfinch *Coccothraustes coccothraustes*
House Martin *Delichon urbica*
House Sparrow *Passer domesticus*
Indian Peafowl *Pavo cristatus*
Jackdaw *Corvus monedula*
Jay *Garrulus glandarius*
Kestrel *Falco tinnunculus*
Kingfisher *Alcedo atthis*
Lapwing *Vanellus vanellus*
Linnet *Carduelis cannabina*
Little Egret *Egretta garzetta*
Long-tailed Tit *Aegithalos caudatus*
Magpie *Pica pica*
Mallard *Anas platyrhynchos*
Mandarin Duck *Aix galericulata*
Marsh Tit *Parus palustris*
Meadow Pipit *Anthus pratensis*
Mistle Thrush *Turdus viscivorus*
Moorhen *Gallinula chloropus*
Nuthatch *Sitta europaea*
Peregrine *Falco peregrinus*
Pheasant *Phasianus colchicus*
Pied Wagtail *Motacilla alba yarrellii*
Raven *Corvus corax*
Redwing *Turdus iliacus*
Reed Bunting *Emberiza schoeniclus*
Ring Ouzel *Turdus torquatus*
Robin *Erithacus rubecula*
Rook *Corvus frugilegus*
Sand Martin *Riparia riparia*
Sedge Warbler *Acrocephalus schoenobaenus*
Siskin *Carduelis spinus*
Skylark *Alauda arvensis*
Song Thrush *Turdus philomelos*
Sparrowhawk *Accipiter nisus*
Spotted Redshank *Tringa erythropus*
Stock Dove *Columba oenas*
Stonechat *Saxicola torquata*
Swallow *Hirundo rustica*
Swift *Apus apus*
Tree Pipit *Anthus trivialis*
Wheatear *Oenanthe oenanthe*
Whinchat *Saxicola rubetra*
Willow Tit *Parus montanus*
Willow Warbler *Phylloscopus trochilus*
Woodpigeon *Columba palumbus*
Wren *Troglodytes troglodytes*

In Memoriam – Michael Stanley Smith 1947-2004

As this report was going to print, news arrived of the death of Mike Smith of Caslon Crescent, Stourbridge, at the relatively early age of 56. Mike was devoted to Shropshire's wild places and loved nothing more than to explore those which were neglected by others. As a result he probably knew the county better than almost anyone: among his favourite spots were Brown Clee and Clun Forest, along with Chelmarsh, where he volunteered hundreds of hours of labour, mostly digging, to help improve the reserve's wetland habitats.

Mike's initial interest was birds, and he contributed much to Shropshire ornithology including a monthly column on the county in *Birdwatching* magazine. For the last dozen years his interests extended also to Lepidoptera, Odonata and longhorn beetles, and he will be especially remembered for his significant contribution to our knowledge of Shropshire's moths (micros as well as macros) from the early 1990s to the present day. Diffident of his knowledge, he hesitated to join SIG activities; but he was persuaded to take part in our 2002 field meetings at Whixall Moss and Borle Brook-River Rea, and would have done more in 2003 but for his long and ultimately fatal illness. Mike died peacefully in the early hours of 5 March 2004.