

Shropshire Invertebrates Group

Annual Report

2006

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**Photographs © N. Jones, I. Thompson
Field Meetings 2006**

26 February 2006: Dudmaston (present: C. Derry, K. Claxton, N. Jones, G. Blunt)

As our Group met at Hampton Load on this late February day the Severn Valley bore no traces of a recent light snowfall, though across the river snow could still be seen powdering the summit of Brown Clee. In fact we experienced sunshine intermittently throughout our visit, creating warm and welcome intervals between cloudy

spells and cold breezes. Our main aims were to search for the terrestrial caddis *Enoicyla pusilla* and to sample rot-holes in old trees for larvae of Diptera.

After following the river bank and passing beneath the waterworks' bridge we entered Long Covert, a tongue of mature deciduous woodland which we found to contain much Pedunculate Oak and Hazel, the latter liberally festooned with catkins. Bramble and Honeysuckle appeared commonly in the shrub layer, and clumps of Great Wood-rush and Bluebell were identified from their distinctive leaves. Wild Cherry, Lime and Silver Birch occurred more locally, and a very large Field Maple, galled by the mite *Aceria macrochelus*, was found by the main track through the wood. In shadier spots Hart's-tongue was not uncommon and leaves of Lords-and-Ladies were just appearing above ground. In two or three places Scarlet Elf-cups provided vivid splashes of colour on the forest floor, and other fungi we were able to identify were Jew's Ear, Birch Bracket and Many-zoned Polypore.

Although we sieved and searched leaf litter on slopes and at tree-bases we encountered few invertebrates. Indeed, the valley of a brook entering the Severn at the northern end of Long Covert produced no invertebrates at all until we moved further up its banks into the wood. We suspected the influence of a cold air sump in this valley, a big disappointment to us as the area seemed nearest in habitat to the Baveney Brook where we found the terrestrial caddis in 2005. Of the invertebrates we did find we identified the woodlouse *Porcellio scaber*; the molluscs *Discus rotundatus*, *Trichia hispida* and *T. striolata*; and the common beetles *Agonum assimile*, *Demetrias atricapillus*, *Tachyporus obtusus*, plus a melanic Two-spot Ladybird. A local weevil *Otiorrhynchus clavipes* was one of our best finds of the day, but we did not attempt to identify the variety of springtails, centipedes and millipedes which turned up in our sampling tray. However, photos of two pseudoscorpions we found were subsequently identified by national expert Gerald Legg as *Neobisium carcinoides* (Neobisiidae), one of our most abundant species. In Long Covert several Honeysuckle leaves bore the pale mines of agromyzid flies, which we identified as *Chromatomyia aprilina* and *C. loniceræ*.

Contrasting with this paucity of invertebrate fauna, the bird-life of Long Covert was both diverse and evident. Robins, Great Tits and Blue Tits were in full song, a Kestrel called in the wood and we came across a few Woodpigeons and Pheasants together with single Nuthatch, Magpie and Coal Tit. At one point we found fresh tracks of Pheasant and Fox together in soft mud, coming a few moments later upon a heap of feathers which showed that the latter had caught up with the former. At the end of Long Covert the path skirts two pools - a secluded small pond and the main lake of Dudmaston estate. Here we had good views of various water birds: a large flock of feral Greylag Geese included a few Canada Geese; ducks were represented by two pairs of Goldeneye, a drake Pochard and redhead Goosander; while two Great Crested Grebes, a Cormorant and a dozen or so Coots made up the remaining waterfowl. About two hundred Fieldfares and twenty Redwings worked their way through the lakeside trees, a pair of Buzzards called overhead, and single Kingfisher and Wren were seen. The woods around the outflow stream were flecked white with flowering Snowdrops, and we found the snail *Clausilia bidentata* (Clausiliidae) on tree bark here. Finally, after much scrabbling about rot-holes in parkland trees beside Big Pool Nigel Jones emerged triumphant with a single hoverfly larva, which he bred out and which proved to be *Myathropa florea*: but our search for the terrestrial caddis was unfruitful - no great surprise, as Dudmaston lies beyond its known distribution in this region.

From Big Pool we descended to the Severn and turned south along a riverside track, where Heron, Sparrowhawk and ten Long-tailed Tits were added to the day's tally. This track eventually brought us into Long Covert again, and so back towards Hampton Loade by the way we had come. Our day finished on a high note as we watched a flock of fifty Siskins at close quarters in Alders beside the Severn, and careful scanning with binoculars revealed four Goldfinches and a Brambling with them.

19 March 2006: Nills Hill Quarry and Poles Coppice, Pontesbury (present: I. Thompson, G. Blunt, D. Wrench, R. Kemp)

A target of this year's field meetings was to investigate the biodiversity of some of the county's quarries, starting with Nills Hill Quarry, which had last been worked in the 1970s. This small site consists today of an open quarry floor surrounded by regenerating woodland of Pedunculate Oak, Ash and Hazel, with abundant Ivy and Bramble and some Honeysuckle. Impeded drainage and a lack of soil cover has turned the quarry floor into a carpet of moss where few herbs have established themselves, though some Sallows and rough herbage have done so in one part of the site.

At this early date Daisies were in flower, but these were the only nectar sources, and the weather was too cool for flying insects. We therefore turned our attention to a small ditch in which we discovered a few caddis and water beetle larvae; then by turning over bits of industrial waste and breaking open dead Hemlock stems we located an assortment of invertebrates including numerous common earwigs *Forficula auricularia*; the woodlice *Oniscus asellus* and the local *Porcellio spinicornis*; the beetles *Silpha atrata*, *Nebria brevicollis* and *Hydrobius fuscipes*; the bug *Stygnocoris fuliginus*; the snail *Aegopinella pura*; several unidentified small Diptera, plus an ichneumon wasp and sawfly larva. Wild Teasel heads were collected, but no invertebrates were bred out from them. An abundance of droppings attested to the presence of Rabbits, and several birds were holding territory, with Greenfinch, Blue Tit and Robin in song and a Raven flying overhead.

A short scramble up a narrow track took us out of the quarry floor into the surrounding woodland. Lords-and-Ladies and Scaly Male-fern were located here, and we identified the bryophytes *Thuidium tamariscinum*, *Rhytidiadelphus squarrosus* and *Lophocolea heterophylla*. Galls of the gall midge *Macrodiplosis dryobia* were found on Pedunculate Oak, while leaf mines included those of the nepticulid moth *Stigmella aurella* on Bramble.

We emerged from the wood into a lane that led down to another open clearing at the back of the quarry. Here a slope of loose shale supported Climbing Corydalis, Sheep's Sorrel and Navelwort, while Broom and Western Gorse grew at its foot. We thought this clearing would make an attractive sun-trap in warm conditions, but the day's cool temperatures meant that invertebrates were still difficult to find, but we did locate four hibernating Seven-spot Ladybirds on a roadside fence post and mines of the agromyzid flies *Phytomyza ilicis* on Holly and *Aulagromyza hendeliana* on Honeysuckle. A shady roadside bank supported some Hart's-tongue.

We left the lane where a big Horse-chestnut marked the start of a footpath towards Poles Coppice. Holly was abundant along this path, one shrub being heavily dusted with a type of green mould, and the ground flora included flowering Dog's Mercury and leaves of Bluebell and Woodruff. Hart's-tongue grew luxuriously here too, and we added Soft Shield-fern to our list of ferns for the day. Jew's Ear fungus was present on Elder, and a Great Spotted Woodpecker called overhead. By searching oak trunks Dan Wrench found the liverworts *Metzgeria fruticulosa* and the tiny *Microlejeunia ulicina* whose intricate forms we admired by aid of his hand lens.

At length the track widened and entered Poles Hill Quarry, also now disused, where sitting on rocks below the quarry face we took a late lunch. Here we found Common Frog spawn, Hard Rush and an abundance of mosses including *Sphagnum squarrosum*, *Aulaacomnium palustre*, *Dicranum scoparium*, *Plagiomnium undulatum*, *Hylocomium splendens* and *Pleurozium schreberi*, along with the liverwort *Lunularia cruciata*. Two Buzzards called overhead, and Long-tailed Tits were busy seeking nest material; though a lone Fieldfare was evidence that winter had not yet fully departed.

The lane back to our starting point produced a few new plants for the day, including flowering Primrose and leaves of Lesser Celandine and Shining Crane's-bill. As we neared our cars we spent a little time searching a small roadside marsh whose soils were contaminated with iron oxide, where the emergent vegetation seemed to be Lesser Bulrush though we could not be certain. Seven-spot Ladybird was again present here, and Siskins foraged in bushes above our heads. At length we heard again the Greenfinch whose song had greeted us as at the outset, and we knew we were nearly back at our starting point.

30 April 2006: Treflach and Dolgoch Quarries (present: N. Jones, M. Lawley, J. Mason, W. Rudge, I. Thompson, D. Wrench)

This was the first visit by the Group to either of these sites. The weather was disappointing being overcast and cold.

Treflach was the first point of call, the principal site for the day. This disused limestone quarry is in a poor state, insofar as a considerable amount of tipping has taken place, rather typical for this type of site. The floor of the quarry at the higher level has had a large amount of stone fill spread, while areas at the back show soil mounding, which from the size of some of the trees has been there for a considerable time. Nearer the locked entrance gates there has been, given the site's proximity to local villages, the inevitable tipping of a more domestic nature, both of general rubbish and plant materials.

We entered the site from the road up a steep verge and over a low mesh fence. On the verge near the fence we noted a large nest mound of the ant *Lasius flavus* and nearby a good clump of False Oxlip. This taxon was also

found on the steep banks of the entrance track; here and in the adjacent small area of woodland its parents Primrose and Cowslip were abundant.

Near the site entrance we found concentrated the domestic rubbish. An old door and sheets of metal were lifted to reveal a Pill Woodlouse *Armadillidium vulgare* and a nest of the ant *Myrmica rubra* within which was found the tiny white woodlouse *Platyarthrus hoffmanseggi*. A Common Toad was sheltering under a concrete kerbstone. On one rubbish mound a Cornsalad was found, but with neither flowers nor fruits available no specific identification could be made. Crosswort was also noted in this area. Beyond the tipped rubbish the site was a mass of earth and building rubble mounds densely covered in Brambles and with several Wild Teasels. We noticed a Flowering Currant shrub of some size, which was in full bloom and attracting numerous bumblebees. On closer examination most of these proved to be newly emerged queens of *Bombus pascuorum*, several of which were of the dark form, together with a single queen of *B. lucorum*.

Further into the quarry one graded area contained a very large stand of Butterbur, but penetration of this and the tangle of scrub proved very difficult, and in large part restricted our wanderings to the more open areas. Here under a tarpaulin a second Toad was found. Where a track descended to the lower quarry areas and the water body at the lowest level a good stand of Pendulous Sedge was noted, and in the same location some Common Spotted-orchids were found. In the woodland on old spoil heaps and track banks both spotted and unspotted plants of Lords-and Ladies were abundant. Colt's-foot was a frequent occurrence. Dan Wrench made a list of all plants for the site which amounted to 133 species including garden throw-outs.

Throughout the visit Chiffchaffs could be heard, Starlings were in evidence and in thicker cover Wrens were both seen and heard. Corvids were represented by Magpies and Carrion Crows, the latter inevitably mobbing the only Buzzard we saw. It was good to record the sighting of a Song Thrush, and at least an attempt at breeding was evidenced by a predated egg-shell. Less expected finds were Tawny Owl and some Mallard, which were disturbed from a very small pond in thick cover. A brief glimpse of a Sparrowhawk was obtained as it dashed away through trees.

Because of the cold not many invertebrates were encountered other than by searching the tipped rubbish as mentioned above. The roof of a dilapidated shed produced the remains of a wasp's nest, and at least two queens of another bumblebee species, *Bombus terrestris*, were busy nectaring. A single Common Groundhopper was found in a sparsely vegetated area.

It was good to have Mark Lawley, the VC 40 recorder for bryophytes, with us. He found a total of 66 species on this site but none was rare. *Brachythecium glareosum*, *Campylophyllum calcareum*, *Campyliadelphus chrysophyllus*, *Ditrichum gracile*, *Entodon cocinnus* and *Tortula lanceola* all attest lime, and are therefore local in Shropshire, whereas *Racomitrium lanuginosum* on the pile of tarmac near the entrance was most ecologically disorientating (or disorientated!).

The downside of the morning was that Bill Rudge took a heavy fall when a rock on a steep slope gave way. He fell on his binoculars and subsequently was found to have cracked three ribs. It says something for the robustness of Olympus optics that the binoculars were undamaged.

After lunch we decided to make an unscheduled visit to the Shropshire Wildlife Trust (SWT) reserve at Dolgoch Quarry, another disused limestone quarry, but in this case because of its distance from a public highway not subject to the tipping of rubbish.

Our approach was a direct one up the hill from the village of Dolgoch, through woodland partly old and partly regrown on ravines and areas which had served as part of the stone extraction infrastructure. Ancient woodland indicators were noted including Goldilocks Buttercup, Bluebell, Wood Anemone, Moschatel and False Brome. A good lot of Red Campion was also in evidence.

Our first stop was the pool. This was very full and there had been a degree of inundation of the paths alongside. In these against the sandy bottom we could clearly see some caddis larvae moving, which were collected and subsequently identified as *Limnephilus flavicornis*. On one of the large boulders projecting from the water two teneral Large Red Damselflies were found and in the clear pool waters we could see both Common and Great Crested Newts. A Water-measurer *Hydrometra stagnorum* (Hemiptera: Hydrometridae) was also noted. Nearby, two mining bees *Andrena nitida* were seen in association with nests in an old spoil heap.

We looked at the quarry face and admired some of the fossils in the fallen blocks, but there was little else of interest in the first part of the quarry. The second quarry floor was accessed by way of the old connecting tunnel. This area was warmer and the floor in parts wetter (as distinct from flooded). Queens of *Bombus lucorum* and *B. terrestris* were noted, Seven-spot ladybirds were active, and on the underside of a Sycamore leaf two specimens of the Orange Ladybird were found. A general look around the quarry floor revealed a toadlet under a small log, the ant *Lasius fuliginosus* with a nest under a discarded piece of sheet material and Green Tiger Beetles busy amongst the short vegetation. The hoverflies *Syrphus vitripennis*, *Platycheirus albimanus* and *Eristalis tenax* were also recorded.

A dead Rabbit yielded plenty of rabbit fleas *Spilopsylla cuniculi*.

The flora of this site has been recorded at regular intervals and we would not have expected to find anything new. A total of 72 plant species were noted for the quarry itself and the route up through the wood. Mark Lawley had recently compiled a bryophyte list for the site for SWT and did not bother with another full listing but he collected *Didymodon spadiceus* from wet soil on rock, which is a new species for this site.

We made our way out via the old trackway, which links with an adjacent area where limestone was formerly burnt in kilns cut into the rock face. This area was at one time a reliable place to find Bee Orchids but it was noticed that scrub invasion is now a serious threat to the short open grassland. From here we took the direct route down through the woods to the layby where we had left the cars.

**11 June 2006: Llyncllys Quarry (present: J. Mason, N. Jones, D. Wrench, W. Rudge,
G. Blunt)**

Having abandoned our May field meeting because of rain (the first time this has happened with any of our outdoor meetings) we were much relieved to enjoy hot weather for this June excursion. Our group met at the entrance to Llyncllys Quarry, an active limestone quarry not far from Treflach Quarry which we had visited in April.

We found the road into the quarry lined with much Meadow Buttercup, Germander Speedwell, Wood Avens and Hogweed; these flowers proved highly attractive to insects, and our nets were soon being deployed with vigour. The bees *Andrena nitida*, *A. haemorrhoea* and *Halictus rubicundus* were taken, along with a good variety of hoverflies:

Cheilosia impressa
C. proxima
Chrysogaster solstitialis
Epistrophe grossulariae
Episyrrhus balteatus
Eristalis arbustorum
E. horticola
E. perinax
Helophilus pendulus
Sphaerophoria scripta
Syritta pipiens

The common longhorn beetle *Grammoptera ruficornis* and a couple of Two-spot Ladybirds were also present here, and we found the severed wing of a Common Swift moth. As we progressed up the lane we passed a hedgerow dominated by Field Maple and Hazel, where an unusual bulbous larva of a hoverfly was found on Dog-rose. Other plants common here were Ivy, Barren Strawberry, Colt's-foot and Gooseberry. We found a Common Toad beneath a piece of discarded rubbish; a Willow Warbler sang in a nearby copse; and a Grey Wagtail flew up the lane past us.

At the end of the lane we entered a clearing where Oxeye Daisy and Common Bird's-foot-trefoil now provided the major nectar sources on a bank covered also with low-growing Brambles. Other plants in flower included Field Forget-me-not, Viper's-bugloss, Hedgerow Crane's-bill, Ground-ivy and single specimens of Pyramidal and Bee Orchids. Here we saw our first butterflies – a few Common Blues and single Orange Tip – and a somewhat battered specimen of Pale Tussock moth fluttered in the grass; the beetle *Oedemera nobilis* was abundant, along with a couple of specimens of its congener *O. lurida*; while a German Wasp *Vespula germanica* queen was hunting amid the low vegetation. Other insects identified here were the hoverflies *Eristalis tenax* and *Platycheirus albimanus*, the mason-bee *Osmia caerulescens*, the bumblebees *Bombus lapidarius* and *B. pascuorum*, and the conopid fly *Sicus ferrugineus*.

At this point we passed through the working part of the quarry, stopping only to admire a pair of Broad-bodied Chasers around a small pond created by seepage from a slope. The female was busy ovipositing in the alga-covered water, while the male shadowed her to ward off possible rivals, though the pair had the pond to themselves. Then we made our way up the slope to explore areas of short turf and Silver Birch scrub. Here Wild Strawberry was in great abundance, and we tucked liberally into its sweet fruit; Scarlet Pimpernel was also in some quantity, and we additionally encountered one or two flowering Columbines. By this date Cowslip and Stinking Hellebore were already going to seed, and a short search yielded fruiting specimens of the scarce Small-flowered Buttercup. Yellow-blossomed plants proved to be Creeping Cinqufoil in disturbed places and Common Rock-rose in established turf.

By this time it was past mid-day, and both vertebrate and insect activity had declined in the intense heat. We lunched beside a small pond – or what once had been so, as it was now quite dry. A Soldier Beetle and a few Sloe Bugs *Dolycoris baccarum* did put in an appearance, and a Painted Lady flew past, the first of several during the day. We found a Seven-spot Ladybird and the common moth *Olethreutes lacunana*, and we heard or saw Pheasant, Woodpigeon, Willow Warbler and Jackdaw.

After lunch we headed into the welcome shade of a mature woodland consisting chiefly of Silver Birch, Ash, Hazel and Sycamore, with a ground flora including much Hart's-tongue and patches of Sanicle, Black Spleenwort and Maidenhair Spleenwort. A Spurge-laurel in the shrub layer bore a curious fasciated "gall" – possibly the result of physical damage rather than a true galling agent. In the darker reaches of the wood the snail *Clausilia bidentata* (Clausiliidae) was present on tree trunks, and in a low cave we encountered the impressive cave spider *Meta menardi* (Tetragnathidae). A little further on the wood thinned near the quarry edge; here patches of Common Rock-rose were in flower, hosting several distinctive small leaf-beetles which we determined as *Cryptocephalus bipunctatus* var. *sanguinolentus* – a nationally scarce species and one of the day's best finds. Further along the path the woodland canopy opened somewhat where European Larch had been planted, and here we encountered two moths – a Barred Red and a female *Adela reaumurella*, plus the small lacewing *Hemerobius micans*.

Soon we emerged into a broad sunlit ride where Ash was regenerating strongly and flowering plants included many Common Spotted-orchids, together with Germander Speedwell and Common Rock-rose, the latter including a red-flowered plant. Insects were plentiful here and we observed Red Admiral, Painted Lady, Dingy and Grizzled Skippers, Cinnabar and the mining bee *Andrena labiata*, while an Azure Damselfly and two Emperor Dragonflies foraged for insect prey along the ride. The flowers attracted the hoverfly *Pipizella viduata* in good numbers, along with other hoverflies (*Chrysotoxum festivum*, *Epistrophe eligans*, *Sphaerophoria philanthus*), the snail-killing fly *Pherbellia dubia*, the tachinid fly *Limnia unguicornis*, and a second tachinid which was probably but not certainly *Solieria pacifica*. The leaf-beetle *Cryptocephalus bipunctatus* was present here too, along with its congener *C. parvulus*. A Common Groundhopper was found in the field layer. In the neighbouring woods Tawny Owl and Green Woodpecker called, but went unseen. After spending some time in this ride we followed its descent towards the quarry floor, encountering Caper Spurge and Green Tiger Beetle en route, plus a Rabbit skulking under a track-side bush.

As the hot afternoon wore on we headed wearily back towards the quarry entrance, diverting only to examine a large pond and its outflow stream, where Large and Small Skippers and a Peacock were added to the day's butterfly tally, *Cheilosia bergenstammi* and *Eristalis intricarius* to the hoverflies, and the fly *Dolichopus unguulatus* (Dolichopodidae) was taken.

This was a long day in exhausting heat, but a most rewarding one, for Llyncllys Quarry's range of habitats clearly have much wildlife potential. Our day's finds are completed by the following galls:

Rusts

Puccinia urticata on Common Nettle

Bugs

Psyllopsis fraxini on Ash

Gall-mites

Acalitus rudis on Silver Birch

Phytoptus avellanae on Hazel

Gall-midges

Wachtliella rosarum on Dog-rose

9 July 2006: Clee Hill Quarry and Titterstone Clee (present: D. Wrench, K. Claxton,

G. Blunt)

Our July field meeting took place on a dull, cool and windy day when the exposed location of Clee Hill made us work hard for our rewards. We parked at the site office and spent our visit exploring the grasslands, pools and hollows of earlier, small-scale extractions to the south and east of the active quarry.

Our first stop was a secluded hollow offering shelter from the wind, where two Meadow Browns and five Small Heaths were on the wing along with the bumblebees *Bombus lapidarius* and *B. lucorum*. A few Foxgloves and Marsh Thistles were providing nectar sources, and Gorse bushes created pockets of warmer microclimate. By searching beneath debris that had been tipped there we turned up a handful of carabids, among them *Cychrus caraboides*, *Agonum albipes* and *Pterostichus madidus*; the crab spider *Xysticus erraticus*; a variety of ant species, of which we identified *Formica fusca*, *Lasius flavus* and *Myrmica ruginodis*; and nearby we found galls of the mite *Aceria thomasi* on Wild Thyme. A scattered population of Carlina Thistles took us initially by surprise, as the habitat seemed untypical; though we reflected that this plant also grows at Clee Burf on neighbouring Brown Clee hill.

Further along the slope we encountered an old sheep paddock full of Spear Thistles and protected from the wind by a low wall and a large, fruiting Sycamore. Several *Eristalis pertinax* hoverflies were feeding from the thistle flowers. Common Nettles grew here in the enriched soil and were galled by the gall-midge *Dasineura urticae*, while open turf bore mounds of the ant *Lasius flavus* again. A single plant of Bittersweet was also growing here.

Our final destination on Clee Hill was a small pond and marshy gully on the south-eastern slope. A pair of Broad-bodied Chasers and an Azure Damselfly patrolled the former, a Ringlet was found low down in the pond-side vegetation, and galls of the gall-midge *Rhabdophaga cinerareum* were present on Goat Willow. A large hoverfly here proved to be *Volucella bombylans*. A careful search of the gully discovered one of our targets for the day, the scarce Ivy-leaved Bellflower, a few plants of which grew under rushes where they received some protection from grazing sheep: too early in the season for flowers but the small, characteristic leaves were unmistakable. Yarrow and Marsh Speedwell were also found in the narrow belt of lush vegetation along the gully, where the Field Grasshopper and the moths *Bryotropha politella* and Silver Y were present, and a Red Admiral flew by. A robber-fly was taken and later determined as the patchily distributed *Leptarthrus brevis*; and our tally of invertebrates was completed by a lacewing *Hemerobius micans* and capsid bug *Lygocoris contaminatus*.

Throughout the day birds were very apparent, especially Jackdaws, which seemed to have a good population breeding in the quarry faces. Over twenty Swallows hunted across the hillside, and we spent several minutes watching a party of five Kestrels, six Ravens and a Sparrowhawk soaring in the thermals above a low ridge. Clee Hill is noted for its high Wheatear population, and we saw twelve birds, including juveniles, in the relatively small area that we worked. Skylark, Meadow Pipit and a pair each of Stonechat and Linnet were the other birds of open spaces present; local copses held Blackbird, Greenfinch and Magpie; a party of ten Goldfinches frequented the patch of Spear Thistles; and

a House Sparrow and family of Pied Wagtails were found about houses and outbuildings lower down the slope. A single Rabbit was seen, and we found the corpse of a Common Toad.

A fresh flurry of cold rain drove us back to our cars, and we decided to move on to Titterstone Clee to search for Scarce Blue-tailed Damselfly which had recently been reported from the old quarry at the summit. We failed to locate it, though a population of the ordinary Blue-tailed Damselfly skulking in reeds around a small pond did raise our hopes for a while. Ivy-leaved Bellflower was present here too, along with Harebell and Marsh Arrowgrass. In deteriorating weather conditions few invertebrates were about, with only the bumblebee *Bombus lapidarius*, the click beetle *Ctenicera pectinicornis*, Mottled Grasshopper, and galls of *Aceria thomasi* on Wild Thyme recorded. Single Kestrel and Raven and a couple of Swallows passed overhead as we drew our meeting to a close and headed for home.

**13 August 2006: Rhos Fiddle and Riddings Brook (present: W. Rudge, I. Thompson,
R. Smith, J. Mason, G. Blunt)**

Our August meeting aimed to sample the invertebrate fauna of the Shropshire Wildlife Trust's Rhos Fiddle reserve and upper reaches of the nearby Riddings Brook. The day was generally dull with a cool breeze blowing which limited the number of insects on the wing, so we relied principally on searching and sweeping techniques.

Rhos Fiddle is a remnant of the Heather moorland that once clothed much of the surrounding hills. It is essentially a Heather – Bilberry dry heath with several areas of poor drainage where Soft-rush is the dominant plant species. Gorse forms a number of stands in drier areas, with one or two Hollies growing among them; and a small group of Silver Birch and Rowan trees create a low canopy in one part of the moor. The site is grazed by cattle and sheep at low density, allowing a diversity of acid-loving plants to flourish; though Cross-leaved Heath appears to thrive only in a small ungrazed paddock in the centre of the site.

Setting out from the small car park we soon heard and saw typical birds of open country – Raven, Meadow Pipit and Skylark – and four Swallows swept low over the moor, perhaps on passage. A Wren skulked in a Gorse bush, a Greenfinch called overhead and a family party of seven Great Tits frequented one of the Hollies. By searching beneath planks of wood on the heath we found runs of the Short-tailed Vole. Tormentil and a few Creeping Thistles were in flower, but most plant species located were grasses and rushes: Purple Moor-grass, Tufted Hair-grass, Mat-grass, Sweet Vernal Grass, Heath Rush, Heath Wood-rush. Bracken was also present, but very local. The commonest insects encountered were the hoverflies *Syrirta pipiens* and *Sphaerophoria menthastri*, while *Metasyrphus luniger* and *Platycheirus angustatus* were also present, and Lepidoptera included numerous *Bactra lancealana* (Tortricidae), *Crambus lathoniellus* (Pyrilidae), and single specimens of Antler Moth and a roosting Small Copper. Our sweep-net produced the spiders *Meta segmentata* and *Xysticus cristatus*; and at ground level we came across several adults of Field, Common Green and Meadow Grasshoppers plus a Broom Moth larva.

From the dry heath we descended into a shallow depression where we found a variety of wetland plants, among them Marsh Thistle, Marsh Pennywort, Marsh Violet, Small Sweet-grass, Bulbous and Toad Rushes, and very locally Bogbean and Common Cottongrass. A species of *Sphagnum* moss was also present, though we did not identify it. But there was little water in any of the pools, sumps and runnels on Rhos Fiddle this day, so that a Common Frog which we found must have been in some danger of dehydration. We turned over stones by a dry ditch and found the ants *Myrmica ruginodis* and *Formica lemni*, plus the ground beetles *Olisthopus rotundatus* and *Agonum albipes* and the bugs *Lygus rugulipennis* (Miridae) and *Peritrechus lundii* (Lygaeidae). A further bug, *Neophilaenus lineatus* (Cercopidae), was in some numbers among neighbouring rushes, and we came across the water beetle *Agabus guttatus* in a dried-out ditch.

Heading now along the bottom end of the moor towards the spinney we passed through an area of dry heath sheltered from the wind, where insect life was suddenly much more evident. The bumblebees *Bombus pascuorum* and *B. terrestris*, plus a possible *B. lucorum*, were foraging among Heather blooms, and our sweep-net began to yield rewards: three larvae each of the Beautiful Yellow Underwing and Narrow-winged Pug moths, the latter in both pink and green forms. Our search for galls and leaf mines on the Rowans and Silver Birches proved fruitless, but we did find the leaf-beetle *Luperus longicornis* on the latter and the carabid *Abax parallelepipedus* beneath; an old wasp's

nest had apparently been trashed by a Badger; but our best find here was the Hieroglyphic Ladybird which turned up in our sweep-net – apparently a first record for Shropshire.

By this time we were ready for lunch, and after viewing the main pool on the moor – water level again much reduced – we strode back towards our cars. Hard-fern was encountered for the first time, and Buzzard and Blackbird put in an appearance; while our final sighting for Rhos Fiddle was a mammal which we spotted moving through thick rushes, and which, after we managed to view it through binoculars, we saw to be a Fox.

Lunch itself was held in Robin Smith's cottage nearby, where we enjoyed the warm atmosphere and his wife's cooking. It was hard to drag ourselves away, but the second stage of our day's programme beckoned, so we headed westwards to the upper reaches of the Riddings Brook, stopping en route to admire some Mountain Pansies on a roadside bank. After crossing a field we examined the brook and adjacent grassland, finding a good range of vertebrates: Common Toad, Common Lizard and the nest of a Wood Mouse beneath various bits of old van and other debris, and Bullhead and Brown Trout in the brook itself. Invertebrates were not numerous, though we did encounter the large slug *Arion ater* (Arionidae); the bug *Cicadella viridis* (Cicadellidae); mayflies *Ecdyonurus torrentis*, *Baetis* species (both nymphs) and *Habrophlebia fusca* (imago); and a nymph of the caddis-fly *Plectrocnemia conspersa*. Interesting plant species included Northern Marsh-orchid, Devil's-bit Scabious and Crested Dog's-tail in a small paddock and Greater Tussock-sedge by the stream. However, our search for the White-clawed Crayfish *Austropotamobius pallipes* (Decapoda: Astacura) in Riddings Brook was not successful; we later learned that its previously known location was much lower down, and we were unable to add any information about the status of this declining species in the area.

3 September 2006: Clee Hill Quarry and Treenpits (present: I. Thompson, J. Mason, G. Blunt, N. Jones)

This meeting revisited the same areas around Clee Hill Quarry that we had covered on our July field trip. The weather this time was breezy but warm, and cloudy with a few sunny intervals. Flowering plants on this occasion included Harebell, Western Gorse and Ivy-leaved Bellflower, and we located several more plants of this last species in the same marshy gully as before. Where Carline Thistle was growing on a low shaly bank near the site office we also recorded Silver Hair-grass and New Zealand Willowherb, the latter an unusual species for Shropshire.

More insects were on the wing than in July, especially Lepidoptera, among which were Small White, several Small Heaths, and the micros *Bactra lancealana*, *Nomophila noctuella*, *Agriphila tristella* and *Cydia succedana*. Larvae of Broom Moth and Northern Eggar were also found sunning themselves, and the hoverflies *Episyrphus balteatus* and *Platycheirus albimanus* were identified. The Field Grasshopper was again present, this time accompanied by the Common Green Grasshopper; while among gorse bushes we encountered the Sloe Bug *Dolycoris baccarum* and orb-web spider *Araneus quadratus*. A female Common Darter perched in pond-side rushes, and these plants also held tassel galls of *Livia juncorum* (Hemiptera: Psylloidea), a gall which we have seldom come across. Sweeping of rushes yielded the snail-killing flies *Sepedon sphegea*, *Tetanocera hyalipennis* and *T. punctifrons*, along with *Platypalpus calceatus* (Empididae). A further search beneath the tipped rubbish yielded a specimen of the large and impressive rove beetle *Staphylinus dimidiaticornis* and the ants *Formica fusca* and *Myrmica ruginodis*, the latter with many alate males beginning to swarm.

Birds present on this occasion were 30 Meadow Pipits, 25 Goldfinches, and low numbers of Jackdaw, Pied Wagtail, Robin, Linnet, Kestrel, Raven, Buzzard and Wren. Four Wheatears were still flitting around the slopes, and single Swallow and Siskin flew south, presumably on migration. A raptor calling from somewhere within the active quarry may have been a Peregrine, but we failed to see it.

After investigating the quarry environs we decided to walk on to Treenpits, a small area of mounds and hollows which attest earlier mining activities. Our route along the edge of Clee Hill village took us past a large flowering *Buddleia globosa*, tenanted by many *Eristalis tenax* and a few *Bombus terrestris* including a large queen. Two-spot and Seven-spot Ladybirds were present here too – how long, we wondered, before these ubiquitous species suffer from the advance of the Harlequin Ladybird? A tricky scramble over a gate took us into Treenpits; but the weather had clouded

over by now, a cold wind was blowing, and little insect life was in evidence though we did find *Staphylinus olens*, our second large rove beetle for the day. Carrion Crow and Green Woodpecker were added to our tally of birds.

As we returned to our cars the lure of an adjacent tea-room proved too strong to resist, and pots of traditional tea in congenial surroundings made a welcome conclusion to the day.

8 October 2006: Lower Short Ditch (present: R. Smith, I. Thompson, J. Mason,

K. Claxton, G. Blunt)

Our final field meeting of 2006 was held at Lower Short Ditch, a triangle of Heather moorland on the county boundary by the Kerry Ridgeway. Some adjacent conifer plantations had been clear-felled in recent years, changing the character of the site into a more open habitat. We found a moor that supported a variety of acid-loving species, with Heather, Bilberry and Wavy Hair-grass abundant throughout along with a few local patches of Cross-leaved Heath, Crowberry, Heath Rush and Green-ribbed Sedge. The lichen *Cladonia portentosa* was common on drier ground, and damp areas glowed in attractive shades of red from the tussocks of Deergrass and Bog Asphodel. The moor is ungrazed and little managed, so that Rowan saplings have begun to invade across the site. Other plants present along its margins include Hawthorn, Broom, Western Gorse, Hard-fern, Bramble and Rosebay Willowherb.

At first the cool, breezy conditions reduced insect activity, with only a dung-fly *Scatophaga* species in any numbers. Sweeping produced the leaf-beetle *Lochmaea suturalis* and Hieroglyphic Ladybird on Heather and the weevil *Sitona striatellus* on Western Gorse. Single specimens of Brick moth, the dung beetle *Geotrupes stercorarius* and the bug *Acanthosoma haemorrhoidale* (Acanthosomatidae) were also encountered; while grubbing in rotten wood of a dead birch stump produced the distinctive beetle *Endomychus coccineus* (Endomychidae). Both Field and Common Green Grasshoppers were disturbed from short turf, and ants found were subsequently determined as *Formica fusca* and *Myrmica scabrinodis*. Later in the afternoon the wind eased and sunny spells brought out a few butterflies – Red Admiral, Peacock and an unidentified White, all singletons, plus a superb Small Tortoiseshell, nowadays much less common than formerly. In many parts of the moor the empty pupal cases of a moth *Coleophora* species festooned the heads of rushes in great quantity: judging from the date these were more likely to have been *Coleophora alticolella* than the other common rush-infesting species *C. glaucicolella*. A few galls were also located and proved to be those of the gall-midge *Rabdophaga auritae* on Grey Willow and gall-mite *Phyllocoptes goniothorax* on Hawthorn.

In contrast to the rather sparse insect life, birds were very evident across the moor. At least a dozen Ravens were seen overhead, and we disturbed thirty Meadow Pipits, two Linnets and two Common Snipe from beneath our feet. A group of four Stonechats appeared to be a family party. Other birds seen in the vicinity included three Bullfinches and single Buzzard, Kestrel, Robin, Green and Great Spotted Woodpeckers. Evidence of mammals was provided by the tracks of a Fox and an abundance of Molehills in a neighbouring pasture.

After lunch we followed a triangular path on the opposite side of the road from the moor, which took us around a young conifer plantation between the county boundary and Kerry Ridgeway. In these more sheltered conditions we disturbed a couple of Spruce Carpets and found the crab spider *Xysticus cristatus*; and two hairy caterpillars by the track were those of Fox Moth and probably White Ermine, though we could not be sure of the latter. As we neared our cars a cock Pheasant, which we had heard crowing throughout the day, at last put in a brief appearance and scuttled across the track before us. This proved to be the final sighting of the Group's 2006 field programme. As we packed our gear away in our cars and had a final mug of tea we agreed that the locality had much potential for a further excursion in an earlier month next year.

Members' individual activities 2006

John Mason

Shropshire

Birds

On 4 March during a walk in wet woodland near Wat's Dyke, St Martins, I flushed two Woodcock and found a birch stump with an old woodpecker's nest. Sand Martins were flying over Venus Pool on 11 April; I saw the first Swallow at Bayston Hill on 20 April, and the first Swifts screaming overhead there on 4 May. Kingfishers were present at Highley at 6 May and near the Shrewsbury Flower Show on 11 August.

Mammals

A Fox ran along the terrace of our Bayston Hill house in broad daylight on 7 January: it was seen off by a neighbour's cat. On my 4 March visit to woodlands near St Martins I spotted two buff-coloured Rabbits; and during an evening outing with the Shropshire Bat Group to Earl's Hill on 30 May there were 13 Lesser Horseshoe Bats and 5 Brown Long-eared Bats in a bat box. I picked up a Grey Squirrel road traffic accident near Sodylt Hall on 2 December.

Invertebrates

Spring sunshine brought out the following insects in my Bayston Hill garden on 29 April: Holly Blue, Orange Tip and bee-flies. The hoverflies *Leucozona lucorum* and *Xylota segnis* were there on 7 May, followed three days later by freshly emerged *Epistrophe eligans*, along with Speckled Woods, vine weevils, shield bugs and various solitary bees. The Blue-tailed Damselfly visited from a neighbour's pond on 18 May. July sunshine and warmth brought Red Admiral and Peacock to the garden on the 28th, and a "superwasp" *Dolichovespula media* drowned itself in a glass of wine. On the same date there were masses of vanessids including more than a dozen Painted Ladies on the Buddleia bushes at the back of Shrewsbury Town football ground car park. I had a good view of Brown Hawker flying over the Llangollen Canal at Weston Rhyn on 5 August and Migrant Hawker in our garden on 3 September. A Clouded Yellow was at Venus Pool on 14 August, another in the garden on the 27th of the month, and Red Admirals were still feeding on fallen apples there on 4 November.

Botany

The winter flowers were late this year: Snowdrops not yet in full bloom on 28 January and Winter Aconites only just showing at St Eata's, Atcham, on the same date. On 18 February I revisited the magnificent national collection of Witch Hazels at Swallow Hayes, Albrighton, and enjoyed their Hellebores. Slender Speedwell put on a good show of flowers at Shrewsbury Hospital (22 April); Toothwort was in flower at Highley (6 May); and Greater Broomrape produced at least 77 flower spikes parasitizing Broom on the ramparts of Oswestry Old Hill Fort (11 June).

Elsewhere in the UK

Birds

On a February trip to Cornwall I visited some historical cliff nesting localities for House Martins at Carlyon Bay and Bossiney Haven, but found no sign of recent nesting. At Gunwalloe Church Cove I tried unsuccessfully to reach Sand Martin nest holes in sand cliffs at the back of the beach but my ladder was too short. There were lots of Sand Martins at Welshpool (Powys) on 22 April and a Hobby flew over the road near Corfe Castle in Purbeck (Dorset) on 24 May. The Red Kite circling over the M40 near Aston Rowant (Oxfordshire) on 25 September is now a regular sight in that area.

A July trip with my wife to Scotland produced some good birds, and at Oban we were amazed to see Black Guillemots sitting on the harbour wall oblivious to passing traffic and pedestrians. On Arran I was delighted to get good views of Hen Harrier quartering the moorland – apparently there are good numbers on Arran because there is no persecution. At Duncansby Head (Caithness) a Great Skua flew around the headland; while on a boat trip from Ulva on Mull to Staffa we saw an Arctic Skua. After visiting Fingal's Cave we landed on Lunga in the Treshnish Isles and got within a few feet of thousands of Guillemots, plus Razorbills, Puffins and Shags, on a stack that was barely separated from the cliff.

Mammals

En route to Cornwall on 27 February my wife and I saw several dead Badgers on the roads, while at Kynance Cove near The Lizard we spotted a Pygmy Shrew scampering about. Our Scottish tour produced an Otter which we watched

near the Ulva ferry on Mull before our boat trip; while in the far north I noticed a whalebone arch over the gateway to farmland at Latheronwheel, Caithness. Back at home a parcel of bat droppings arrived by post, having come from a Noctule roost in Cornwall, but they yielded no fleas, unfortunately.

Invertebrates

As I drove over a hump-backed bridge in Glen Affric on our visit to Scotland I noticed a dragonfly in the middle of the road. On inspection I saw it had been decapitated, but found the missing head capsule and reunited it with the rest of the body. It proved to be a species I had never seen before – Azure Hawker. A visit to Shugborough Hall (Staffordshire) on 3 August produced Brown Hawker, several Painted Ladies and a Clouded Yellow. At East Barnet (North London), on a later date (30 August) than last year, many of the same species as before swarmed over flowering Ivy: *Volucella inanis*, *V. zonaria*, and *Hornets Vespa crabro* preying on the other insects. On 28 October several Red Admirals were visiting Buddleia flowers at Rothamsted, Harpendon (Hertfordshire).

Botany

I resisted pruning back the Witch Hazel in the garden of my mother's Barnet house during 2005, and was rewarded by a magnificent display of flowers in January and February of this year. Later on, Scotland produced a few nice plants: Scots Lovage on the cliffs at Whaligoe steps, Caithness; Scottish Primrose on rocks behind the beach at Achinver Bay; and the rare Purple Oxytropis on the Durness limestone in Farr Bay. On 23 September a stroll at Greenham Common, Berkshire, revealed Autumn Lady's-tresses in flower in the short turf.

Astronomy

A main excursion during the year was a cruise with my wife from Crete to Libya, where we observed the total eclipse of the sun on 29 March near Jalu in the Libyan desert. At home in Shropshire a partial eclipse of the moon was visible in the east just after it rose during the evening of 7 September.

Ian Thompson

My activities this year were seriously curtailed by medical problems. I could not carry out any water sampling, did not manage to do any fishing at all and had to reduce involvement in two botanical surveys. In the latter part of the year the later SIG field trips were my only outings. I did however spend a lot of time in my garden, particularly through the hot weather of mid summer, and as a result made some records which may well have been missed had I been more active in the field.

Shropshire

Birds

My first dates for migrants:

- 16 April – Swallow at both Asterley and Annscroft.
- 21 April – House Martins at Meole Brace.
- 22 April – Cuckoo (heard) at Horsebridge (near Minsterley).
- 5 May – Swift over Meole Brace.

For the first time in some years a female Siskin was in our garden at Meole Brace on 3 April. We have never had more than three at any one time, and whether the occasional bird has previously visited and been missed I do not know. Last year our feeders were visited by a male Chaffinch whose legs appeared thickened, scaly and white in colour, and even when looked at through binoculars it was difficult to make out what had caused this. The bird did not appear to be otherwise unhealthy. This individual re-appeared in 2006; I noticed that it was limping and the toes of one leg seemed to be curling so that it is walking on its knuckles. On 4 July a Skylark was seen and heard while I was walking along Nobold Lane near home: an increasingly rare sight these days

Mammals

I have not recorded any Mink or Polecat sightings for either the Mammal Society survey or the Vincent Wildlife Trust road traffic accident (RTA) survey for September & October this year. We have had the usual autumn influx of Wood Mice into one of the house lofts and at present I am preparing a store area within our garage which I hope to make rodent-proof in order to allow for the storage of vegetables.

Invertebrates

This year my moth trap was operated on six occasions (as against eight last year). The total number of species of macro moths recorded was the same as last year – 63. Interestingly this year's results included 29 species not recorded last year and co-incidentally 29 species were found last year but not recorded this. As usual most trapping nights produced a large number of caddis flies which were passed to David Pryce for identification and recording on the national database. A few ephemeropterans were caught including on 1 July six *Ephemera danica*. On 5 August the trap contained two burying beetles *Nicrophorus vespilloides*. On the last occasion on which the trap was operated, 23 September, it was full of crane-flies – probably as many as 100. Most were the common *Tipula paludosa* but there were a few others, which may produce some more dots on Pete Boardman's distribution maps.

On the very early date of 19 January I saw a queen *Bombus terrestris* in flight in Meole Brace. It landed and crawled into a hole in a bank. Presumably having been in hibernation its chances of surviving the subsequent hard weather must have diminished. No further queen bumblebees were seen until 4 April when another *B. terrestris* was found dead in my garden. On 5 April a queen *B. lucorum* was nectaring on *Berberis* flowers and on 22 April a queen *B. lapidarius* was noted in our garden and on 26 April another nearby. We had a nest of the latter species among some stones beside the house. This nest was successful in that at least one male and a new queen were seen to have emerged: the very worn queen was found crawling on the paving. I later tried to recover the nest but found that it had been placed at some depth through the stones and under a concrete slab upon which our oil tank stands. It appears locally to have been a good year for our common bumblebee species.

The St. Mark's fly *Bibio marci* was again noted early this year on 3 May at Haughmond Hill.

In our garden this summer two 'firsts' were noted: a male *Volucella pellucens* (13 July) – unfortunately no net was handy and the individual soon moved on; and on 3 August a Clouded Yellow was present.

Some interesting ladybird records occurred this year. Hieroglyphic Ladybirds found on the Group's outings at Rhos Fiddle and Lower Short Ditch were first county records, as were the Adonis Ladybirds found at two quarries by Nigel Jones. Old records of the Water Ladybird have also come to light and the discovery on Haughmond Hill of an Eyed Ladybird without the generally typical cream haloes to the spots caused some initial speculation as to whether this large species was our first county Harlequin record. In his garden John Mason found two specimens of what were first thought to be Larch Ladybirds but a further examination has revealed that they were an unusual variant of the Ten-spot Ladybird, which is a species showing considerable variation.

Botany

While picking apples from our largest tree this autumn I found that a Mistletoe plant had established itself from one of the many seeds which, some time ago, I put into various crevices in the bark. Close examination revealed that at present there are no more plants. Whether this one is a male or female is unknown, so I do not know if we shall have berries or not.

Elsewhere in the UK

My visits to SE England are rare these days, so I had not realised the extent to which Buzzards have spread south and east. On 4 October I noted a Buzzard by the M1 (Junction 4) within the Greater London area and within 1 km. of this sighting saw a Buzzard corpse on the hard shoulder.

It was interesting to visit the new RSPB facilities at Rainham Marshes beside the Thames near Dagenham (London) on 30 December. There were healthy numbers of Lapwing and Wigeon present. Disappointingly most of the geese were Canadas but there were a few Greylag, and some Brent had been seen, but not by me.

Nigel Jones

I had an extraordinarily active year, so I have quite a long list of interesting records for 2006. Ian Cheeseborough (IC) also passed me a number of interesting specimens for identification, which I include in my notes.

Climate change appeared to impact on Shropshire during 2006, as a number of northward-spreading insect species were recorded for the first time, or in greater numbers than in recent years. For example, the Bee-wolf *Philanthus triangulum* (Hymenoptera: Crabronidae) showed a marked expansion, being reported by Andy Jukes as common along the banks of the River Severn in the Highley area during 2005. In 2006 I encountered the species in numbers at Morville Quarry (27 July); plus individuals from Venus Pool, Cound (4 August) and Eardington Quarry near Bridgnorth (14 August).

Two Heteroptera were recorded for the first time in the county. The distinctive red-and-black-marked *Corizus hyoscyami* was found at Morville Quarry on 27 July, and another was collected by IC at Roman Bank, Rushbury, during July. This species has until very recently been confined to coastal sites and sandy areas in the south of England. *Stictopleurus abutilon*, once restricted to a very few sites in south-east England and supposed extinct, has recently been recorded at several UK sites, including one at Eardington Quarry (14 August).

Two hoverflies expanding their British range were recorded for the first time in Shropshire this year. *Chrysotoxum verralli* was found at Venus Bank (17 July) and *Volucella zonaria* was photographed in Shrewsbury by a resident in the Belle Vue district (8 September).

Phasia barbifrons (Diptera: Tachinidae), first recorded in the UK in 1999, has been steadily expanding north. I recorded it for the first time in the county on 14 August at Eardington Quarry, near Bridgnorth.

Graphocephala fennahi (Homoptera: Cicadellidae): there were thousands of this north American introduced species on leaves of Rhododendron at Attingham Park in September. This insect has been spreading northwards in Britain since 1933, and this was the first time I have noticed it in Shropshire.

As an indication of extended insect activity in response to longer warm seasons, Hornets *Vespa crabro* were still active about a nest in the base of a tree on 1 November at Attingham Park.

Diptera

Syrphidae

A highlight of the year was the discovery of the rare *Cheilisia semifasciata* from three Shropshire localities. Its larvae are leaf miners on Navelwort. A substantial colony was found in woodland above Haughmond Abbey, 3 June; at Lee Brockhurst, 6 June, and by Alex Lockton near Pontesford, 5 June.

Following its first appearance in Shropshire in 2005, *Rhingia rostrata* continued to appear at new locations: I recorded it from Birch Farm, Kinlet (April 22), with three more in a malaise trap there on 19 July. The species was abundant at Frith Wood, Ledbury (Herefordshire) on 25 May, and other records were made from Whittery Bridge, Chirbury (31 May); Crickheath (14 June) (IC); and Eastridge Wood, Habberley, on 20 August.

Other notable hoverfly records for 2006 include:

Platycheirus occultus Atcham (15 September); Hopesay Common (IC) (25 August)

Meligramma euchromum Bucknell Wood (16 May) - first VC40 record for this exceedingly scarce fly

Chrysotoxum cautum Dolgoch Quarry (30 June)

Didea fasciata Hopesay Churchyard (7 September) (IC)

Eupodes “species A” (of Stubbs & Falk, 2002) Eastridge Wood (15 June); several hovering low over bare ground in dappled shade under conifers, Sunny Hill, Clunton (16 June) - first VC40 records
Eupodes bucculatus “Form Y” Llyncllys Hill (27 August)
Cheilosia cynocephala Eardington Quarry, near Bridgnorth (14 August): a first Shropshire record since 1947 for this nationally scarce fly
Eumerus ornatus Llyncllys Hill (12 July): nationally scarce and a first Shropshire record
Brachypalpus laphriformis Kynaston (9 May, 29 June); Birch Farm (20 May); all from malaise traps
Criorhina ranunculi Llanymynech (18 April); Sturt Common, Wyre Forest (22 April); Birch Farm, Kinlet (22 April); Earnwood Copse, Wyre Forest (28 April)
Criorhina asilica two Attingham Park (10 May); one Fishpool Valley, Croft, Herefordshire (23 May); and four at Frith Wood, Ledbury, Herefordshire (25 May)
Criorhina floccosa on hawthorn on the Croft estate, Herefordshire (23 May); two on Hogweed flowers near Atcham (9 June)
Ferdinandea ruficornis female at Furniss, Newport (1 May) in a malaise trap
Sphegina verecunda many Brook Coppice, Westcott and 1 Eastridge Wood, Habberley, both 15 June
Chalcosyrphus eunotus Attingham Park (5 May) (Peter Boardman) and I saw another there on 10 May
Xylota abiens Croft Castle, Herefordshire (17 June), a very scarce species
Xylota florum Wollaston Farm, Kynaston (29 June) and Birch Farm, Kinlet (19 July)

Conopidae

The rare *Myopa extricata* was caught at Birch Farm, Kinlet, 22 April (IC). There were first Shropshire records for the nationally scarce *Conops strigatus* from Poles Coppice quarry, Pontesbury (6 August) and by IC at Rectory Field, Church Stretton (28 July). *Myopa testacea*, an uncommon fly, was found in my Shrewsbury garden on 1 June, at Whitcliffe Common on 15 June (IC), and at Croft, Herefordshire, on 23 May. Finally, *Thecophora atra* was found quite frequently in Shropshire from Sunny Hill, Clunton (16 June); Venus Bank, Cound (13 July); Venus Pool (13 July and 4 August); Eardington Quarry, near Bridgnorth (12 July) (IC); and Shadwell Quarry, Much Wenlock (30 August).

Asilidae

The nationally scarce *Lasiopogon cincta* was recorded at Prees Heath (6 June). I encountered another nationally scarce species, *Dioctria oelandica*, in woodland at Sunny Hill, Clunton on 16 June. The heathland and dune specialist, *Machimus cingulatus* was recorded from Morville Quarry (27 July); Treen Pits, Clee Hill (22 August) (IC); and Hilton sandpit, Bridgnorth area (7 August) (IC). I made my first Shropshire record for the scarce *Leptogaster guttiventris* at Venus Pool, Cound, on 30 July.

Tabanidae

There were a few *Tabanus bromius* at Brook Vessons on 15 June. A male *Hybomitra distiguenda* was hovering in a small disused quarry at Llyncllys Hill (12 July). On 9 July a Shrewsbury resident passed me a huge, squashed male horsefly *Tabanus sudeticus* that had flown into a town house. I saw another male almost certainly of this species resting on a bush in a small marsh at Berrington on 13 July. Finally, I encountered the large *Tabanus autumnalis* at Venus Pool on 24 and 25 July

Stratiomyidae

An old quarry at Alberbury provided a first Shropshire record (for me at least) of *Chorisops nagatomii*. I had not encountered the usually common *Oplodontha viridula* for about fifteen years, so it was pleasing to find this attractive little fly at four locations - Nills Hill Quarry, Pontesbury (26 June); Attingham Park (10 July); Severn Valley Country Park, Alveley (20 July) and at Venus Pool, Cound (7 & 9 July). I also recorded eleven species of Stratiomyidae from Venus Pool during July and August. These included some local and scarce species - *Nemotelus nigrinus*, *N. pantherinus*, *Oxycera trilineata*, *O. nigricornis* and large numbers of *O. rara* on Lime leaves. Finally, at Treflach Quarry on 12 July, I recorded single specimens of *O. rara* and *Stratiomys potamida*.

Other noteworthy Diptera occurring this year were:

(Tipulidae) *Dictenidia bimaculata* – near Pontesford, 5 May
 (Xylomyiidae) *Solva marginata* – a dead specimen of the nationally scarce ancient-woodland fly in my kitchen in Shrewsbury on 11 June.
 (Xylophagidae) *Xylophagus ater* – one at Sunny Hill, Clunton, on 16 June
 (Empididae) *Hilara albinervis* was swept from long grass at Dolgoch Quarry, Llyncllys, 30 June. This is a fly of riverine habitats, so it appeared to be out of place here.
 (Dolichopodidae) *Dolichopus longicornis* at Morville Quarry (27 July); *Hypophyllus discipes* and *Dolichopus wahlbergi* at Nills Hill Quarry, Pontesbury (26 June) – all uncommon species.
 (Ulidiidae) *Physiphora alcaea* – Lingen Bridge, Bucknell (7 August); at Llyncllys Hill on 12 July were several *Herina frondescentiae*, *H. nigra* (= *germinationis*) and *H. longistylata*.
 (Platystomatidae) *Rivellia syngenesiae*, a local species, at Venus Pool on 9 July and 4 August
 (Platypozidae) *Callomyia speciosa* – one at Roman bank, Rushbury (10 August)
 (Tachinidae) *Phasia pusilla* and *P. obesa* – huge numbers at Attingham (21 August)
 (Sarcophagidae) *Metopia argyrocephala* – gravel pit at Morville (27 July)

Hymenoptera

Apidae

Although *Anthophora plumipes* is considered a widespread and common bee, before this year I had never encountered it in Shropshire outside my garden, so it was pleasing to record it elsewhere – males at Venus Bank (26 April); St Chads churchyard, Shrewsbury (29 April); Priest Weston (7 May); and a female at Moccas Park, Herefordshire, nesting in an upturned root-plate (13 May). Also considered widespread but recorded by me for the first time was *Hoplitis claviventris*, Bury Ditches (16 June).

Chelostoma florissomne seemed to have a particularly good year, with records from Marrington Dingle, Chirbury (31 May); below the Hollies, Haughmond Hill (2 June); near Pontesford and in the Oakwood, Radlith area (5 June); Blakemoorgate, near Brook Coppice, Westcott (15 June); Sunny Hill, Bury Ditches (16 June) and in Shrewsbury and Stevenshill, Cound (25 June). Following its occurrence in my Shrewsbury garden last year, the rare *Stelis phaeoptera* occurred there again on 24 June 2006. A small bee *Lasioglossum laevigatum* which I swept at Eardington Quarry on 14 August proved to be a first county record.

Other interesting bees this year were *Andrena bucephala*, *A. cineraria* and *A. labiata* in Bucknell Wood (16 May), and many *A. cineraria* nesting in tracks at Bircher Common, Herefordshire (12 May). There were numbers of *Bombus monticola* at Blakemoorgate, Stiperstones (15 June); Oakwood, Radlith, near Pontesbury (5 June) and Cheney Longville (19 June). I encountered a single *Hylaeus signatus* on Weld at Eardington on 14 August.

Vespidae

Ancistrocerus parietum had over fifty active nests in a short section of river bank at Atcham on 14 July. This was only the second vice-county record for an apparently widespread wasp. I caught a very dark male *Dolichovespula media* at Venus Pool on 22 July, while a female of this species was at New Berwick Farm near Attingham on 21 August.

Further Hymenoptera records for 2006 include:

(Chrysididae) *Hedychrydium ardens* on a Yarrow flower at Venus Bank (13 July)
 (Cimbicidae) *Abia candens* – Llyncllys Hill (12 July)
 (Cephalidae) *Calameuta filiformis* – frequent at Nills Hill Quarry, Pontesbury (26 June)
 (Ichneumonidae) *Rhyssa persuasoria* – I photographed a female at Bucknell Wood (16 May)

Coleoptera

(Silphidae) *Silpha tristis* at Blackurst, near Enchmarsh (12 May)

(Chrysomelidae) *Cryptocephalus bipunctatus* and *C. hypochaeridis* at Dolgoch Quarry (30 June)

(Attelabidae) *Apoderus coryli* at Sunny Hill, Clunton (16 June); Dolgoch Quarry (30 June) and

Llyncllys Hill (12 July)

(Cerambycidae) *Leptura quadrifasciata* at Atcham (18 July); *Anaglyptus mysticus* at Whittery Bridge,

Chirbury (31 May), Venus Bank, Cound (1 June) and Birch Farm, Kinlet (20 May) (IC);

Stenostola dubia (= *ferrea*) near Habberley Brook (5 June); *Pognocherus hispidulus*
Weir Wood, Hookagate (9 May); *Stenocorus meridianus* at Stevenshill, Cound (25 June)

Lepidoptera

There were dozens of Small Pearl Bordered Fritillaries below the eastern slopes of the Stiperstones on 15 June, and on the following day I encountered several Wood Whites along woodland rides at Sunny Hill, Clunton. The White-letter Hairstreak was recorded twice at Llyncllys Common, single specimens on 30 June and 12 July. On the latter date there were also several Silver-washed Fritillaries there; while a single specimen of this species was on Teasel flowers at Eardington Quarry, 14 August. The once common Wall Brown was encountered only twice: a single specimen at Eastridge Wood, Habberley on 6 August and another singleton below the Lawley, 12 August.

Godfrey Blunt

For yet another year my studies severely restricted opportunities for fieldwork, and besides the Group's field meetings I did little in Shropshire other than make some casual observations in my Alveley garden. Here I recorded the first Common Frog spawn on 12 March, and the first butterfly, a Comma, was feeding on Mezereon flowers on 1 April.

As my house is near the top of a small hill, insect migrants pass through my garden with some frequency. This year the summer months were better than usual for migrants, starting on 27 July with a female Brimstone. This species is an occasional transient through the garden, but on this occasion the butterfly arrived late in the day, spent some time investigating a hedge of Lawson's Cypress, and finally entered it to roost. August brought numerous Red Admirals and Large Whites, plus a Common Darter on the 8th and Southern Hawker on the 26th. The month was most notable, however, for an influx of Hummingbird Hawkmoths, which my brother Edwin Blunt recorded at Kinver Edge (Staffordshire) on five dates between 6 August and 8 September, and one fed briefly from Purple-loosestrife flowers in my own garden on 8 August.

A few years ago I accidentally introduced the tortricid moth *Lobesia litoralis* into my garden with Thrift plants obtained from a South Yorkshire garden centre. This normally coastal species had a run of poor breeding seasons up to 2005 and I had feared for its survival; but I was delighted to see a healthy population emerge this year. I also found the pyralid *Agriphila geniculea* there on 28 August, a species that is apparently increasing in the district as I now find it regularly in the Rothamsted samples from Compton Park, a suburban site in Wolverhampton (West Midlands). A couple of visits to the Severn Valley Country Park in Alveley produced two or three Clouded Yellows on both 6 and 28 August, with an Emperor Dragonfly on the former date and Common Hawker, Small Heath and Hornet *Vespa crabro* on the latter.

Ian Thompson passed me some leaf-mines for identification; these consisted of *Chromatomyia lonicerae* (Diptera: Agromyzidae) on Honeysuckle from Hope Valley Nature Reserve and *Lyonetia clerkella* (Lepidoptera: Lyonetiidae) on Prunus species at Berth Pool (SJ431231). Nigel Jones' comments above on the dramatic appearance of the bug *Graphocephala fennahi* in Shropshire was matched by my discovery of this species, presumably transient, in untypical habitat in a translocated meadow at Long Ashton, Bristol.

My remaining observations are ornithological: a Barn Owl quartering a hedgerow at Barnsley (Shropshire) on 24 February; a late Swift at Dudmaston on 31 August; and my most abiding memory of 2006, a Woodlark in full song at Kinver Edge on 6 May.

Reference

Stubbs, A. E. & Falk, S. J. (2002) *British Hoverflies*. British Entomological and Natural History Society.

Appendix

Scientific names of species mentioned in the text

Flora

Alder <i>Alnus glutinosa</i>	Cornsalad <i>Valerianella</i> species
Apple <i>Malus</i> species	Cowslip <i>Primula veris</i>
Ash <i>Fraxinus excelsior</i>	Creeping Cinquefoil <i>Potentilla reptans</i>
Autumn Lady's-tresses <i>Spiranthes spiralis</i>	Creeping Thistle <i>Cirsium arvense</i>
Barren Strawberry <i>Potentilla sterilis</i>	Crested Dog's-tail <i>Cynosurus cristatus</i>
Bee Orchid <i>Ophrys apifera</i>	Cross-leaved Heath <i>Erica tetralix</i>
Bilberry <i>Vaccinium myrtillus</i>	Crosswort <i>Cruciata laevipes</i>
Birch <i>Betula</i> species	Crowberry <i>Empetrum nigrum</i>
Bittersweet <i>Solanum dulcamara</i>	Daisy <i>Bellis perennis</i>
Black Spleenwort <i>Asplenium adiantum-nigrum</i>	Deergrass <i>Trichophorum caespitosum</i>
Bluebell <i>Hyacinthoides non-scripta</i>	Devil's-bit Scabious <i>Succisa pratensis</i>
Bog Asphodel <i>Nartheceum ossifragum</i>	Dog-rose <i>Rosa canina</i>
Bogbean <i>Menyanthes trifoliata</i>	Dog's Mercury <i>Mercurialis perennis</i>
Bracken <i>Pteridium aquilinum</i>	Elder <i>Sambucus nigra</i>
Bramble <i>Rubus fruticosus</i> agg.	European Larch <i>Larix decidua</i>
Broom <i>Cytisus scoparius</i>	False Brome <i>Brachypodium sylvaticum</i>
Buddleia <i>Buddleja davidii</i>	False Oxlip <i>Primula veris</i> x <i>vulgaris</i>
Bulbous Rush <i>Juncus bulbosus</i>	Field Forget-me-not <i>Myosotis arvensis</i>
Butterbur <i>Petasites hybridus</i>	Field Maple <i>Acer campestre</i>
Caper Spurge <i>Euphorbia lathyris</i>	Flowering Currant <i>Ribes sanguineum</i>
Carline Thistle <i>Carlina vulgaris</i>	Foxglove <i>Digitalis purpurea</i>
Climbing Corydalis <i>Ceratocarpus claviculata</i>	Germander Speedwell <i>Veronica chamaedrys</i>
Colt's-foot <i>Tussilago farfara</i>	Goat Willow <i>Salix caprea</i>
Columbine <i>Aquilegia vulgaris</i>	Goldilocks Buttercup <i>Ranunculus auricomus</i>
Common Bird's-foot-trefoil <i>Lotus corniculatus</i>	Gooseberry <i>Ribes uva-crispa</i>
Common Cottongrass <i>Eriophorum angustifolium</i>	Gorse <i>Ulex europaeus</i>
Common Nettle <i>Urtica dioica</i>	Greater Broomrape <i>Orobanche rapum-genistae</i>
Common Rock-rose <i>Helianthemum nummularium</i>	Greater Tussock-sedge <i>Carex paniculata</i>
Common Spotted-orchid <i>Dactylorhiza fuchsii</i>	Great Wood-rush <i>Luzula sylvatica</i>

Green-ribbed Sedge *Carex binervis*
 Grey Willow *Salix cinerea*
 Ground-ivy *Glechoma hederacea*
 Hard-fern *Blechnum spicant*
 Hard Rush *Juncus inflexus*
 Harebell *Campanula rotundifolia*
 Hart's-tongue *Phyllitis scolopendrium*
 Hawthorn *Crataegus monogyna*
 Hazel *Corylus avellana*
 Heather *Calluna vulgaris*
 Heath Rush *Juncus squarrosus*
 Heath Wood-rush *Luzula multiflora*
 Hedgerow Crane's-bill *Geranium pyrenaicum*
 Hellebore *Helleborus* species
 Hemlock *Conium maculatum*
 Hogweed *Heracleum sphondylium*
 Holly *Ilex aquifolium*
 Honeysuckle *Lonicera periclymenum*
 Horse-chestnut *Aesculus hippocastanum*
 Ivy *Hedera helix*
 Ivy-leaved Bellflower *Wahlenbergia hederacea*
 Lawson's Cypress *Chamaecyparis lawsoniana*
 Lesser Bulrush *Typha angustifolia*
 Lesser Celandine *Ranunculus ficaria*
 Lime *Tilia* species
 Lords-and-Ladies *Arum maculatum*
 Maidenhair Spleenwort *Asplenium trichomanes*
 Marsh Arrowgrass *Triglochin palustre*
 Marsh Pennywort *Hydrocotyle vulgaris*
 Marsh Speedwell *Veronica scutellata*
 Marsh Thistle *Cirsium palustre*
 Marsh Violet *Viola palustris*
 Mat-grass *Nardus stricta*
 Meadow Buttercup *Ranunculus acris*
 Mezereon *Daphne mezereum*
 Mistletoe *Viscum album*
 Moschatel *Adoxa moschatellina*
 Mountain Pansy *Viola lutea*
 Navelwort *Umbilicus rupestris*
 New Zealand Willowherb *Epilobium brunnescens*
 Northern Marsh-orchid *Dactylorhiza purpurella*
 Oak *Quercus* species
 Oxeye Daisy *Leucanthemum vulgare*
 Pedunculate Oak *Quercus robur*
 Pendulous Sedge *Carex pendula*
 Primrose *Primula vulgaris*
 Purple-loosestrife *Lythrum salicaria*
 Purple Moor-grass *Molinia caerulea*

Fungi

Birch Bracket *Piptoporus betulinus*
 Jew's Ear *Auricularia auricula-judae*

Coleoptera

Purple Oxytropis *Oxytropis halleri*
 Pyramidal Orchid *Anacamptis pyramidalis*
 Red Campion *Silene dioica*
 Rosebay Willowherb *Chamerion angustifolium*
 Rowan *Sorbus aucuparia*
 Rush *Juncus* species
 Sallow *Salix* species
 Sanicle *Sanicula europaea*
 Scaly Male-fern *Dryopteris affinis*
 Scarlet Pimpernel *Anagallis arvensis*
 Scots Lovage *Ligusticum scoticum*
 Scottish Primrose *Primula scoticum*
 Sheep's Sorrel *Rumex acetosella*
 Shining Crane's-bill *Geranium lucidum*
 Silver Birch *Betula pendula*
 Silver Hair-grass *Aira caryophyllea*
 Slender Speedwell *Veronica filiformis*
 Small-flowered Buttercup *Ranunculus parviflorus*
 Small Sweet-grass *Glyceria declinata*
 Snowdrop *Galanthus nivalis*
 Soft-rush *Juncus effusus*
 Soft Shield-fern *Polystichum setiferum*
 Spear Thistle *Cirsium vulgare*
 Spurge-laurel *Daphne laureola*
 Stinking Hellebore *Helleborus foetidus*
 Sweet Vernal Grass *Anthoxanthum odoratum*
 Sycamore *Acer pseudoplatanus*
 Tall Fescue *Festuca arundinacea*
 Thrift *Armeria maritima*
 Toad Rush *Juncus bufonius*
 Toothwort *Lathraea squamaria*
 Tormentil *Potentilla erecta*
 Tufted Hair-grass *Deschampsia cespitosa*
 Viper's-bugloss *Echium vulgare*
 Wavy Hair-grass *Deschampsia flexuosa*
 Weld *Reseda luteola*
 Western Gorse *Ulex gallii*
 Wild Cherry *Prunus avium*
 Wild Strawberry *Fragaria vesca*
 Wild Teasel *Dipsacus fullonum*
 Wild Thyme *Thymus polytrichus*
 Winter Aconite *Eranthis hyemalis*
 Witch Hazel *Hamamelis* species
 Wood Anemone *Anemone nemorosa*
 Wood Avens *Geum urbanum*
 Woodruff *Galium odoratum*
 Yarrow *Achillea millefolium*

Many-zoned Polypore *Trametes versicolor*
 Scarlet Elf-cup *Sarcoscypha coccinea*

Adonis Ladybird *Adonia variegata*
Cream-spot Ladybird *Calvia quattuordecimguttata*
Eyed Ladybird *Anatis ocellata*
Green Tiger Beetle *Cicindela campestris*
Harlequin Ladybird *Harmonia axyridis*
Hieroglyphic Ladybird *Coccinella hieroglyphica*
Larch Ladybird *Aphidecta oblitterata*

Orange Ladybird *Halysia sedecimguttata*
Seven-spot Ladybird *Coccinella septempunctata*
Soldier Beetle *Rhagonycha fulva*
Ten-spot Ladybird *Adalia decempunctata*
Two-spot Ladybird *Adalia bipunctata*
Vine Weevil *Otiorrhynchus* species
Water Ladybird *Anisosticta novemdecimpunctata*

Odonata

Azure Damselfly *Coenagrion puella*
Azure Hawker *Aeshna caerulea*
Blue-tailed Damselfly *Ischnura elegans*
Broad-bodied Chaser *Libellula depressa*
Brown Hawker *Aeshna grandis*
Common Darter *Sympetrum striolatum*

Common Hawker *Aeshna juncea*
Emperor Dragonfly *Anax imperator*
Large Red Damselfly *Pyrrosoma nymphula*
Migrant Hawker *Aeshna mixta*
Scarce Blue-tailed Damselfly *Ischnura pumilio*
Southern Hawker *Aeshna cyanea*

Orthoptera

Common Green Grasshopper *Omocestus viridulus*
Common Groundhopper *Tetrix undulata*
Field Grasshopper *Chorthippus brunneus*

Meadow Grasshopper *Chorthippus parallelus*
Mottled Grasshopper *Myrmeleotettix maculatus*

Lepidoptera

Antler Moth *Cerapteryx graminis*
Barred Red *Hylaea fasciaria*
Beautiful Yellow Underwing *Anarta myrtilli*
Brick *Agrochola circellaris*
Brimstone *Gonepteryx rhamni*
Broom Moth *Melanchra pisi*
Cinnabar *Tyria jacobaeae*
Clouded Yellow *Colias croceus*
Comma *Polygonia c-album*
Common Blue *Polyommatus icarus*
Common Swift *Hepialus lupulinus*
Dingy Skipper *Erynnis tages*
Fox Moth *Macrothylacia rubi*
Grizzled Skipper *Pyrgus malvae*
Holly Blue *Celastrina argiolus*
Hummingbird Hawkmoth *Macroglossum stellatarum*
Large Skipper *Ochlodes venata*
Large White *Pieris brassicae*
Meadow Brown *Maniola jurtina*
Narrow-winged Pug *Eupithecia nanata*
Northern Eggar *Lasiocampa quercus callunae*

Orange Tip *Anthocharis cardamines*
Painted Lady *Cynthia cardui*
Pale Tussock *Caliteara pudibunda*
Peacock *Inachis io*
Red Admiral *Vanessa atalanta*
Ringlet *Aphantopus hyperantus*
Silver-washed Fritillary *Argynnis paphia*
Silver Y *Autographa gamma*
Small Copper *Lycaena phlaeas*
Small Heath *Coenonympha pamphilus*
Small Pearl-bordered Fritillary *Boloria selene*
Small Skipper *Thymelicus sylvestris*
Small Tortoiseshell *Aglais urticae*
Small White *Pieris rapae*
Speckled Wood *Pararge aegeria*
Spruce Carpet *Thera britannica*
Wall Brown *Lasiommata megera*
White *Pieris* species
White Ermine *Spilosoma lubricipeda*
White-letter Hairstreak *Satyrium w-album*
Wood White *Leptidea sinapis*

Fish

Brown Trout *Salmo trutta*
Bullhead *Cottus gobio*

Amphibians

Common Frog *Rana temporaria*
Common Newt *Triturus vulgaris*
Common Toad *Bufo bufo*

Great Crested Newt *Triturus cristatus*

Reptiles

Common Lizard *Lacerta vivipara*

Mammals

Badger *Meles meles*

Brown Long-eared Bat *Plecotus auritus*

Fox *Vulpes vulpes*

Grey Squirrel *Sciurus carolinensis*

Lesser Horseshoe Bat *Rhinolophus hipposideros*

Mink *Mustela vison*

Mole *Talpa europaea*

Noctule *Nyctalus noctula*

Otter *Lutra lutra*

Polecat *Mustela putorius*

Pygmy Shrew *Sorex minutus*

Rabbit *Oryctolagus cuniculus*

Short-tailed Vole *Microtus agrestis*

Wood Mouse *Apodemus sylvaticus*

Birds

Arctic Skua *Stercorarius parasiticus*

Barn Owl *Tyto alba*

Blackbird *Turdus merula*

Black Guillemot *Cephus grylle*

Blue Tit *Parus caeruleus*

Brambling *Fringilla montifringilla*

Brent Goose *Branta bernicla*

Bullfinch *Pyrrhula pyrrhula*

Buzzard *Buteo buteo*

Canada Goose *Branta canadensis*

Carion Crow *Corvus corone corone*

Chiffchaff *Phylloscopus collybita*

Coal Tit *Parus ater*

Common Snipe *Gallinago gallinago*

Coot *Fulica atra*

Cormorant *Phalacrocorax carbo*

Cuckoo *Cuculus canorus*

Fieldfare *Turdus pilaris*

Goldeneye *Bucephala clangula*

Goldfinch *Carduelis carduelis*

Goosander *Mergus merganser*

Great Crested Grebe *Podiceps cristatus*

Great Spotted Woodpecker *Dendrocopos major*

Great Skua *Catharacta skua*

Great Tit *Parus major*

Greenfinch *Carduelis chloris*

Green Woodpecker *Picus viridis*

Greylag Goose *Anser anser*

Grey Wagtail *Motacilla cinerea*

Guillemot *Uria aalge*

Hen Harrier *Circus cyaneus*

Heron *Ardea cinerea*

Hobby *Falco subbuteo*

House Martin *Delichon urbica*

House Sparrow *Passer domesticus*

Jackdaw *Corvus monedula*

Kestrel *Falco tinnunculus*

Kingfisher *Alcedo atthis*

Lapwing *Vanellus vanellus*

Linnet *Carduelis cannabina*

Long-tailed Tit *Aegithalos caudatus*

Magpie *Pica pica*

Mallard *Anas platyrhynchos*

Meadow Pipit *Anthus pratensis*

Nuthatch *Sitta europaea*

Peregrine *Falco peregrinus*

Pheasant *Phasianus colchicus*

Pied Wagtail *Motacilla alba yarrellii*

Pochard *Aythya ferina*

Puffin *Fratercula arctica*

Raven *Corvus corax*

Razorbill *Alca torda*

Red Kite *Milvus milvus*

Redwing *Turdus iliacus*

Robin *Erithacus rubecula*

Sand Martin *Riparia riparia*

Shag *Phalacrocorax aristotelis*

Siskin *Carduelis spinus*

Skylark *Alauda arvensis*

Song Thrush *Turdus philomelos*

Sparrowhawk *Accipiter nisus*

Starling *Sturnus vulgaris*

Stonechat *Saxicola torquata*

Swallow *Hirundo rustica*

Swift *Apus apus*

Tawny Owl *Strix aluco*

Wheatear *Oenanthe oenanthe*

Wigeon *Anas penelope*

Willow Warbler *Phylloscopus trochilus*

Woodcock *Scolopax rusticola*

Woodlark *Lullula arborea*

Woodpecker *Dendrocopos* species

Woodpigeon *Columba palumbus*

Wren *Troglodytes troglodytes*

Scientific names of taxa other than species

Agromyzid Flies	Diptera: Agromyzidae	Pyralid Moths	Lepidoptera: Pyralidae
Bee-flies	Diptera: Bombyliidae	Robber-flies	Diptera: Asilidae
Beetles	Coleoptera	Rove Beetles	Coleoptera: Staphylinidae
Bryophytes	Musci & Hepaticae	Rusts	Uredinales
Bugs	Hemiptera	Sawflies	Hymenoptera Symphyta
Bumblebees	Hymenoptera: Apidae	Shield bugs	Hemiptera: Pentatomidae
Burying Beetles	Coleoptera: Silphidae	Slugs and Snails	Gastropoda
Caddis Flies	Trichoptera	Snail-killing Flies	Diptera: Sciomyzidae
Capsid Bugs	Hemiptera: Miridae	Solitary Bees	Hymenoptera: Halictidae & Andrenidae
Carabids	Coleoptera: Carabidae	Spiders	Araneae
Centipedes	Chilopoda	Springtails	Collembola
Click Beetles	Coleoptera: Elateridae	Tachinid Flies	Diptera: Tachinidae
Conopid Flies	Diptera: Conopidae	Tortricid Moths	Lepidoptera: Tortricidae
Crab Spiders	Araneae: Thomisidae	Wasps	Hymenoptera: Vespidae
Crane-flies	Diptera: Tipulidae	Water Beetles	Coleoptera: Dytiscidae
Dung Beetles	Coleoptera: Geotrupidae	Weevils	Coleoptera: Curculionidae
Dung-flies	Diptera: Scatophagidae	Woodlice	Isopoda Oniscoidea
Earwigs	Dermaptera: Forficulidae		
Fleas	Siphonaptera		
Gall-midges	Diptera: Cecidomyiidae		
Gall-mites	Acari: Eriophyoidea		
Hoverflies	Diptera: Syrphidae		
Ichneumon Wasps	Hymenoptera: Ichneumonidae		
Lacewings	Neuroptera		
Ladybird	Coleoptera: Coccinellidae		
Leaf Beetles	Coleoptera: Chrysomelidae		
Liverworts	Hepaticae		
Longhorn Beetles	Coleoptera: Cerambycidae		
Mason-bees	Hymenoptera: Megachilidae		
Micro Moths	Lepidoptera		
Millipedes	Diplopoda		
Mining Bees	Hymenoptera: Andrenidae		
Mites	Acari		
Molluscs	Mollusca		
Nepticulid Moths	Lepidoptera: Nepticulidae		
Pseudoscorpions	Pseudoscorpiones		

