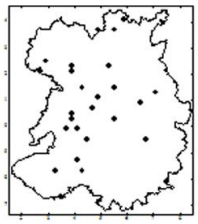


A bi-annual newsletter focussing upon the study of insects and other invertebrates in the county of Shropshire (V.C. 40)

October 2012 (Vol. 6)
Editor: Pete Boardman
pete@field-studies-councl.org

~ Welcome ~

Welcome to the 6th edition of the Shropshire Entomology newsletter. I hope you enjoy it and it inspires you to submit your own articles relating to any aspect of entomology relevant to Shropshire or Shropshire entomologists. Many thanks once more to everyone who has contributed to this edition. The deadline for submission of content for Vol. 7 is **Friday 8th March 2013**. Please feel free to pass this newsletter on to anyone you feel might be interested in it.
Please note there are instructions for authors at the back of this newsletter.
Note – past newsletters are now available for download as PDF's from www.invertebrate-challenge.org.uk/newsletters-and-resources.aspx

~ Contents ~

- Identification of a Shropshire pseudoscorpion – From the rarest to the most common!: *Dr Kris Hart*
- Wood ants in the Wyre Forest: *Paul Wilson*
- Your last chance.....: *Sue McLamb*
- Dudmaston's rare and interesting insects: *Caroline Uff*
- Dudmaston, Shropshire's top aculeate site?: *Ian Cheeseborough*
- The plant bug *Orsillus depressus* (Mulsant & Rey, 1852) new to Shropshire: *Maria Justamond*
- Not a total washout! The red-veined darter *Sympetrum fonscolombii* Selys, 1840 in Shropshire: *Sue McLamb*
- Granville Country Park butterfly count: *Keith Fowler*
- An encounter with *Stylops*: *Maria Justamond*
- Potential identification problems with *Poeculis* (Coleoptera: Carabidae): *Michelle Furber & Warren Putter*
- Trampolining beetles: *Caroline Uff*
- New and 'nearly new' craneflies to Shropshire during 2012: *Pete Boardman*
- Insects are your friends – an occasional guide to insect identification by reference to unexpected sources – No.1 – The Dame Edna fly *Palloptera mulleibris* (Harris [1780]): *C. Midwinter*
- Telford's 'invertebrately challenged' tetrads: *Keith Fowler*
- *Aquarius najas* (De Geer, 1773) – the river skater new to Shropshire: *Frances Riding*
- Breaking a duck – a snakefly at Shawbury Heath: *Pete Boardman*
- Oil beetle *Meloe violaceus* Marsham, 1802 at Oswestry Hill Fort: *Keith Fowler*
- More ento-fungi: *Pete Boardman*
- The diving ground beetle?: *Simon Yates*
- The hoverfly *Volucella inanis* (Linnaeus, 1758) new to Shropshire in a Telford car park: *Nigel Cane-Honeysett*
- Craneflies and parallel universes – the rediscovery of *Phylidorea (Phylidorea) heterogyna* (Bergroth, 1913) at Fenn's, Whixall & Bettisfield Mosses NNR: *Pete Boardman*
- Websites I have loved
- Please don't feed the tigers!: *Maria Justamond*
- Rediscovery of the heather shieldbug *Rhacognathus punctatus* (Linnaeus, 1758) at Whixall Moss, but not what we went for: *Pete Boardman*
- Hoverfly hints and tips – the chitinous bridge feature for *Neoascia* and *Sphegina*: *Pete Boardman via Nigel Jones*
- Some noteworthy Long Mynd diptera finds: *Nigel Jones*
- The County Recorder network
- Dates for your diary
- Submission guidelines for articles

Identification of a Shropshire Pseudoscorpion – from the rarest to the most common!

Whilst attending a workshop at the Field Studies Council (FSC) centre at Preston Montford, Shropshire, I came across a strange little beast as I sifted through some leaf litter taken from the edge of a water treatment pond within the grounds of the centre. The workshop had been organised by Natural England, to enable staff and volunteers alike to identify some soil meso- and micro-fauna (in preparation for an upcoming nationwide soil survey), which meant that there were plenty of experienced eyes around for the quick identification that it was a pseudoscorpion. Pseudoscorpions (also known as false scorpions and book scorpions) form the fourth largest order of the arachnids and are globally widespread, with over 3,300 recorded species. Currently in the UK and Ireland, there are 28 species but due to their small size and secretive nature, they are known as one of the so called 'Cinderella groups' as few people ever observe them despite their abundance and ubiquitous spread. As top predators they generally feed upon springtails (*Collembola*), booklice (*Psocids*), mites (*Acari*) and insect larvae. They lack the characteristic stinging tail of the distantly related scorpion but rather, immobilise prey using their pedipalps (pincers) by crushing and in many species through the injection of venom [venom can be in one or both fingers]. The chelicera then scissor the prey apart and a mildly corrosive saliva is poured over (or pumped into) the material prior to consumption.

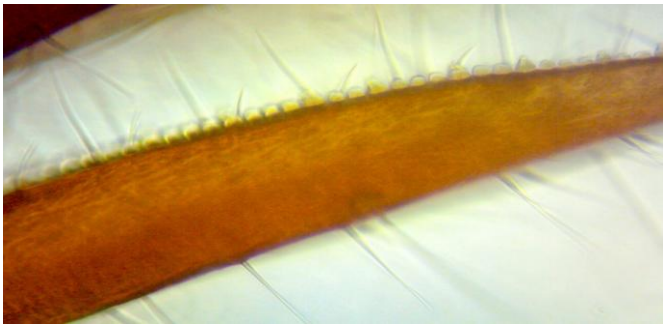
I had never seen or even heard of this native group before (as a soil microbiologist, if the mood takes me, I have to 'imagine' what my specimens might look like when working!), so I preserved the specimen in ethanol for a closer look down the microscope (SP-45 Digital microscope, Brunel Microscopes ltd). After a quick look at the key in Legg & Jones (1988), the standard work on British species, I was led to the suggestion of *Kewochthonius halberti*.

Dorsal view of *Neobisium carcinoides* preserved in ethanol. Total length was 2.54 mm, tergites undivided and 2x2 eyes closely set (posterior eyes poorly developed). (Photo: Kris Hart)

Matthew Shepherd (the workshop organiser from Natural England) had also reached this species after following the same key. In the under-recorded world of soil mesofauna, it's not unusual to turn up new species records, but the key reported that this species had only one unconfirmed record, ever, from the UK. Could we really have found the second ever UK specimen?

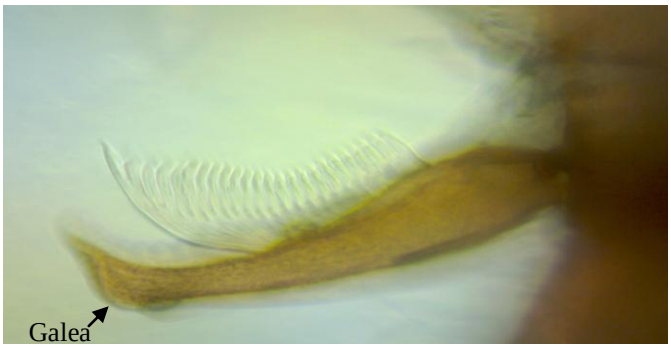
K. halberti is a rare species (only one recorded specimen at Malahide, Dublin, 1915, and another unconfirmed report at Axmouth, Devon, 1916) and it is not associated within the inland territories, such as landlocked Shropshire! Therefore further investigation was required. Owing to their small size and secretive habits, being found under stones, logs, debris etc., pseudoscorpions are poorly understood and it is always possible that a species could be associated with different unrecorded habitats, leading me to think that I shouldn't question the

key. The trouble is that it just didn't 'look' right. Because the specimen proved too big for *K. halberti* and the shape of the cephalothorax (the front segment with a plate covering the head and thorax) narrowed towards the front. I uploaded some images to the UK based species identification website, iSpot. This site is linked to the Open University and Opal (the Open-air Laboratory), where anyone from beginner to expert can post photos of wildlife either with or without identification, for others to confirm or amend as appropriate. I was promptly contacted by Dave Hubble (an expert in invertebrates), who agreed that by following the key he too concluded it was *K. halberti*. We both agreed this was unlikely so Dave requested some more pictures and measurements for deeper investigation.



The movable finger of the pedipalp pincer showing small blunt teeth along the edge. Protruding trichobothria (hairs) are one of the sensory features used to stalk prey. (Photo: Kris Hart)

Some features were clear such as the tergites (plates running across the top of the abdomen) having no longitudinal split down the middle. However, whether or not the chelicerae (the jaws attached to the front of the head forming small pincers rather than the large scorpion-like pincers on the pedipalps) were more or less than 2/3 the length of the cephalothorax was a less clear decision. They were measured as 0.7 of this length but given the margin for error, this was a borderline result. The teeth on the edge of the pedipalp finger (above) match those of *K. halberti*, but this species is only 1.2 mm long, whereas, the specimen was twice this length (2.54 mm) - definitely outside the plausible range of variation. So Dave returned to the key and chose the 'smaller chelicerae' branch leading to the genus *Neobisium*. This immediately looked promising as this species is of the same general size as the specimen, and also showed more or less the same shape of cephalothorax. Indeed, keying it out soon led to the 'common neobisid' *N. carcinoides* - probably Britain's commonest pseudoscorpion! The final feature indicating this was the shape of the galea - the small bump on the outside edge near the tip of the 'finger' of the chelicera (below). I made contact with the chief recorder of British pseudoscorpions, Gerald Legg (British Arachnological Society), who confirmed the identification as a male *N. carcinoides* and added the entry to the national database. Despite this being our most common pseudoscorpion species, this was only the 39th time it has ever been recorded in Shropshire.



The movable finger of the chelicera of *N. carcinoides*. The galea is the small round bump near the tip to the bottom left of the photo and is a low, rounded structure rather than being more highly raised. The delicate looking comb-like structure, the serula externa, is attached to the moveable finger and is used for grooming. (Photo: Kris Hart)

So, a possible rare species turned out to be a very common one. This may seem disappointing, but not so - apart from being a more accurate record,

it illustrates the process of using fine structural or morphological details to aid identification. It also provided an opportunity to look at a specimen from a group that isn't seen very often (without finely sieving leaf litter or other suitable debris that is) and become more familiar with it. Various possibilities were considered - was it an adult? (juvenile pseudoscorpions are very poorly understood); had the preserving fluid had an effect on colour? It also showed how a resource such as iSpot can be used to collaborate in the identification of difficult specimens. Indeed, I would appeal to anyone who happens to be sifting through patches of leaf litter to keep an eye out for this charismatic group. Consultation with the (very good value) key by Legg & Jones, (1988) could easily lead to a significant discovery that Gerald Legg would be happy to confirm (for contact details see below). Additionally, once captured they are extremely entertaining to watch as they pace about with their threateningly outstretched pedipalps, and then scuttle backwards assuming a more defensive posture when molested by some passing springtail. Although the specimen turned out to be the most common species, the find was no less fascinating and turned out to be a most enjoyable experience, one I hope to repeat with this group of arachnids in the future.

References

Legg, G., Jones, RE. 1988. Pseudoscorpions. Synopses of the British Fauna (New Series). No. 40, The Linnean Society of London and The Estuarine and Brackish-water Sciences Association, pp. 81-83.

http://wiki.britishspiders.org.uk/index.php5?title=Pseudoscorpion_Recorders_Group

Contact: Gerald Legg: gerald@chelifer.com

Wood ants in the Wyre Forest

The Wyre Forest straddles the border of Shropshire and Worcestershire, and is home to two species of wood ant. The red wood ant *Formica rufa* Linnaeus, 1761 is most common, and the slavemaker ant *Formica sanguinea* Latreille, 1798 is relatively scarce (the hairy northern wood ant *Formica lugubris* Zetterstedt, 1838 is absent). With help from the Wyre Forest Study Group, I was able to survey the locations of the red wood ant's domed nests earlier this year. The aim was to get distribution data; however I was also able to note some interesting behaviour.

Formica rufa nests in close proximity (Photo – Paul Wilson)

Red wood ants are considered to be territorial, but nests are not always mutually hostile, indeed nests can spring up in close proximity and workers seem to move between them. Nests are also home to a large number of queens. I occasionally observed about 30, or so, of these established queens on a nest surface in spring when the ants mass in the sunshine, and there were probably many more out of sight.

In May the winged ants fly and are thought to mate away from the nest, the queens later returning back to the nests. However, prior to this, winged ants are found on the nest surface.

However, I noticed the overwhelming majority were males, and when a virgin queen appeared on the surface mating promptly took place. This suggests that some queens are likely to be fertilised by males from the same nest before the mating flight; and probably also suggests that the later mass emergence of queens is a way of ensuring some, or the majority, of mating takes place outside the nest.

Mating *F. rufa* removed from nest surface (Photo – Paul Wilson)

Any impression that British wood ants live a simple life with one queen, in one fortress nest, ruthlessly defending their territory is generally too simplistic, though it may be true in other parts of the world. The University of York are now radio tracking wood ants to find some answers* and there's plenty of scope for further observation.

* See: Tags to shed light on northern hairy ants' movements http://www.bbc.co.uk/news/science-environment-19359555

Paul Wilson

Your last chance…

A huge thank you to all those who have sent in Odonata records so far and an equally huge reminder to those who have been out recording in this magnificent summer and have yet to send in the important results. Please don't worry if you only have a few records- amidst studies and storm clouds my recording season has been far from impressive! All records however are gratefully received and the sooner the better if you would like them to contribute to the British Dragonfly Society National Atlas. I look forward to hearing from you soon…..

Sue McLamb
mclamb1@btinternet.com

Sympterum danae black darter at Fenn's, Whixall & Bettisfield Mosses NNR (Photo – Pete Boardman)

Sue McLamb

Dudmaston's rare and interesting insects

The Dudmaston Estate, south of Bridgnorth, already has a good reputation for its impressive

butterflies and dragonflies but it is becoming increasingly apparent that the site is important for a fantastic range of the other insects too.
The lakes and pools abound with dragonflies and damselflies including the ruddy darter and red-eyed damselfly. But look a bit closer and you may see the small but striking water ladybird running up and down the reeds.

Anisosticta novemdecimpunctata Water Ladybird (Photo – Ian Cheeseborough)

In fact Dudmaston is a haven for ladybirds. A visit by Ian Cheeseborough and myself in June revealed ten different species in the parkland alone. Amongst these was a first Shropshire record for the uncommon 18-spot ladybird, a species associated with mature Scott's pine trees. This was one of several conifer dwellers which included the cream-streaked ladybird. The parkland has a long history of ornamental conifer cultivation which may account for the presence of these uncommon beetles.
The parkland trees (and surrounding woodland) also provide an essential wood decay habitat for many other very scarce and locally distributed insects. These include the brown tree ant, oak and hawthorn jewel beetles, the black-headed cardinal beetle and a variety of longhorn beetles.

These species and many more depend upon the retention of standing and fallen deadwood in and around the parkland.

Pyrochroa coccinea Black-headed Cardinal Beetle (Photo – Caroline Uff)

Dead wood is important for insects in other habitats to too. The dingle woodland was visited this year by Pete Boardman, who found it to be a rich site for craneflies. He recorded 23 species of cranefly, (including 3 scarce/ threatened species) and predicts that there could be up to 90 different species. Of particular interest was the rare and "near endemic" species *Lipsothrix nervosa* which is dependent upon sodden timber in the form of log jams in the stream. The wet seepages and sodden timber pictured are of utmost importance for many such species.

Log jam at Dudmaston (Photo – Pete Boardman)

But the parkland and dingle are just the start. The surrounding woodlands, rides, gardens and grasslands support an impressive number of exciting species, many of which are rare in the county. These include the stunning white admiral butterfly, the longhorn beetle *Phytoecia cylindrica*, the small grass shieldbug and the bordered shieldbug.

The long-horned beetle *Phytoecia cylindrica* (Photo – Caroline Uff)

The solitary bee and wasp population is so good that it deserves a separate dedicated article – but for now it will suffice to mention that amongst the 70 species recorded by Ian Cheeseborough this summer, 6 were nationally scarce/rare and two of the wasps, *Crossocerus palmipes* and *Harpactus tumidus* were new species for the county. (Please see Ian Cheeseborough's article about Dudmaston's hymenoptera later in the newsletter – Ed.)

The open glades created by the active woodland management are a good place to spot some of these species, as is a former arable field within the plantation woodland - now flower rich grassland.

Photo by (C) Josef Dvorak www.biolib.cz for BWARS
Crossocerus palmipes female

Overall, Dudmaston is proving to be real county gem for invertebrates and there are still plenty to be discovered. The changes in management over recent years have no doubt been beneficial, in particular the reduction in grazing pressure on the parkland, restoration of arable to flower rich grassland, routine retention of dead wood and the increased structural diversity of the plantation woodlands.

Caroline Uff

Dudmaston, Shropshire's top aculeate site?

Occasionally you arrive at a site and immediately know that you are in for a great days recording/collecting. A very small part of the very large National Trust estate at Dudmaston was just such a place.

73 species in six short visits (due to the weather!) and I still have some 30 specimens to look at over the winter months.

The area that I concentrated on was no more than a hectare in size. The site consisted of a mosaic of acid grassland, scrub, and woodland (mainly coniferous) edge. Large quantities of standing and lying dead wood were present, the

paths and banks were south facing, open to the sun and sandy.

Harpactus tumidus (Photo – Jeremy Early)

The first visit was made in late spring and the other five during the summer, mainly in July. As a result a large proportion of the early spring species were not recorded, a good number of which should be present when considering the quality of the habitat.

And when you consider some of the other common species that were not recorded …

Only one species of *Ectemnius and Pemphredon* were recorded, there were no records of *Rhopalum* or *Passaloecus* and just four species of *Crossocerus*. . . . . and no *Cerceris rybyensis*.

No *Halictus* were seen, only two *Lasioglossum*, a handful of *Andrena* and no *Nomada guttulata* !

ETC…..

And still 73 species

I should mention a number of the species that were present including *Crossocerus palmipes* (nationally scarce), and *Harpactus tumidus*, both of which nest along the open tracks. These wasps were caught in water traps, a very effective aid when recording on any site. It is surprising and exciting to see what species you may otherwise have missed. The dead wood lying next to the paths offered nesting sites for *Hoplitis claviventris* which in turn provided the host for the rare *Stelis ornatula* (3rd county record). Four other nationally notable species were also recorded, the mining bee *Andrena bimaculata* and three wasps, *Arachnospila minutula* (spider-hunter), *Diodontus tristis* and *Nysson dimidiatus*.

Nine species of spider-hunting wasps – OK. One is a cleptoparasite, but still!

When you visit a site you have in your mind some of the species you expect to see. When it is a sandy site it is some or all of the following;

Andrena barbilabris and its cleptoparasite, *Sphecodes pellucidus*, species of *Crabro* (fly hunters), *Tachysphex pompiliformis* (hunters of grasshopper nymphs) and its parasite *Hedychridium ardens*, species of *Diodontus* (aphid hunters) and *Oxybelus uniglumis* (fly hunter) etc.

They were **all** present!

Stelis ornatula at Buildwas, Shropshire (Photo – Bob Kemp)

The summary table below lists the number of species of bee, wasp and ant recorded at Dudmaston during 2012.

Aculeates	No. of species recorded	Nationally scarce or above
Bees	36	2
Wasps	34	4
Ants	3	/

Table 1 – summary of hymenoptera species at Dudmaston during 2012.

2013 can't come soon enough!!!

Ian Cheeseborough

The plant bug *Orsillus depressus* (Mulsant & Rey, 1852) new to Shropshire

Back in February, I was fortunate to find two juniper shield bugs in a Lawson's cypress hedge a few metres from my office. So at the beginning of June, I thought I'd have another look for the shield bugs and found a further six, but I also spotted a smaller hemipteran bug, which with the help of the excellent 'British Bugs' website, I decided looked like *Orsillus depressus* (Mulsant & Rey, 1852).

Once I'd uploaded the photos to Flickr, Tristan Bantock confirmed the identification, which I then passed on to Pete Boardman as this species is from the continent, but slowly spreading across the UK. It is a first record in Shropshire but I suspect there are many more out there! So, when you're out looking for the juniper shield bugs on Lawson's cypress, keep an eye out for these little bugs too!

Orsillus depressus perfectly camouflaged on Lawson's cypress seed heads (Photo – Maria Justamond)

References

British Bugs website – www.britishbugs.org.uk

Maria Justamond

Not a total washout! The red-veined darter *Sympetrum fonscolombii* Selys, 1840 in Shropshire

Though it is too early to summarise the field season with respect to dragonflies and damselflies I felt it important to point out that despite a largely soggy summer not all was lost and whilst the May monsoons briefly abated Red-veined darters *Sympetrum fonscolombii* Selys 1840, were spotted by Jim Almond at Venus Pool (SJ5406). Days later I was lucky enough to see them accompanied by the experienced eyes of Bob Kemp who confirmed the identification. The darters stubbornly remained some distance out from the main bird hide though with the aid of a telescope the single pale stripe on the side of the thorax was clearly visible. This is illustrated here in Jim's photographs and one can also make out

the blue coloration in the lower half of the eye.

Red-veined Darters *Sympetrum fonscolombii* (Photos – Jim Almond)

The darters were clearly ovipositing and though this species is regarded as a scarce migrant there has been an increase in the number of breeding records in recent years (Smallshire & Swash, 2010). *S. fonscolombii* has been recorded in a number of locations this year including Staffordshire where interestingly it has been recorded for the last few years suggesting possible successful breeding as opposed to an influx of new migrants (British Wildlife, 2012). This is definitely a species to look out for and thanks to Jim is a great record for Shropshire. The only previous record was an anonymous sighting made at Whixall Moss in 1940.

References

Perrin, V. (2012) Wildlife reports: Dragonflies. British Wildlife, 23(6): 429-431

Smallshire, D. and Swash, A. (2010) Britain's Dragonflies. A field guide to the damselflies and dragonflies of Britain and Ireland . 2nd ed. Hampshire: Wild Guides

Sue McLamb

Granville Country Park butterfly count

We were pottering around on the Western Stockpile at Granville in the early afternoon on a day in May that had improved steadily. A small group were studying the dominant lichen – *Cladonia sp*; others were searching the silver birch scrub and heather for signs of life; Graham was having a quiet moment leaning on the fence and Matt had disappeared.

A shout was heard from behind a screen of silver birch.

"Graham, Liz – over here".

No-one moved. Liz and her little group continued to study the lichen, others continued their searches, Graham was unmoved and Matt was still missing.

The call was repeated, a little more urgently this time.

"Graham, Liz – over here!"

This time one or two of us, with reluctance, heeded the call and made our way, leisurely, over to the source of the frantic call. What we

found was Matt crouched down holding his net over a patch of ground.
"It's in there!"
We peered and saw nothing, unimpressed. "What's in there?"
"Dingy skipper!"
Our attitude changed immediately; Matt had done it; he had actually managed to find and capture the target species – but we still could not see it under his net.
Carefully, very carefully, Matt inserted a pot under the net and fiddled around for a while before producing the elusive butterfly. Well done Matt.


Dingy skipper (Photo – Keith Fowler)

Now, of course, everything changed, the small group abandoned the lichen, the searchers of silver birch and heather appeared and Graham decided to let the fence hold itself up. The butterfly was handed around, studied, photographed, handed round again and more photographs taken. Finally it was released and, as if in gratitude, posed on a sprig of heather while even more photographs were taken. Eventually it got bored of all the attention and flew off.

This was, more or less, the finale of a day in Granville counting butterflies. It started off in the rain and cold when a group of half a dozen or so of us met at Granville's car park. Matt briefed us - although we were unlikely to see butterflies we would survey the site looking for food plants.
We started off in Waxhill Meadow. The rain had stopped. We soon realised that searching for food plants without a competent botanist (or, dare I say it, a vegetative key) was pretty difficult. Arguments over common and bush vetch raged but eventually we got our eye in for a few plants. It did help that Liz found *Grapholita jungiella,* a micro-moth whose food plant is bush vetch, so we knew it was there – somewhere.
From Waxhill we inspected the dingy skipper bank and noted that it needs some attention during the winter. We paused for lunch, perching on the dragonfly, and then made our way to the Western stockpile via the "Top of the World". The clouds were thinning and it was getting slightly warmer.
In the eastern corner; was that a glimpse of a dingy skipper? Desperate searching yielded no butterfly.
We moved on along the southern slope. The sun started to break through. A few gathered around a patch of lichen; others went off to search the silver birch and heather; Graham decided to check the fence and Matt disappeared.

Keith Fowler

An encounter with *Stylops*

On the afternoon of 25th March 2012, I popped to Venus Pool as the weather was dry, sunny and quite warm. I saw many bee species and the most ladybirds I've ever seen in quantity and also variety of species! I always like the explore the edge of the meadow area for insects and on my way back towards the car park, I spotted a

ground beetle, tearing along at high speed through the grass, as they do! I dropped onto my knees in the hope of getting a photo to identify it, but it was far too quick for me!

However, something else in the grass caught my eye. It was tiny but looked like a mass of wings! I took a couple of photos, but it was down amongst the grass so they weren't clear. I offered this insect my finger, onto which it happily climbed, and it was then that I was able to get better views of it!

Stylops melittae on the author's finger (Photo - Maria Justamond)

I recognised it from the various insect guides I have at home, but couldn't immediately name it. As soon as I returned home, I looked through my books and saw that it was a *Stylops*, a member of the Strepsiptera family (meaning twisted wing). They are endoparasites of various insects.
Ian Beavis on iSpot identified mine as *Stylops melittae* Kirby, 1802, a mining bee endoparasite which would make sense with all the species I saw on the wing that day.

Stylopised *Andrena* bee with female *Stylops* protruding from abdomen (Photo – Pete Boardman)

They are rarely seen apparently as the female spends her entire life within her host, save for a small protrusion on the bee's abdomen (see photo above). The male, which I saw, is winged and once emerged, finds a female and mates before dying. It is very short lived as an adult, lasting up to just a few hours. It was a very lucky spot!!

Maria Justamond

Potential identification problems with *Poecilus* (Coleoptera: Carabidae)

One of our 'Invertebrate Challenge beetle days' was a visit to Liverpool World Museum and we found it to be a remarkably valuable experience. During the day, we discovered a potential problem that could arise with the identification of species within the genus *Poecilus*.

The authors examining the beetle collection at Liverpool Museum (Photo: Pete Boardman)

Prior to the visit we discovered two identical beetles in a food container which had been carelessly discarded in a field (grazed improved grassland type habitat). There was some question as to the species thus a specimen was taken to the Museum with the intention of identification. With the aid of Martin Luff's key and access to numerous specimens, we came to the conclusion that our beetle was *Poecilus cupreus* (Linnaeus, 1758). However when we cross-referenced our specimen with the museum collections, we noticed that there were subtle differences in the colour of the basal antennal segments. With this discovery, we referred back to the Luff key and found that *P. cupreus* can actually be confused with three other *Poecilus* species, *Poecilus versicolor* (Sturm, 1824), *Poecilus lepidus* (Leske, 1785) and *Poecilus kugelanni* (Panzer, 1797). The aforementioned species are the only *Poecilus* species found in the United Kingdom.

With our identification in question, we looked in depth at the four species and discovered the following (table 1):

Species	Antennal segment colouration	Comments
P. cupreus	Black – first two segments light brown.	Similar to *P. versicolor*. Distinguished by punctured head and finer, more numerous tibial setae.
P. lepidus	All black.	All black antennal segments are a distinguishing feature.
P. versicolor	Black – first two segments light brown.	Similar to *P. cupreus*. Tibial setae are a distinguishing feature.
P. kugelanni	Black – first two segments have pale undersides	Paler underside antennal segments are a distinguishing feature.

Table 1: Differences between *Poecilus* species (Luff, 2007).

Poecilus versicolor (Photo - http://users.skynet.be/verzamelen/index.html)

After much deliberation, our beetle was finally identified as being *P. versicolor*. This outcome highlighted the importance of having a reference collection for comparison; our beetle would have been incorrectly identified as being *P. cupreus*. It would therefore be advisable with *Poecilus* species to take a voucher specimen to ensure

correct identification and if possible cross-reference with a collection.

References

Luff, M. L., (2007) The *Carabidae: (Ground Beetles) of Britain and Ireland*. 2nd ed. Royal Entomological Society.

Photo Website: http://users.skynet.be/verzamelen/loopkevers.html

Michelle Furber & Warren Putter

Trampolining beetles – an observation

Do they think it's a pond, a steaming dung pile or do they just want a bounce?
After moving our trampoline from the shade to a sunny spot in June, it soon attracted an assortment of small dung beetles and water beetles, in particular *Helophorus* species.
Could this be a lazy way of collecting such groups? I wonder whether it is the dark but reflective surface, or the heat it gives off in the sunshine that attracts them. The only down side is that it does seem to quickly kill them…….. so I've moved it back into the shade.

Caroline Uff

New and 'nearly new' craneflies to Shropshire during 2012

2012 has been an exciting year for cranefly discoveries with several new species plus the re-discovery of several species last recorded in the county by Cyril Pugh in the 1930's. Most of this work was kick-started by the recording needed to update the 2nd edition of the Shropshire cranefly atlas as highlighted in *Shropshire Entomology* Vol. 5. Amongst the 3,500 records put together during 2012 the following species are worthy of note as new or 'nearly new' to Shropshire.

- *Dicranomyia nigristigma* Neilsen, 1918 collected by Pete Boardman at Long Mynd – new to VC40.
- *Ellipteroides alboscutellatus* (von Roser, 1840) collected by Pete Boardman at Whitwell Coppice – new to VC40.
- *Erioptera divisa* (Walker, 1848) collected by Pete Boardman at Atcham – first record since 1940.
- *Hoplolabis vicina* (Tonnoir in G&T, 1920) collected by Pete Boardman from the River Clun and the River Meese – new to VC40
- *Limonia dilutior* (Edwards, 1921) collected by Keith Fowler at the Long Mynd – first record since 1933.
- *Metalimnobia bifasciata* (Schrank, 1781) collected at Fenn's, Whixall & Bettisfield Mosses NNR by Jim Cresswell – first record since 1928.
- *Molophilus bihamatus* de Meijere, 1918 – collected by Nigel Jones at Crosemere – new to VC40.
- *Nephrotoma crocata* (Linnaeus, 1758) photographed at Llynclys Quarry by Dan Wrench – first record since 1970.
- *Phylidorea heterogyna* (Bergroth, 1913) – see article later in newsletter.
- *Rhipidia ctenophora* Loew, 1871 collected by Pete Boardman at Cantlop Bridge – new to VC40.
- *Scleroprocta sororcula* (Zetterstedt, 1851) collected by Nigel Jones at Hope's Wood – new to VC40
- *Ula mixta* Stary, 1983 – collected by Pete Boardman at several sites – new to VC40

All specimens were identified or verified by the author and all specimens housed in the Preston Montford insect collection.

Of these records some were unexpected but the discovery of *Ellipteroides alboscutellatus* was perhaps greeted with the greatest joy as it involved identifying suitable habitat beforehand. This cranefly is to be found amongst *Pallustriella* bryophytes that inhabit areas of tufa – a reasonably uncommon habitat in the county, with the exceptions of Ironbridge Gorge and Hook-a-gate (Allott, 2011), and much smaller areas at Sweeney Fen, Alveley, Much Wenlock, and the Wyre Forest. Following a tip off from Alex Lockton in the spring Whitwell Coppice was visited and found to be suitable for the fly. It was later discovered in mid-July where large numbers of adults were seen crawling over *Pallustriella falcata* (determined by Alex Lockton & confirmed by Martin Godfrey).

Ellipteroides alboscutellatus at Whitwell Coppice – Photo (Pete Boardman

The author would like to thank Alex Lockton, Keith Fowler, Jim Cresswell, Nigel Jones and Dan Wrench for contributing to our cranefly knowledge with their advice and discoveries.

References

Allott, A.J. (2011). Collins New Naturalist Library (118) Marches. Harper Collins.

.....

Shropshire cranefly atlas – 2nd edition
Last call for records – please submit any you have for inclusion in the atlas by the end of October 2012.

Expected publication of atlas – spring 2013 by FSC Publications

Many thanks – Pete Boardman

Pete Boardman

Insects are your friends – an occasional guide to insect identification by reference to unexpected sources – No.1
The Dame Edna fly – *Palloptera mulleibris* (Harris [1780])

Palloptera mulleibris (Harris [1780]) is a small fly found in a range of habitats and is on the wing from spring through to autumn. Larvae are said to be predatory on small insects and have been found under tree bark. It is a clearly identifiable species in the field as it holds its uniquely marked wings at right angles in a way that resembles the glasses worn by Barry Humphries' alter-ego Dame Edna (hence the name we have given to it – the Dame Edna fly.

Dame Edna (Photo – A. Dale)


Palloptera mulleibris (Photo – Anon)

Hang on – I may have got that wrong!

C. Midwinter

Editor's note – Having consulted the SEDN database there are only a few records of this fly in Shropshire – a clear case of under-recording. Perhaps this article may jog your memory or alert you to the presence of the fly. If you come across it please record it and send the details to me for inclusion in the SEDN database.

Thanks Ed.

Telford's 'invertebrately challenged' tetrads

Throughout 2010 and 2011 I had been surveying my local patch, Dothill. This started out as a training exercise but developed into something more meaningful as the data became part of the case to turn an area of Dothill into a Local Nature Reserve. At the end of last year Pete (Boardman) suggested that I should turn my attention to other areas of Telford where invertebrate recording has been poor. To back up his suggestion Pete supplied counts for each of Telford's 62 tetrads from the SEDN database. Of these, 3 tetrads had no records; 22 tetrads had between 1 and 20 records.

As I felt that there was little more I could do to assist Dothill's application for LNR status (it is now in the hands of the politicians) I decided to accept Pete's suggestion.

Over the spring and summer I have visited many of the tetrads with the least records, often with Nigel Cane-Honeysett and Liz Wright, and occasionally with other members of the Wrekin Forest Volunteers, recording what we can. Along the way we have found some very pleasant areas and, unfortunately, some dire ones. But most have given us plenty to try to identify.


From left to right – Nigel Cane-Honeysett, Stephen Mitchell, Keith Fowler and Liz Wright surveying Invertebrately Challenged tetrads in Telford (Photo – Margaret Mitchell).

Initially I planned routes along footpaths that would provide exercise as well as the opportunity to search for invertebrates. It soon became apparent that walking more than a mile or so in a day's surveying was too much to expect! This made planning easier as I just had to arrange a meet point. Usually we stuck to public footpaths but on two occasions we were granted permission by the owners to explore King Charles' wood, Evelith and Greenacres farm, Kemberton.

Tetrad	Area	2011	2012
SJ60C	Leighton	10	78
SJ61A	Leaton	4	61
SJ61F	Cluddley	13	30
SJ61H	Longdon-on-Tern	2	37
SJ61M	Eyton-upon-the-weald	4	56
SJ61W	Trench	12	73
SJ61X	Preston-upon-the-weald	20	64
SJ70F	Norton	10	53
SJ70G	Brockton	0	41
SJ70H	Kemberton	4	69
SJ70I	The Wyke	0	31
SJ70J	J4 M54-ish	12	26
SJ70K	Cotsbrook	15	17
SJ70L	Grindle	2	92
SJ70M	Evelith	16	153
SJ70P	Shifnal north	2	55
SJ71C	Honnington	9	26
SJ71F	Redhill	2	10
SJ71K	Watling Street A5	0	23
SJ71L	Lilyhurst	13	18

Table 1 – tetrads surveyed with records before our visits (2011 column) and records added in 2012 (2012 column).

Overall we have managed to visit 20 tetrads and increase the total number of records, subject to verification, from 150 to over 1000. (see summary table of tetrads covered – table 1). All being well we will add more next year.

Keith Fowler

Aquarius najas (DeGeer, 1773) – the river skater new to Shropshire

The river skater *Aquarius najas* (DeGeer, 1773) (Photo 1) is a large *Gerris* with a dark brown/black coloration. Unlike some other skaters it is without a yellow line on the side of the pronotum and the middle pair of legs are very long. The species is generally very locally distributed on running waters where they are to be found on slack water in sometimes large congregations. It also occurs on the edges of canals and whichever water body it appears to prefer partial shade.

Aquarius najas - the river skater (Photo – Frances Riding)

There is strong female territoriality in *A. najas* with position in the current being kept by striding upstream. Any interloper is seen off if they come within 10-30 cm of the territory holder. Males ride on the back of the females more or less permanently during the long breeding period and take part of the food caught

by the female. Males stay attached to the female even when she dives to the bottom of the river to lay eggs to the underside of stones (Vepsäläinen and Nummelin, 1985).

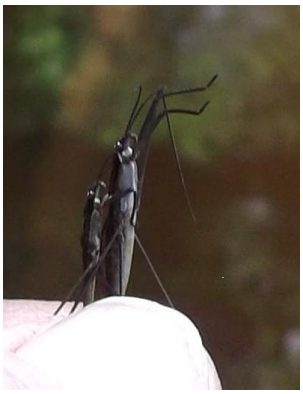
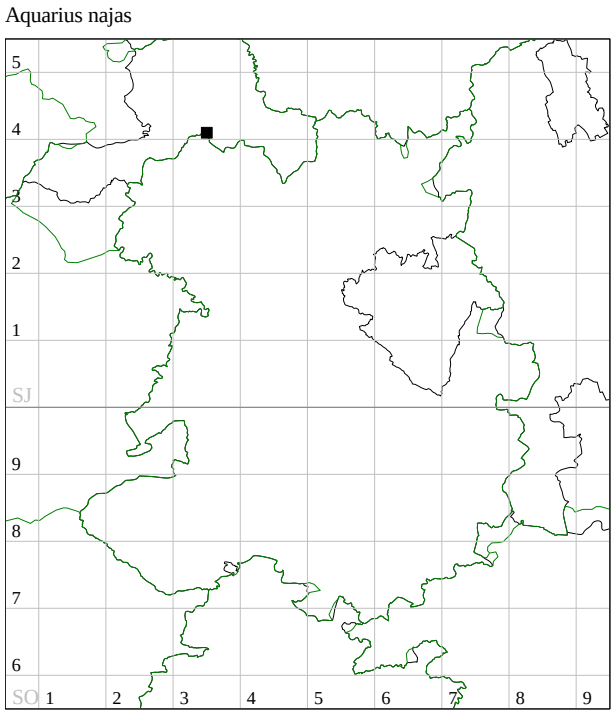


Photo 2. Female *Aquarius najas* with male riding on her back during mating. It is difficult to dislodge the male even to hold them for photographing. (Please excuse my thumb!) (Photo – Frances Riding)

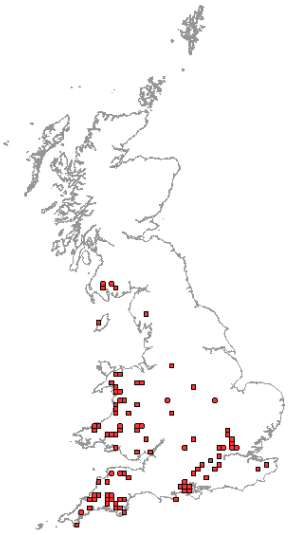
In July 2012 three adults, a breeding pair and a single specimen, where found in slack water below a small log jam in the Shell Brook near the River Dee, North Shropshire (Map 1). Adults were amongst a flotilla of juveniles which is characteristic behaviour for the species. This sighting appears to be the first county record for this species.



Map 1. Distribution of *Aquarius najas* in Shropshire

In Britain *Aquarius najas* has a predominantly western and southern distribution and is regarded as locally distributed. In Scotland it is regarded as rare as it is only found in four 10km squares in Dumfries and Galloway.

Although the NBN distribution map for Britain (Map 2) does not indicate it, the *Provisional Checklist of Cheshire Heteroptera (True Bugs 2002)* claims the insect is common for the county. According to the *Checklist of Hemiptera, Heteroptera recorded in Wales*, M.A. Howe. CCW 2004**.** *A. najas* is common. The closest records to Shropshire are one above and one below Llangollen on the River Dee and at Abermule on the Montgomery Canal, these being in 2008. The NBN distribution map shows a wide distribution throughout Wales and the abundant habitat of stony rivers and streams appears to be perfect for the river skater. Given the suitability of rivers and streams, particularly to the west of the county, it seems likely that Shropshire has a larger population of the river skater than currently understood.



Map 2. 10 km squares with records for *Aquarius najas*. NBN Gateway (data.nbn.org.uk) accessed 13 August 2012

References and Bibliography

Huxley,T. 2003. *Provisional atlas of the British aquatic bugs (Hemiptera, Heteroptera)*. Huntingdon: Biological Records Centre.

Savage, A.A. 1989. *Adults of the British Aquatic Hemiptera Heteroptera: A key with ecological notes.* Scientific Publication No.50. Freshwater Biological Association.

Vepsäläinen, K. and Nummelin, M. 1985. Female territoriality in the waterstriders *Gerris najas* and *G. cinereus* . *Ann. Zoo. Fennicci* 22: 433-439.

Frances Riding

Breaking a duck – a snakefly at Shawbury Heath

I've always wanted to see a snakefly and it had annoyed me that despite being involved in entomology for more years than I can count on my fingers and toes I'd never seen one. You can therefore imagine my delight to finally break my duck whilst out shieldbug recording with Invertebrate Challenge participants Keith, Jim C, Jim S, Liz, and Nigel at Shawbury Heath in North Shropshire.

The insect was keyed out as *Phaeostigma notata* (Fabricius, 1781) using a combination of Colin Plant's slightly tortuous (but thankfully short) key to Raphidoptera (Plant, 1997) and the photos on BioImages. Having checked the SEDN database this also apparently breaks a duck for Shropshire.

Phaetostigma notata (Photos – Pete Boardman)

References

Plant, C.W. (2007). A Key to the adults of British Lacewings and their allies (Neuroptera, Megaloptera, Raphidioptera and Mecoptera). Field Studies **9**. (1997) 197-269.

BioImages – the virtual field guide www.bioimages.org.uk

Pete Boardman

Oil beetle - *Meloe violaceus* Marsham, 1802 at Oswestry Hill Fort

"Whozzat" cried Liz as she dived into the undergrowth. She returned with a twig on which was wound a millipede. But before we could give this any attention Liz abandoned it and with another cry of "WHOZZAT!!" she pounced on another unsuspecting insect.

This time she emerged with a huge beetle. We had no idea what it was. As we had no reference

books to look it up in it was potted up and carried around until we could get the opportunity to identify it.

A group of us had met with Pete Boardman at the Little Chef just outside Oswestry for an Invertebrate Challenge shieldbug day. The intention was to visit a few record-free tetrads in and around Oswestry to improve coverage in that area. After an hour or so rummaging around the rough grassland at the side of the car park – and turning up some shieldbugs - we split up into smaller groups to cover other tetrads.

Four of us; Liz, Paul, Alan and I, went to Oswestry Hill Fort. Here we circled around the lower fortifications before moving up to the higher ones. Although we did find the target group there was not much about. As we reached the higher ramparts and were thinking of lunch Liz found the beetle.

We managed to find Paul who had a "*Chinery*" and over lunch discussed what the beetle was. We were happy to determine that it was an oil beetle, but which one? Higher authority and superior knowledge was required.

We met up with Pete at Oswestry Racecourse. With the wonders of modern technology (an i-phone) he was able to identify it as *Meloe violaceus*.

By a strange coincidence BugLife (http://www.buglife.org.uk/) are conducting a survey of oil beetles and have produced a leaflet giving information about the four species and how to identify them. The following is an extract from that leaflet about their lifecycle:

"Oil beetles have one of the most extraordinary life cycles of any British insect - they are nest parasites of solitary mining bees. Female oil beetles dig nest burrows in the ground, in to which they lay hundreds of eggs. Once hatched, the active, louse-like, larvae climb up on to flowers and lay in wait for a suitable bee. Their hooked feet enable a firm hold on an unwitting bee collecting pollen for its own nest. Once in a bee's nest the larva disembarks and eats the bee's eggs and the store of pollen and nectar. The larva develops in the bee burrow until it emerges as an oil beetle ready to mate and start the whole cycle again."

(http://www.buglife.org.uk/Resources/Buglife/Buglife%20oil%20beetle%20ID%20guide%20web%20lrg.pdf)

Liz's beetle was a female whose vital statistics were length 35mm. Width 11mm.

Meloe violaceus oil beetle (Photo – Pete Boardman)

After the beetle had been admired by all it was returned to Oswestry Hill Fort.

Keith Fowler

More ento-fungi

Following on from Don McNeil's interesting and enlightening article in *Shropshire Entomology* (Vol. 5) I have kept my eye out for fungi-affected insects and invertebrates. I was therefore chuffed to encounter several fungi-affected caddisflies on a shaded alder tree along the Borle Brook at New England near Highley, South Shropshire on a

recent cranefly hunting trip. They were situated about a metre above the water level in deep shade. Three specimens were photographed and one specimen was taken and given to Don who indicated how little was reported on the fungi of this group of insects. I look forward to hearing more in due course.

Fungi-affected caddisfly (Photo: Pete Boardman)

If you come across any invertebrates that have succumbed to fungi please make a note or collect the specimen and contact Don McNeil don.entomofungi@gmail.com

Pete Boardman

The diving ground beetle?

The Invertebrate Challenge beetle group met at the Preston Montford Field Centre for the initial session of the 2012 season. The plan for the day was to consolidate our knowledge of ground beetles (Carabidae). What we witnessed over a break for lunch was ground beetle behaviour that none of us had ever observed before.

The very first session was held in March. The day was so pleasant, we decided to go outside and eat our lunch at the edge of the pond in the middle of the classrooms (Darwin pond). Over the break whilst watching the whirligig beetles dance across the surface of the pond Don Stenhouse, Warren Putter & Michelle Furber spotted a ground beetle scaling the walls of the pond. Initially, we all thought it was making its way along the edge to get back into some sort of cover this was not the case however. Far from appearing to try and avoid the water, this *Pterostichus melanarius* (Illiger, 1798) appeared to be making for the water surface. After observing the beetle for a short time to our surprise the ground beetle used its outstretched antenna to sense the surface of the pond.

Pterostichus melanarius inspecting the surface of the pond with its outstretched antenna (Photo – Simon Yates)

Instead of turning away as we assumed it was going to, the ground beetle pushed through the surface film and proceeded to explore the underwater depths of the pond. It appeared quite at home for a ground beetle in this 'unnatural habitat'. After a few minutes of exploring the ponds depths it 'surfaced'; wandered along the edge of the pond and then 'dived' into the depths again.

Moments later *P. melanarius* diving under the water surface and exploring the ponds depths (Photo – Simon Yates)

After discussing what we had seen it transpired that none of us had ever seen this type behaviour in a ground beetle before. We were very intrigued to know if this is something which has been witnessed in this family or indeed this species of ground beetle before?

Simon Yates

The hoverfly *Volucella inanis* (Linnaeus, 1758) new to Shropshire in a Telford car park

Well there I was in the car park in Telford Town Park unloading my wheelbarrow, mattock, rake, pickaxe and other delicate Archaeological instruments, when something caught my eye in a patch of sunlight in the foliage of a horse chestnut tree. It was a substantial winged insect with wasp/hornet type markings but it was broader and there was something about how its wings looked even from 20 feet away. Whipping a suitable pot out of my pocket (yes I know I was going on an Archaeological dig not "bug" hunting but I had promised Pete Boardman I would look out for shieldbugs) I approached and potted it.

Now I'm a (not the) spider man but spending many a happy day out with Dipterists on SIG field meetings, Wrekin Forest Volunteer heathland surveys, shieldbug days and Keith Fowler's '*Invertebrately Challenged Tetrad*' days I've begun to recognise when I've seen a different species even if I don't know what it is. Keith and I regularly exchange flies and hoppers for spiders and harvestmen with each other.

At the end of a long hard day's digging I settled down to try and identify it. I Googled "big hoverfly pictures" and a number of candidates emerged from the photographs. Plumping for *Volucella zonaria* as a starter I registered as a user on the Hoverfly Recording Scheme website http://www.hoverfly.org.uk/ and discovered that there have only been 3 or 4 records in Shropshire so I sought Keith's advice on such an unusual sighting. Meantime, being suspicious of spotting "rarities", I had another poke around the Hoverfly site and changed my provisional ID to *V. inanis.* Imagine my consternation when I found that that species has not been recorded in Shropshire at all.

After examining the scutellum, tergite 1 and sternite 1 for yellow colouration and that the arista on the antennae were plumose – all under e-mail direction from Keith, I became convinced it was *V. inanis*. Sending suitable photographic evidence to Keith and Nigel Jones elicited a positive ID.

This appears to be another species which is slowly spreading up from down South and has finally arrived in mid Shropshire. According to the website "The larvae are ectoparasites of

social wasp larvae, and have been found in association with *Vespula germanica* and *Vespa crabro.* They are, unlike any other member of the genus, very flattened so that they fit into the larval cells beside the wasp larvae on which they feed. Found in open areas in woodland and scrub and, most frequently, in suburban areas, in parks and gardens."

Nigel Jones is also aware of more recent local sightings of my first candidate *V. zonaria* so that's another one to look out for – particularly in car parks it would seem from the website.

All this is adding to the increasing conviction that all car parks should be designated invertebrate SSSIs!

Nigel Cane-Honeysett

Craneflies and parallel universes – the rediscovery of *Phylidorea (Phylidorea) heterogyna* (Bergroth, 1913) at Fenn's, Whixall & Bettisfield Mosses NNR

The 76 year wait is over!

On the 12th September 1936 Fred Perry from Stockport took on Don Budge of the USA at the US Open Tennis Championship at the West Side Tennis Club, Forest Hills, New York and won 2–6, 6–2, 8–6, 1–6, 10–8 (if you are interested?). It is likely that Cyril Pugh from Oswestry took a passing interest at Perry's achievement in the patriotic spirit of the age. Pugh himself having only 21 days before Perry's triumph discovered the cranefly *Phylidorea heterogyna* as new to Britain at Whixall Moss. It is highly unlikely Perry ever heard of Pugh's achievement.

One of Pugh's specimens of *Phylidorea heterogyna* from the Manchester Museum collection (Photo – Pete Boardman).

If we move forward some 76 years a rather strange synergy emerges. On Friday 9th September 2012 a party of cranefly-botherers on an Invertebrate Challenge field day visited Whixall Moss to search for the now legendary beast eager to once and for all determine whether it was still to be found on the Mosses. Since Pugh's day the fly has only been found from a few sites, including from Wybunbury Moss NNR in Cheshire by the author (Boardman, 2005) and so sightings have only ever been occasional. To put it into some sort of context, probably only a couple of entomologists alive in Britain today have ever seen it in the field!

The party make their way towards the old hand-cuts near the cranberry beds on the Shropshire side of the site. They lunch and talk about cycling, ladybirds and how hot it is. Then the quarry is spotted and the 76 year wait is over.

A couple of days later Andy Murray from Dunblane becomes the first man to win a Grand Slam tennis title in 76 years when he beats Novak Djokovic of Serbia 7-6 (12-10), 7-5, 2-6, 3-6, 6-2 (if you are still interested?) at Flushing Meadows, New York. Murray earned approximately $1.9m for his victory. I still await my prize.

References

Boardman, P.J., (2005). A review of the known sites of *Phylidorea heterogyna* (Bergroth, 1913) (Diptera, Limoniidae) from Great Britain. *Dipterists Digest* 12, No.1 p83-86

Pete Boardman

Websites I have loved

Nigel Cane-Honeysett emailed me about a website he'd seen demonstrated at the British Arachnological Society AGM that eases getting grid references after the event so to speak. They are looking to develop a smart phone version too. The link is;

http://www.bnhs.co.uk/focuson/grabagridref/html/index.htm

This reminded me of the Herbaria United website that allows you to check which Vice County your grid reference is in;

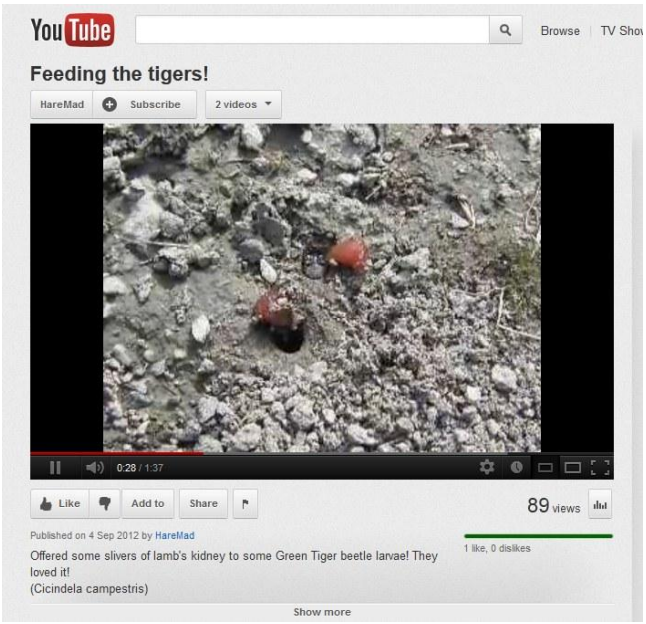
http://herbariaunited.org/gridrefVC

Nigel Cane Honeysett & Pete Boardman

which leads on to .....

Please don't feed the tigers!

Maria Justamond recently sent me a link to a You Tube video that I felt worthy of being included here. She discovered the larval burrows of green tiger beetle larvae at The Bog Mine near The Stiperstones recently and returned to feed them with some chopped up bits of lamb's kidney!



http://youtu.be/iO6t_-HytHA

Maria Justamond

Rediscovery of the heather shieldbug *Rhacognathus punctatus* (Linnaeus, 1758) at Whixall Moss, but not what we went for!

During the summer we were fortunate enough to receive the renowned entomologist Steven Falk (now of Buglife) to Shropshire to lead us in the search for the hairy canary fly *Phaonia jaroschewskii* (Schnabl, 1888) on Fenn's, Whixall & Bettisfield Mosses NNR. Steven joined me, Nigel Jones, Keith Fowler, Gordon Leel and Jim Cresswell of the Invertebrate Challenge to search for the rare muscid which was last recorded there in the 1930's by Cyril Pugh. Steven has encountered the fly whilst surveying in Hampshire and is one of the few people that knows its haunts and behaviour.

(Incidentally if you google 'hairy canary' you discover it is also the name of a hairdressers in Cambridge whose tagline is "*Canaries always look their best – so will you too after a visit to Hairy*

Canary" – you never know when that bit of information will come in handy!!).

Steven Falk with his secret weapon (Photo – Pete Boardman)

Unfortunately the weather wasn't the best and after a sunny start the rain clouds rolled in.

Rain clouds over Whixall Moss (Photo – Pete Boardman)

Fortunately we had some shelter for part of the day, working the site adjacent to the cranberry beds, an area of marginally uncut bog. Whilst sheltering from a squally shower Gordon Leel had the good fortune to glance down and find an unfamiliar-looking shieldbug which on inspection proved to be *Rhacognathus*!

Rhacognathus punctatus heather shieldbug at Whixall Moss (Photo – Pete Boardman)

The species list from the day is still to be compiled but it is likely to include new Shropshire and other interesting species.

Pete Boardman

Hoverfly hints and tips – chitinous bridge feature for *Neoascia* & *Sphegina* species

Over the past year and a half Nigel Jones has been teaching the Invertebrate Challenge hoverfly identification course and has produced a couple of illustrated hints and tips to help students overcome some of the difficulties with the keys. The most recent illustrated the 'chitinous bridge' feature for *Neoascia* and *Sphegina* species that lots of people have trouble with. You can view a PDF of Nigel's latest advice on the Invertebrate Challenge website (go to

www.invertebrate-challenge.org.uk – then click onto the 'newsletter and resources' page).

Pete Boardman

Some noteworthy Long Mynd Diptera finds

The Hoverfly Invertebrate Challenge students visited the Long Mynd on 18 August. One of the hoverflies we hoped to see was the lovely bee-mimic hoverfly, *Arctophila superbiens*, a species strongly associated with wet ground in north and west Britain.

Arctophila superbiens (Photo: Chris Raper)

We were duly obliged when Jim Cresswell captured and potted up a nice specimen for us all to admire, from close to the bottom of the Carding Mill Valley. This was followed by further sightings of two more specimens. The previous two years of winter drought had knocked back populations of damp-loving flies and *A. superbiens* in particular had been rather infrequent since 2009, so this is welcome evidence that this rather local species is doing quite well on the Long Mynd.

Although hoverflies were our principal focus for the day, I can never resist bagging any other vaguely interesting flies that I encounter and I was mightily pleased that my resolve to resist such temptations this day was weak. I bagged two large Tachinid flies in the genus *Eurithia*. These turned out to be two different species, the common and frequently recorded *E. anthophila*, plus another widespread species, which has not been recorded in Shropshire before - *E. consobrina*.

On returning home I got some additional specimens under the microscope and was delighted to find the small Muscid fly *Lispocephala riparia*. This is an interesting species with a rather different life history to the average Muscid-fly.

Lispocephala riparia (Photo: Jorge Almeida)

L. riparia frequents fast flowing streams, where its larval stages live, clinging to mosses with special hook like processes. Anchored in this way, the larvae are able to grab passing black-fly (Simulidae) larvae on which they feast. *L. riparia* is considered a local species and has not been recorded previously from Shropshire.

A few days later, Pete Boardman set about exploring the area about Wildmoor Pool, principally in search of craneflies. From about the "splash zone", close to tumbling stream water, Pete spied and captured a small fly with dark spots on the wings. Pete passed this to me and I immediately thought "this looks a bit

different". It quickly keyed out as another rather local species, the Empid-fly *Wiedemannia insularis*. Another Shropshire first!
Along with some notable craneflies that Pete has found, and some other scarce Dipterans discovered in 2011, the Long Mynd is proving to be a rich hunting ground for Dipterists in search of new and interesting Shropshire species.

Nigel Jones

The County Recorder Network

This information is accurate at the time of press. All these people carry out their roles as volunteers and we are indebted to their hard work.

Spiders – The Shropshire Spider Group –
Email: nigel@canehoneysett.plus.com

Mayflies (Ephemeroptera) - Ian Thompson –
Email: salopladybirds@f2s.com

Dragonflies and damselflies (Odonata) Sue McLamb –
Email: mclamb1@btinternet.com

Terrestrial and Aquatic Bugs (Hemiptera) – Pete Boardman –
Email: pete@field-studies-council.org

Beetles (Coleoptera);

Long-horned beetles – Nigel Jones
Email: nigelj@insectpix.net

Ladybirds – Ian Thompson –
Email: salopladybirds@f2s.com

Other beetle groups – Pete Boardman
Email: pete@field-studies-council.org

True Flies (Diptera);

Hoverflies – Nigel Jones –
Email: nigelj@insectpix.net

Larger Brachycera (robber flies, horse flies, soldier flies etc), tachinid flies, conopid flies and picture-winged flies – Nigel Jones
Email: nigelj@insectpix.net

Craneflies – Pete Boardman –
Email: pete@field-studies-council.org

Leaf-mining flies (Agromyzidae) – Godfrey Blunt
Email: blunt.sig195@btinternet.com

Other fly groups – Pete Boardman –
Email: pete@field-studies-council.org

Butterflies and moths (Lepidoptera);

Butterflies – Tony Jacques
Email: b-mcvc40@talktalk.net

Macro-moths – Tony Jacques
Email: b-mcvc40@talktalk.net

Micro-moths – Godfrey Blunt
Email: blunt.sig195@btinternet.com

Hymenoptera,

Aculeates (bees, wasps and ants) and sawflies – Ian Cheeseborough –
Email: ian.cheeseborough@yahoo.co.uk

Others
Plant Galls (of whichever taxonomic order including mites) – Godfrey Blunt
Email: blunt.sig195@btinternet.com

Orders not mentioned above: Pete Boardman –
Email: pete@field-studies-council.org

Dates for your diary

Here is a selection of entomological goings on in Shropshire and elsewhere that I am aware of.

24/11/12 – Worcester Entomology Day at Rock Village Hall. Theme is INSECT BEHAVIOUR. Booking details not available at time of publication but contact Rosemary Winnall rosemary@wyreforest.net for further information.

16/02/13 – Shropshire Entomology Day at Preston Montford Field Centre. To book please contact Pete Boardman – pete@field-studies-council.org

Submitting guidelines for future articles for inclusion in *Shropshire Entomology*

It would help me tremendously if authors thinking of submitting articles to future editions of *Shropshire Entomology* used the following formats;

Font – title: **Palatino Linotype size 14 in bold**

Font – body: Palatino Linotype size 11

Font – caption for photo or table: Palotino Linotype size 10

Please wherever possible state authors for species mentioned in the title eg;

Craneflies and parallel universes – the rediscovery of *Phylidorea (Phylidorea) heterogyna* (Bergroth, 1913) at Fenn's, Whixall & Bettisfield Mosses NNR

or in the text eg. *Phaeostigma notata* (Fabricius, 1781) if it is a species central to the article.

Photographs should ideally be above 200kb in size and I am happy to crop large photos to make the best use of space. Please send photos as attachments rather than include them in the text of your article or if they are included in the article please don't wrap them in text or accompany them with a text box. Please state the photographer's name or the source of the photograph.

Please send text in a word file without any formatting such as columns. Only use capital letters for site or people's names. Lower case letters should be used for vernacular or common species names with the exception of those named after someone eg; Fallen's leatherbug.

Many thanks

Pete Boardman – Editor.