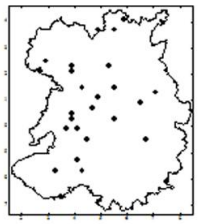


A bi-annual newsletter focussing upon the study of insects and other invertebrates in the county of Shropshire (V.C. 40)

April 2010 (Vol. 3)
Editor: Pete Boardman
pete@field-studies-councl.org

~ Welcome ~

Welcome to the 3rd edition of the Shropshire Entomology newsletter. By the time you receive this the recording season should be under way and hopefully those cold and miserable winter days will be but a mere memory. Also underway will be the **Invertebrate challenge** programme of training days, a three year project funded by The Heritage Lottery Fund and The Esmée Fairbairn Foundation, which will be running around 100 events in total concentrating on the identification of some of Shropshire's most under-recorded and under-studied invertebrates. It will also enable *Shropshire Entomology* to continue for the next three years, as well as enable my involvement with the SEDN as manager of the invertebrate database.

Many thanks once more to everyone who has contributed to this edition. It can only function as a 'newsletter' if people contribute articles of news and views, so please do consider submitting articles that relate to entomology in Shropshire or entomology in general. The deadline for submission of content for Vol. 4 is Friday 16th September 2011. Please feel free to pass this newsletter on to anyone you feel might be interested in it.

Note – past newsletters will soon be able to be downloaded as PDF's from www.invertebrate-challenge.org.uk.

~ Contents ~

The Keeled Skimmer *Orthetrum coerulescens* (Fabricius, 1798) on the Long Mynd

On a sunny day last July the National Trust held a heathland flower public event on Wildmoor, Long Mynd. Whilst checking out the bog plants on a peaty runnel, we noticed some slender, pastel blue dragonflies skimming the water and resting on the soft rush. My first thought was that some of the Black-Tailed Skimmers, known to breed nearby on Wildmoor pool had drifted over, but closer inspection revealed them to be the less common Keeled Skimmer *Orthetrum coerulescens*. A second visit rewarded us with observations of ovipositing as well as newly emerged (teneral) adults and larval shed skins (exuviae), confirming that they were successfully breeding on the site. Around a dozen adults were noted.

Orthetrum coerulescens (Caroline Uff)

Breeding Keeled Skimmers have not been recorded from the Long Mynd before. However, a dead specimen was found in the area in 2005, suggesting that they have probably been here for some time. Given that the Long Mynd is such a well studied site, and that they are breeding just meters from a public footpath, it is amazing that they have remained undiscovered for so long. It is only the second confirmed breeding site currently in the county, with a well established population at Catherton Common being the other (Natural Shropshire website /county recorder).

The stream and associated vegetation on this small part of the Long Mynd has quite a distinctive character to it. Unlike other streams on the hill, it is quite slow flowing, with a series of small shallow pools stained brown by peat (all of which were being used by the skimmers). Marsh St. John's-wort and Marsh Violet, both of which are uncommon elsewhere on Long Mynd wetlands, were locally frequent here, and other species such as Sundew, Butterwort, Bog Asphodel, Lousewort and Lesser Skullcap were also recorded nearby. The site is surrounded by high bracken.

The Keeled Skimmer has a largely western distribution nationally, and is known to favour acid pools and streams on wet heathland sites. It is hoped that this summer a more detailed study can be made of the extent of the population and the habitat characteristics of this site.

Caroline Uff

Solitary Wasps in Shropshire – Part 1

This article will only cover the Superfamily - Apoidea, which contain the species loosely called '**solitary wasp**'.
The other two Superfamilies, Chrysidoidea (including **ruby-tailed wasps**) and Vespoidea (including **spider-hunting wasps** and **social wasps**) will be looked at in later newsletters.

Shropshire boasts a wealth of habitats which provide a rich resource for aculeate

Hymenoptera - bees, wasps and ants. Of these, lowland and upland heath, limestone quarries, sand quarries, and open woodland have proved to be the most productive.
If the following resources are available at a site then there is potential for a good assemblage of species:

1. Aerial nesters require dead wood (preferably standing) or a variety of broken plant stems, along woodland edge or hedgerow in sunny, sheltered situations.
2. Soil nesters need bare ground or short turf with a southerly aspect for warmth. The easier it is to dig, the better. Sandy areas are perfect, a major reason why heathland and sand quarries are so important.
3. All wasps require suitable hunting grounds where their particular prey is found – flies, aphids, spiders, bees, beetle larvae, moth and sawfly larvae to name a few. These are hunted amongst flowers, on the foliage of trees or on the ground etc.
4. Flowers in order to provide nectar for the active lifestyle of the adults. The prey taken is used to rear the larvae.

It is important to remember that wasps as well as bees are surprisingly opportunistic and will use sites or parts of sites that do not appear to offer much quality at all in terms of forage or nesting.
We have surveyed a large number of sites over the past 10 or so years throughout the county and to date have recorded a total of **121 species of wasp**. (112 solitary, 9 social)
Of these 63 are in the Superfamily Apoidea.
The species mentioned are some of the highlights, nationally scarce or above in terms of importance or of interest in a Shropshire context (according to our records!).

Philanthus triangulum at Morville Quarry (Nigel Jones)

A large number of the species recorded within the county are considered to be common or widespread, but we do have a number of nationally important species. The status of the species given, apart from the BAP species, is taken from the Archer status values for Solitary Wasps and Bees (BWARS newsletter, Autumn 2007). This is a more up to date account, when compared to other publications, of what is known country wide from all of the records held by the Bee Wasp and Ant Recording Scheme (BWARS).

Uncommon Shropshire species;

Rare.	*Crossocerus walkeri*
Scarce.	*Crossocerus binotatus*, *Pemphredon morio, Diodontus insidiosus, Diodontus tristis* and *Nysson dimidiatus.*
Shropshire	*Ammophila pubescens* and *Philanthus triangulum.* (both are large and as a result easy to record but are restricted to the Bridgnorth area.

The **121 species** (2010), recorded from Shropshire, compare well with what is known from surrounding counties. The figures in brackets are the dates when the species lists were last updated.

- **Worcestershire 127 (2009)**
- **Staffordshire 129 (2002)**
- **Warwickshire 141 (2009)**

The British wasps are classified from Superfamily (3) through Family (9) to Sub-family (22) then genera (78) and finally species. (The above classification does not include the families Dryinidae, Embolemidae and Bethylidae).
We are fortunate enough to have 51 of the 78 genus and members from 16 of the 22 sub-families! This offers the chance to study/observe the multitude of different lifestyles that make the wasp **the** most fascinating group of insects to learn about.
Below is a table that shows 24 of the 34 genera that make up the Superfamily, Apoidea that we have recorded in Shropshire so far. The numbers in brackets represent the number of species.

Genus	Ground nesters	Aerial nesters	General information
Ammophila (1)	#		A large red and black caterpillar hunter. The abdomen is very long and thin
Tachysphex (1)	#		A species which hunts the nymphs of grasshoppers. Usually associated with sandy soils.
Trypoxylon (3)		#	Black wasps found hunting around vegetation for their spider prey (immature)
Crabro (2)	#		Black and yellow wasps. Males have expanded front tibia easily seen in the field. Nests are stocked with flies.
Crossocerus (16)	#	#	Generally black wasps of varying sizes (some have yellow markings) Most species prey on flies although some collect aphids and small mayflies etc
Ectemnius (7)		#	Medium to large black and yellow wasps preying on many families of flies
Lindenius (1)	#		Nests are stocked with small flies and hemipteran bugs
Entomognathus (1)	#		Small black and yellow wasps. Nests are stocked with small adult leaf beetles
Rhopalum (2)		#	Small wasps. Prey consists of small flies and hemipteran bugs
Oxybelus (1)	#		Beautifully marked wasps associated with sandy soils. Females can be seen returning to their nests with flies impaled on their stings.
Mimumesa (1)		#	Black wasps found nesting in dead wood. Prey consists of leaf and plant hoppers.
Mimesa (2)	#		Black and red wasps. Usually found on sandy soils where it hunts small leaf hoppers.
Psenelus (2)		#	Black wasps known to stock their nests with aphids
Spilomena (1)		#	Very small black wasps provisioning its nest with thrips and aphids.
Stigmus (1)		#	Very small black

			wasps stocking its nest with aphids.
Pemphredon (4)		#	Black wasps preying on various aphids.
Diodontus (4)	#		Black wasps associated with sandy soils and preying on aphids.
Passaloecus (4)		#	Black wasps preying on aphids.
Mellinus (1)	#		Large black and yellow wasps. Nests are stocked with a variety of fly species
Nysson (3)	#		Cleptoparasites. Hosts for the Shropshire species are *Argogorytes* and *Gorytes* and possibly *Lindenius*
Gorytes (1)	#		Black and yellow wasps preying on froghoppers.
Argogorytes (1)	#		Black and yellow wasps preying on froghopper nymphs.
Cerceris (2)	#		Black and yellow wasps. *C. rybyensis* hunts solitary bees while *C. arenaria* is associated with weevils.
Philanthus (1)	#		The bee wolf! A large black and yellow wasp preying on honey bees.

References:

BWARS Newsletter Autumn 2007

David W. Baldock (2010) *Wasps of Surrey*, Surrey Wildlife Atlas Project.

Ian Cheeseborough

'The unkindest cut of all'

Under new guidance from DEFRA, and within the current atmosphere of the coalition government cut backs, it has been decided that the Large Skipper *Ochlodes venata* will be phased out, beginning in the summer of 2012. The butterfly should be gone totally from our verges, rough meadows and other grasslands by the summer of 2015.

A spokesman for the coalition government said "Given the mess in which the last Labour government left our butterflies, it seems only fair to axe some species so that others may thrive. After much consideration it has been decided that the Large Skipper should make way. There are plenty of other Skipper species about that deserve our attention such as the Grizzled Skipper and Dingy Skipper, both of which are Biodiversity Action Plan species and so, in this age of austerity, sacrifices have to be made."

'Rear Moth'

Pantilius tunicatus (Fabricius, 1871) in Shropshire

During the Biodiversity Training Project shieldbug training event on the 9th September 2010 at Wenlock Edge, I was handed a large, beautifully coloured bug by Ian Cheeseborough that had fallen into a beating tray. Said creature turned out to be *Pantilius tunicatus* (see photograph), a Mirid bug associated with hazel, alder and birch (www.britishbugs.co.uk).

Pantilius tunicatus (Tristran Bantock)

Pantilius tunicatus (Pete Boardman)

Having photographed what is clearly an unmistakeable animal I let it go and sought to find out whether this species had been recorded elsewhere in the county, assuming it must be reasonably common. The SEDN database listed records from Cole Mere (1979 – Dr David Sheppard), The Wyre Forest (1988 – Bernard Nau), Brown Clee (1997 – Godfrey Blunt & Mike Smith) and Maddox Coppice (2006 – Nigel Jones). Subsequently I swished at hazel bushes along a field edge at home in Billingsley on September 14th 2010 and immediately found the bug, then similarly at Preston Montford on hazel on October 26th 2010. More recently Godfrey Blunt supplied three records of the bug from Rothampsted trap data from Preston Montford from October 1989, 1990 & 1991.

I would therefore suggest that if you are the vicinity of hazel from September to when the leaves drop it may well be worth looking for this lovely bug.

Pete Boardman

The hoverfly *Platycheirus discimanus* (Loew, 1871) discovered in Shropshire

The genus *Platycheirus* contains the very common silvery-grey spotted *P. albimanus* (Fabricius, 1781), a species that can be amongst the most abundant of hoverflies at most times of year. Within the genus *Platycheirus* are three other similar species, sharing the pattern of silvery-grey spots on the abdomen. These are *P. ambiguus* (Fallen, 1817), *P. sticticus* (Meigen, 1822) and *P. discimanus* (Loew, 1871). Until recent years only *P. albimanus* had been recorded in Shropshire but in early April 2009 I captured a small grey spotted *Platycheirus* male hovering close to blackthorn *Prunus spinosa* flowers. This was the uncommon *P. ambiguus*, distinguished from its common cousin by the lack of expanded front tarsi and by the presence of a curled bristle-like hair at the base of the front femora. Subsequently, having been alerted to the need to search for hovering *Platycheirus* near flowering blackthorn, I have managed to record the species at several new sites. These are all within ten miles radius of Shrewsbury. It is certain to be more widespread throughout the county, so do look out for this hoverfly during April.

On 24 March 2011 I visited a small ancient woodland near Cound, in the hope of finding early season hoverflies such as *Cheilosia grossa* and *C. albipila.* These were not found, but I did capture three very small grey spotted *Platycheirus* on and hovering about goat willow *Salix caprea* catkins. On further investigation these proved to be the nationally scarce *P. discimanus*. Male *P. discimanus* has very

distinctive swollen, almost circular tarsal segments on the front legs. This species is amongst the most diminutive of British hoverflies and I was left wondering if I have been overlooking the species during years of combing goat willow catkins for insects each spring. So, another hoverfly for everyone to look out for in spring. According to Stubbs and Falk (2002) *P. discimanus* is best searched for at blossom of blackthorn, whilst Ball and Morris (2007) state that it is most readily found at *Salix* catkins.

The final member of the clan of grey spotted *Platycheirus, P. sticticus,* is the least understood of the foursome, with no clear indication of where to find it being available. It has been found sparingly across the UK, so theoretically there is no good reason why it too should not eventually be added to the Shropshire Hoverfly list.

References;

Ball S.G. and Morris R. K. A. (2007), *A review of the scarce and threatened flies of Great Britain,* Part x: Syrphidae. *Species Status* x: 1-x Joint Nature Conservation Committee, Peterborough. Draft manuscript.

Stubbs A.E. and Falk S.J. (2002), *British Hoverflies – An Illustrated Identification Guide*, British Entomological and Natural History Society.

Nigel Jones

Welcome to the new Shropshire County Recorder for Odonata!

This February at the 2nd Shropshire Entomology Day I was really pleased to take on the role of County Recorder for Odonata. I have been asked to put a few words together by way of introduction, though those who I met in February will understand 'few words' is quite a challenge! My name is Sue McLamb and I have lived in Shropshire for just over 2 years most of which I have spent outdoors (in all weathers!) with my 3 dogs.

Prior to moving here I taught for the Forestry Commission at Alice Holt, Surrey, where my enthusiasm for all matters natural history led to the first of many FSC courses and completion of the UCert Biological Recording. My last module was dragonflies and damselflies at the idyllic Flatford Mill. This fascinating course was run by Steve Cham and within weeks I had my first homemade net, lots of new books and a worrying number of exuviae in pots! This was followed by increasingly strange behaviour such as turning up at a 40th birthday weekend with alcohol –and a net (!) as I knew there was a great pond at the venue. Then came the unmistakeable sign that things were serious when I was willing to wade bare foot through the deep sludge of a woodland pond to get a large tempting exuvia that was just out of reach!

To bring things up to speed I now teach part time at Ludlow Museum Resource Centre, Acton Scott Historic Farm and voluntarily for the National Trust at Carding Mill Valley. I am also studying for the MSc Biological Recording and hoping to focus my dissertation on the new local populations of *Orthetrum coerulescens* – all records gratefully received! I have so much to learn about these fantastic insects and am hoping this new role will also lead to opportunities to share this knowledge. I feel very privileged to be made County Recorder as a relative newcomer and am really looking forward to a great field season, receiving loads of records and generally getting my teeth into Odonata!

Sue McLamb

(Sue's contact details for damselfly and dragonfly records can be found in the updated County Recorder section towards the end of this newsletter. Ed.)

The Bilberry Bumblebee *Bombus monticola* (Smith) on the Long Mynd

The bilberry bumblebee is a species of upland heaths and moors. The main British populations are found in mainland Scotland, the North Yorks moors, the Peak District, the Welsh uplands, Dartmoor and Exmoor (Benton, 2006). And also the Shropshire hills! It is a smallish, attractive and (fortunately!) distinctive bee, its red tail being much more extensive than that of any other British species.

For the past three years I have been surveying a transect on the Long Mynd, with the aim of discovering something of its habits. For those familiar with the Mynd, my transect starts in Carding Mill Valley, continues past the reservoir, then a scramble up onto Cow Ridge and finally back down Cow Ridge Spur to the starting point. This route allows several different habitats to be surveyed, from the heather *(Calluna vulgaris)* and bilberry (*Vaccinium myrtillus*) dominated plateau to areas of scrub and grassland in the valley.

My knowledge of bumblebees was, at the outset, rudimentary at best. However, with much wisdom and encouragement from Caroline Uff and Ian Cheeseborough my skills have (hopefully) improved somewhat! During forty-six transect surveys I have so far counted 1622 bumblebees of all species, of which 95 (5.9%) have been *B. monticola.* This makes it the fifth most common bumblebee species on the transect, though some way behind the top four: *Bombus pratorum* (14.2%), *B. sylvestris* (*B. pratorum's* 'cuckoo') (16%), *B. lucorum* (s.l.) (16.9%) and *B. lapidarius* (17.8%).

The bilberry bumblebee is so named with good reason: its attraction to bilberry is obvious. I have thus far recorded 15 individuals nectaring at its flowers, though only one collecting pollen. Only bramble (*Rubus fruticosus*) has produced more nectaring records (22). Bramble also turns out to be an important source of pollen.

Bombus monticola on *Rubus fruticosus* agg. (David Williams)

The six bees seen collecting pollen from it are more than have been recorded from any plant species except rowan (*Sorbus acuparia*), which has eight records.

Bombus monticola flying to nectar on *Sorbus acuparia* (David Williams)

In fact I have made surprisingly few observations of pollen collecting to date; other

than bramble's July records all have been made in April or May. Where are the bees obtaining pollen at other times?

Interestingly, neither bramble nor rowan feature much in the literature as forage sources. For example, Benton lists bramble as a nectar source for workers only, whereas I have observed daughter queens, workers and males all nectaring, and workers collecting pollen from it. Benton does not mention rowan at all, as neither do Edwards and Jenner (2005) or Macdonald and Nisbet (2006). These sources also all fail to mention bramble. Why should this be? Is *B. monticola* genuinely doing something different in Shropshire? Certain oft-quoted forage sources (eg all *Erica* spp) are absent from the Mynd. But others, which flower alongside rowan and bramble (eg bilberry and marsh thistle, *Cirsium palustre*) are present and being used, so this would not seem to offer an explanation. Bramble itself is only present in small quantities on the Mynd; on the transect it occurs only in one patch adjacent to the reservoir.

There is obviously still much to learn about the bilberry bumblebee in Shropshire. I have plenty to keep me busy!

References

Benton, T. (2006) *British Bumblebees (New Naturalist 98).* HarperCollins.

Edwards, M. & Jenner, M. (2005) *Field Guide to the Bumblebees of Great Britain & Ireland*. Ocelli

MacDonald, M. & Nisbet, G. (2006) *Highland Bumblebees: Distribution, Ecology and Conservation.* Highland Biological Recording Group.

David Williams

Hunting for tigers in Shropshire! *Nephrotoma crocata* (Linnaeus, 1758)

In 'A Provisional Account of the Craneflies of Shropshire' (Boardman, 2007) I detailed the discovery of Cyril Pugh's 1927 specimen of the spectacular tiger cranefly *Nephrotoma crocata* in the collections of Manchester Museum.

Nephrotoma crocata (Pete Boardman)

Pugh collected the insect on what is now Fenn's, Whixall & Bettisfield Mosses NNR representing the only record of the fly for Shropshire. It is suggested that the fly (which Alan Stubbs has named 'the bright-belted tiger' is associated with wet sandy (or presumably peaty) substrates, which are required for ovipositing. These have been noted as often near to pines but the ecology of the species is largely unknown as sightings in the UK have often been based upon single site records (Stubbs *in prep*). Indeed Stubbs suggests a genuine decline in the distribution of the insect nationally, with the sandy Surrey and New Forest heaths and the brecks and fens of East Anglia accounting for most records with a scattering of others from Nottinghamshire up to Northumberland, though most of these, like Pugh's record are from the distant past.

Following a recent trip to Liverpool Museum a second, and more recent, specimen came to light from Prees Heath, where a pair were collected 'in cop' in the 1970's. Whilst this is only the second record from the county with a 50 year gap from the first, and still 40 years ago, it might still

suggest that there are discrete breeding colonies of this insect around the Meres and Mosses area in suitable damp habitats. The insect is on the wing in May and June, the Prees record suggests the end of May as a good marker but it remains to be seen whether we can locate any colonies of this fly. I hope to report back on the success or otherwise of searches later in the year.

References;

Boardman, P (2007) *A provisional account and atlas of the craneflies of Shropshire.* Pete Boardman

Stubbs, A.E (in prep) *British Craneflies.* BENHS

Pete Boardman

Will the Alder Leaf beetle *Agelastica alni* (Linnaeus, 1758) be new to Shropshire in 2011?

In May 2004 while standing at a bus stop I happened to see a blue leaf beetle on a sign outside a catholic church in Oxford Road, Manchester, then came across others at Marbury Country Park in Cheshire (Stenhouse, 2006) at which point I identified them as *Agelastica alni* (L), a supposedly RDBK species.

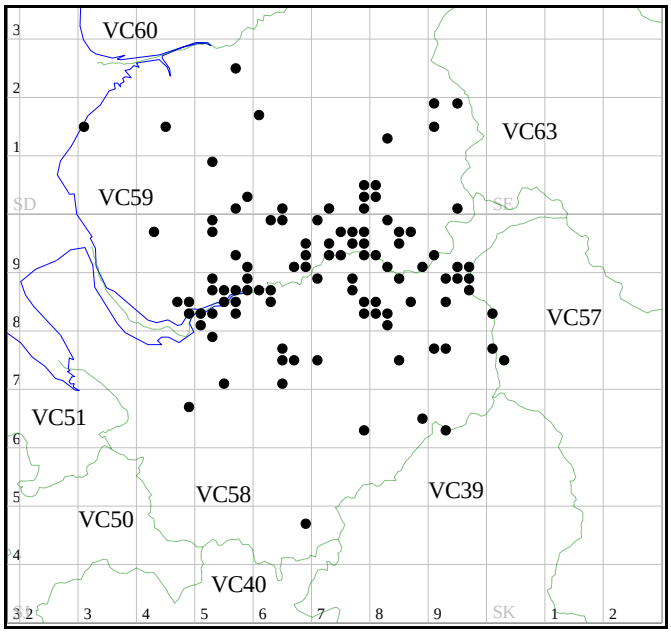
Since then I have had the opportunity to monitor the increasing distribution of the insect over time (Stenhouse, 2010) wondering whether it will burn itself out or keep on expanding and the map shows that the latter is true. Although originally a native species this distinctive beetle probably became extinct many hundreds of year ago and reintroduced on Common Alder *Alnus glutinosa* (L) or Grey Alder *Alnus incana* (L) nursery stock. It is easy to see and identify being fairly large at 7-8mm and ranging in colour from almost black to metallic blue or purplish with black antennae, legs and scutellum. If you see a bluish beetle on Alders or even Silver Birch *Betula pendula* Roth or Hazel *Corylus avellana* L and the leaves are full of holes, you have probably found this insect.

Agelastica alni on Alder leaf with typical larval feeding damage (Don Stenhouse)

Agelastica alni adults and egg masses on alder sapling (Don Stenhouse)

Besides the current stronghold in south Lancashire (VC59) and Cheshire (VC58), *A. alni* has been recorded recently in Derbyshire (VC37) and on the Staffordshire (VC39) border. It is within striking distance of south west Yorkshire (VC63) and West Lancashire (VC60) and the most southerly dot on the map shows it is close to Shropshire VC40) being recorded from Hatherton (SJ6947) on 17th Oct 2010 which is less than five miles from the Shropshire border. So a visit to the Shavington Park (SJ6238) or Adderley (SJ6339) area for example could produce the first Shropshire record in 2011, which I would be glad to hear of.

[Note from the Editor – please see the *Dates for your diary* section for the date of the Shropshire Invertebrates Group trip to Shavington Park]



Records of *A. alni* in the North West of England up to October 2010 (Don Stenhouse)

References;

Stenhouse, D. (2006). Records of Agelastica alni (L) (Chrysomelidae) in South Lancashire and Cheshire in two successive years. Coleopterist. 15: (1), 21-24.

Stenhouse, D.A. (2010). Assessment of the status of the Alder Leaf Beetle Agelastica alni (L) in the British Isles using biological records. Unpublished MSc dissertation.

Don Stenhouse

Preserving insect specimens – an unexpected suggestion

Thanks to Nigel Jones who spotted this unusual use for hand cleaning gel. Please type in the link to your web browser for a slide show.

http://www.slideshare.net/sdroege/how-preserve-insect-specimens-in-hand-sanitizer

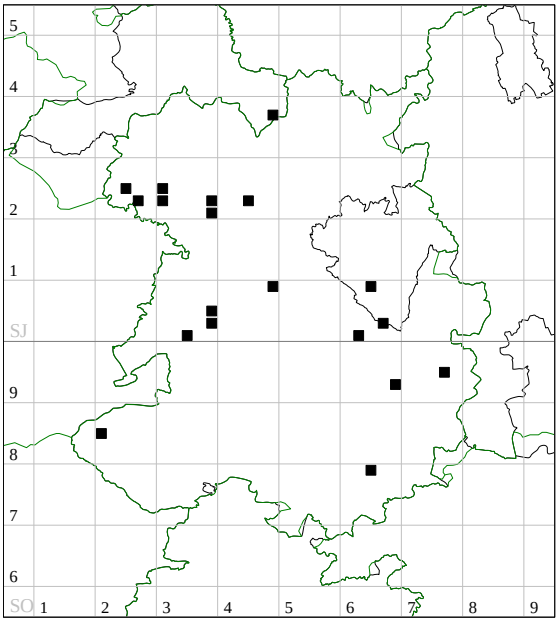
Pete Boardman

An update on the SEDN invertebrate database

The number of invertebrates housed within the SEDN database is now approaching 270,000 and growing thanks to a number of recorders who have submitted data during 2010 / early 2011. The database is now able to show distribution maps for some 5458 species in VC40, an increase on 525 species on the figures quoted in the first edition of *Shropshire Entomology* last April. Major databases that have been loaded on recently include Ian Thompson's ladybird database and Godfrey Blunt's micro-lepidoptera database, plus the 2010 field records from the aculeate hymenoptera recording scheme (Ian Cheeseborough) and the hoverfly recording scheme (Nigel Jones). Also to come our way were the result of Richard Wright's glacial pool survey for Shropshire Council and some Rothampsted trap data for the county via Godfrey Blunt.

I would hope this increase in our knowledge of the distribution of our biodiversity can continue as more people get to know of the existence of the database and that more entomologists contribute their sightings to us too. One potential problem is that our database can be bypassed when people send data to national recording schemes as we don't automatically get sent a copy of that data. I also hope we can continue to grow records from groups other than the Lepidoptera – (which dominate the database with around 200,000 records). I've always been an advocate for receiving data of common species as they give context to the uncommon ones, but we are still in the situation of not having the data of many common species of non-Lepidopteran insects. Examples such as the 7-spot Ladybird, and Common Field Grasshopper, all have 10 km squares without records or at least several 10 km squares with only a single record.

Chorthippus brunneus (Common Field Grasshopper)



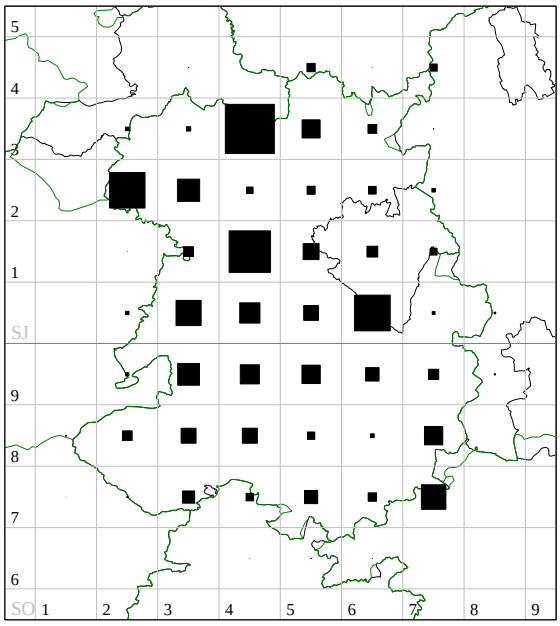
In terms of Orthoptera (grasshoppers and crickets) our records are particularly poor for all of our species.

Of our top 20 most widespread species in the database, 18 are butterflies and 2 are flies (*Tipula paludosa* and *Episyrphus balteatus*) (rather surprisingly no moths or dragonflies make it in there (read it and weep moth-ers and dragonfliers!).

We can also begin to start to interrogate the database and do useful things with it. The first of these has been to compile an invertebrate fauna of the Stiperstones area, which covered The Stiperstones NNR but also outlying sites such as Snailbeach Mine, Black Rhadley Hill, The Bog Mine, Shelve etc and detailed records of 1295 species of invertebrates recorded from the area. (Report as PDF available on request).

We can also start to look at the county and identify where the most recorded and most deficient squares are using the data available to us.

VC40 All Species Density 10km



The above map shows the density of species records from Shropshire's hectads (10km x 10 km squares). The five most densely recorded are SJ43 (Fenn's, Whixall & Bettisfield Mosses, Wem Moss, Ellesmere etc) with 2404 recorded species, followed by SJ41 (Preston Montford,

Shrewsbury) with 2086 species, SJ22 (Oswestry, Llanymynech) with 1767 species, SJ60 (Telford, Ironbridge) with 1757 species and SJ30 (part of The Stiperstones, Poles Coppice etc) with 1324. That said around 35 hectads have less than 100 recorded species so we have a long way to go towards proper coverage.

Please keep submitting your data to the County Recorders (as listed in the back of this newsletter) and remember, if you submit records to the national schemes please send us a copy too. If you haven't sent any information before please do consider doing so and once it has been verified and validated it will end up on the database and eventually online on the National Biodiversity Network Gateway. Here's to the recording season ahead!

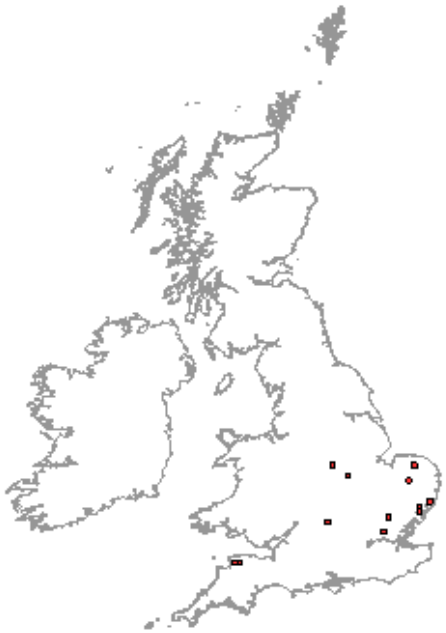
Pete Boardman

A record of the scarce bark beetle *Hylesinus orni* Fuchs, 1906 from Acton Scott during 2010

During the Biodiversity Training Project beetle training event at Acton Scott on the 15th May 2010 I had the impression we had taken a good variety of beetles and I certainly took quite a few tubes home to identify. So it was gratifying to identify 50+ species collected by various attendees on the event. Among these was the Nationally Notable B *Hylesinus orni* Fuchs, 1906 (Curculionidae) which I took from the woodland. It is associated with dead branches of Ash *Fraxinus excelsior* and being fairly small, slow moving, and dark, is also hard to spot. One of the useful features for identification is the asymmetric patterning of the scales on the elytra.

Hylesinus orni (http://www.insecte.org)

The SEDN database suggests this may be a new record for Shropshire, alongside the NBN Gateway map, also shows an absence of records for the county, although both datasets are still incomplete.

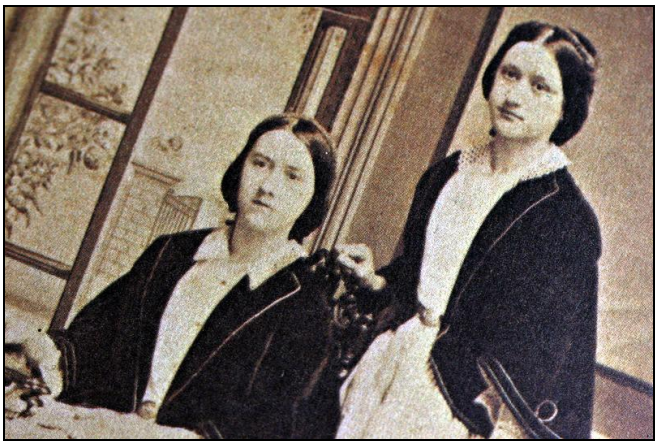


Distribution of *Hylesinus orni* from NBN Gateway

Don Stenhouse

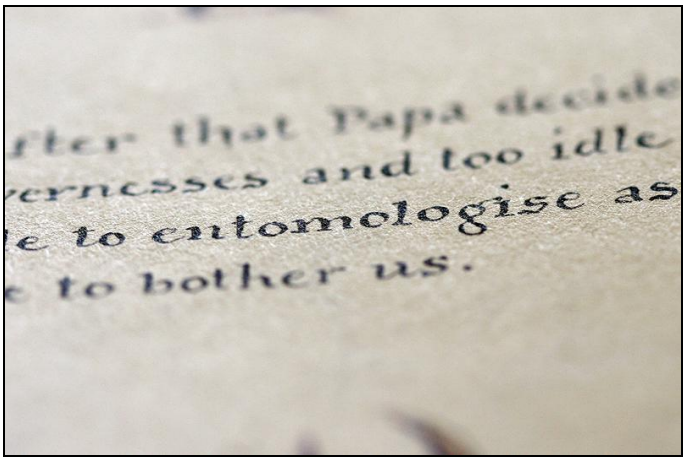
Entomology for Girls

I recently rediscovered a favourite childhood book, "*The Adventures of Madeline and Louisa*", which in my memory was a book about two girls who went out hunting insects, with many charming illustrations exaggerating the danger of their adventures and the size of their quarry. Little did I know that, rather than simply characters in a 1980 children's book, the Pasley sisters were actually entomologists and the book itself was a selection of pages from their 'album' which they wrote and illustrated when the girls were between the ages of 12 and 16.



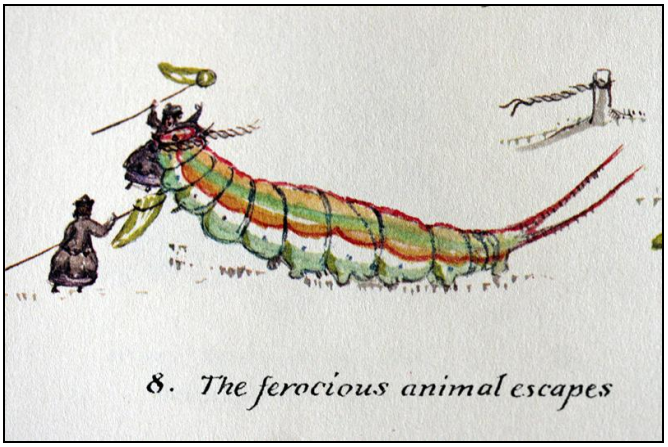
The Pasley sisters, Madeline and Louisa

The youngest daughters of Admiral Sir Thomas Pasley, Bart., K.C.B., Madeline and Louisa grew up at 'The Craig' in Plymouth where their adventures take place. At only aged 14, Madeline wrote 'A Selection of British Butterflies and Moths'. The American Philosophical Society says that 'Her comments on the phenology, ethology, ecology, & appearance of butterflies are concise & knowledgeable & suggest that Pasley was a true enthusiast'.



"entomologise" (Morgan Bowers)

I was also delighted and surprised to note that they use the word 'entomologise' in the book, which I had assumed was modern pig-English, really! Google Books Ngram Viewer says differently however, & shows the word first appearing in published literature in the late 1850s, and showing a surge of use in literature from 1880 – 1900!



"The ferocious animal escapes" (detail from book) (Morgan Bowers)

Madeline (1848-1939) and Louisa (1847-1929) continued 'entomologising' throughout their lives (and illustrating!), much in the tradition of their contemporary accomplished mycologist, Beatrix Potter (1866-1943), all three of whom were unsung scientific heroines of the Victorian era, and certainly childhood heroes of mine.

Morgan Bowers

A further record of the Guelder-Rose Leaf Beetle *Pyrrhalta viburni* (Paykull, 1799) in Shropshire

Following the article on the guilder-rose leaf beetle in the last edition of *Shropshire Entomology* a new record was received from Scotty Dodd who found the beetle at Preston Montford Field Centre on the 8th August 2009. I am grateful to Scotty for submitting the record.

Pete Boardman

The RDB2 cranefly *Arctoconopa melampodia* (Loew, 1873) new to Shropshire

The short-palped cranefly *Arctoconopa melampodia* (Limoniidae) is considered to have a widespread distribution, ranging from the south coast of England to northern Scotland, but records for it have traditionally been few. It is associated with wet or saturated sand adjacent to water bodies, mostly rivers or stream and is noted as a RDB2 / Vulnerable species. Recently whilst going through a backlog of cranefly specimens I identified a couple of examples of the fly taken by Nigel Jones from Big Wood, Eaton Mascott in Shropshire towards the end of April 2009. Nigel confirmed that the habitat where the fly was taken was by a stream with a sandy substrate at the edge of the wood. I would like to thank Nigel for supplying the samples. The cranefly will be added to the SEDN axiozoan list and further locations sought.

Pete Boardman

A review of the 2nd Annual Shropshire Entomology Day

The 2nd annual Shropshire entomology day was held on Saturday 19th February 2011 at Preston Montford Field Centre and chaired by Ian Thompson. 60 attendees were present and many of them gasped in awe at the quality of photographs during the opening talk by Bob Kemp, who illustrated the more uncommon species of dragonflies and damselflies in the county. Nigel Jones then delivered an interesting talk introducing people to the amazing range of picture-winged flies (Tephritidae) that are found, or could yet be discovered, in Shropshire. Nigel encouraged people to look out for picture-winged flies as most are associated with particular plant species and can readily be found with some practice. Several people signed up to receive an identification key to wing markings and hopefully this will lead to more records being received for this noticeable group.

Pete Boardman followed with a talk updating attendees with the latest distribution maps of Shropshire's shieldbugs. Shieldbug recording has increased dramatically in the county since two recording days were carried out by the Biodiversity Training Project in 2010, and since the first shieldbug maps were put together following the genesis of the Shropshire Ecological Data Network – the virtual records centre for Shropshire. The most recent "new" species was the brassica bug *Eurydema oleracea* found by John Bingham in the Wyre Forest.

Brassica bug (John Bingham)

Over lunch attendees gathered in the "show and tell" room to look at a variety of exhibits gathered together. The *living* star of these exhibits was "beetleman" a large long-horned beetle brought by Caroline Uff (thought to be *Morimus asper* (Sulzer, 1776)) which was found on a pallet 3 years ago and handed over to her. Presumably the beetle was a stowaway from a more continental European location but since then "beetleman" has been kept with a succession of stick insects and is believed to subsist off "micro-fungi".

Morimus asper (http://www.galerie-insecte.org/galerie)

Attendees in the "show and tell" room (Pete Boardman)

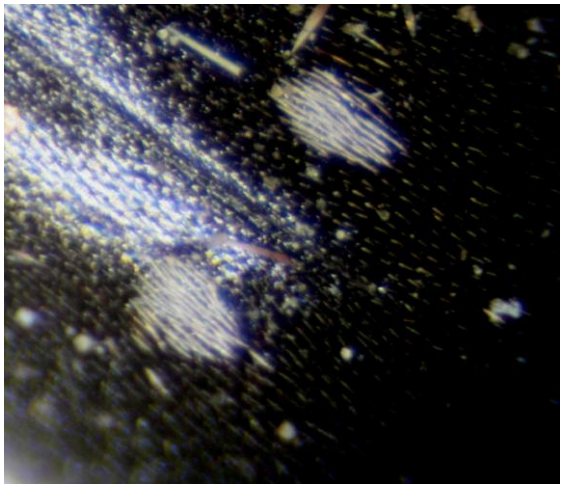
The afternoon session was given over to the launch of the *Invertebrate challenge* project, and talks introducing each of the five main groups for study were delivered by John Partridge (spiders), Nigel Jones (hoverflies), Ian Cheeseborough (bees, wasps and ants), and Pete Boardman (craneflies and beetles). Also the events list of 35 events for 2011 was handed out to attendees during the afternoon.

I would like to thank Sue Townsend and all the staff at Preston Montford for once more hosting the event, Ian Thompson for chairing, and all the people who delivered talks and attended the event. The day was funded by the Biodiversity Training Project. Here's to the next one!

Pete Boardman

What's in *your* carpets?

Many entomologists (or indeed householders) are probably familiar with the varied carpet beetle *Anthrenus verbasci* (L. 1767) and allies that can attack fabrics and collections of insects alike (though surprisingly there is only a single record of the varied carpet beetle on the SEDN database!). They belong to the family Dermestidae, the larder, carpet, skin and fur beetles, which are a relatively small but varied group of insects associated with the activities of human beings and other mammals. Just as this edition of *Shropshire Entomology* was going to press Karen Boardman discovered a small black beetle at home in the spare room which turned out on examination to be the two-spotted fur beetle *Attagenus pellio* (L. 1758). It is easily recognised being black all over with the exception of two patches of white hairs on the elytra (see photo below).



Attagenus pellio – detail (Pete Boardman)

It is presumably common though once more it is currently the only record on the SEDN database. If you have come across this beetle, or indeed any of the *Anthrenus* species, please let me have the records for inclusion in the database.
There are some good web resources illustrating dermestid beetles including Mark Telfer's and Andreas Herrmann's websites as listed below;

http://markgtelfer.co.uk/beetles/dermestidae
http://www.dermestidae.com/

Pete Boardman

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 Recording Group –
Email: john.partridge@blueyonder.co.uk

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);

Longhorn 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

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

Butterflies and moths (Lepidoptera);

Butterflies – **NOTE – new instructions;** – Tony Jacques
Email: b-mcvc40@talktalk.net

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

Micro-moths – Godfrey Blunt
Email: A.G.Blunt@wlv.ac.uk

Hymenoptera,

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

Others

Plant Galls (of whichever taxonomic order) – Godfrey Blunt
Email: A.G.Blunt@wlv.ac.uk

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.

27/03/11 **Kinver Edge (Staffordshire)**
Shropshire Invertebrates Group event
To search for the land caddis reported here in 2010. We will also run a moth trap over the previous night.
Meet at Warden's Lodge near heathland entrance SO838828 at **09:00** to investigate moth trap catch, or **11:00** to explore the Edge. There is ample roadside parking nearby. Bring a garden sieve if you have one, as we shall be sieving leaf litter.

17/04/11 **Snailbeach**
Shropshire Invertebrates Group event
To investigate the site's spring woodland fauna. Meet at 11:00 in car park by Snailbeach village hall at SJ372022.

22/05/11 **Old Oswestry Racecourse**
Shropshire Invertebrates Group event
To explore the wide range of habitats on site.
Meet at the car park SJ259305 at 11:00.

12/06/11 **Sowdley Wood**
Shropshire Invertebrates Group event
To investigate the south-facing and semi-natural woodland which we did not touch at our previous visit. Meet at car park on the edge of the wood south of Clunton at SO337806 at 11:00.

10/07/11 **South Shropshire Orchards**
Shropshire Invertebrates Group event
To search for three uncommon orchard species: Red-belted Clearwing *Synanthedon myopaeformis* (using pheromone lure), the tortricid moth *Celypha woodiana* (a miner of mistletoe) and the Noble Chafer *Gnorimus nobilis*.
Meet at 11:00. **Meeting point to be advised.**

07/08/11 **Shavington Park**
Shropshire Invertebrates Group event
To explore the wetlands and other habitats of this under-recorded part of the county. Cowbane *Cicuta virosa* has been recorded here.
Meet at 11:00. **Meeting point to be advised**

11/09/11 **Bridgnorth Cemetery**
Shropshire Invertebrates Group event
A moth-trapping evening with access to electricity power points. Meet at car park at entrance to cemetery SO724934 at 19:30.

16/10/11 **Devil's Dingle, Buildwas**
Shropshire Invertebrates Group event
To record leaf mines, galls, fungi etc. Meet at 11:00 at the E-on Gate on Buildwas Lane at SJ643046