



BULLETIN OF THE
Dipterists
Forum

Bulletin No. 81

Spring 2016



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Photographs: Front cover *Agathomyia wankowiczii*, Flitwick Moor, Beds, 7 June 2015 **Alan Outen**, above *Volucella inflata*, Flitwick Moor, Beds, 30 Jun 2014 **Alan Outen**. Other photographs as supplied by the authors or the editorial panel who would be pleased to receive illustrations for general purposes - many thanks for those already sent. If you want to catch the next front cover, please think about the orientation, it must be upright (portrait)



BULLETIN OF THE **Dipterists** Forum

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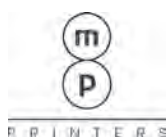
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The following Newsletters and other special items are incorporated into the package for the printers after completion of the Bulletin. They are not to be found in any pdf version of this Bulletin and they have their own pagination. Please contact the Newsletter editors for full colour pdfs, back issues may also be found on the DF website.

Hoverfly Newsletter #60

Booking form for meetings & Membership form: downloadable from Dipterists Forum website or contact the organiser.
A number of links  and downloads referred to in this Bulletin are to be found on our website under Web links.



The Evolution of the Naturalist

If I make the assertion that only in the UK is there a comprehensive biodiversity data sharing community then I very much hope that someone will correct me and tell me where to share my [*Doros destillatorius*, Forêt Domainiale de la Rena, Ain, FRA, 46° 7'47.92"N, 5°13'53.54"E, 13/6/2006] record other than the printed page (Dipterists Digest Vol 15, #1.):



Wraith hoverfly, *Doros destillatorius* (site destroyed in 2007) [Darwyn Sumner]

In the UK we have an enormous suite of tools for biological recording, all developed from the “ground up”, that is to say that they were developed by naturalists and gradually became adopted by institutions then endorsed by government.

Outside the UK, we see the “top-down” approach because “*free and open access to Biodiversity Data*” is perceived as a pretty neat idea - but it stops at institutions, the so called “Biocollections Data Publishers”. Naturalists have no access or input to these except via a small handful of specific and temporary “*citizen science*” cybernaturalist projects (Jepson, 2016). They don’t have the tools (*op. cit.* van der Wal *et. al.*, 2015.)

The species of UK Naturalist (*sensu* Barber, 1980) seem to be endemic to these shores alone (*op cit* Tewkesbury *et. al.*, 2014) which would account for our unique evolution (Thompson, 2010) into a biological recording tool-user and the absence of these tools elsewhere in the world.

We should thus take pride in all the tools we have in the UK and in the ingenious and innovative ways in which we use them be they desktop or online. We have had a comprehensive biodiversity data sharing community since Bates, Wallace & Darwin set sail from these shores, their message: **observe, map and record.**

Biogeography - more than just spots

When Alan Stubbs gives us his introduction at the start of our Field Weeks he uses his knowledge of the geology of the area to give us a bit of a guide as to what we’re likely to find. Off we go, searching for limestone habitats, soft cliffs, wet woodlands, sand dunes etc., attempting to find the most biodiverse sites. How do we know all this stuff? Maps are one of our best resources.

Biogeography, founded by Wallace, is a field that has rapidly developed into a rigorous science, the data that we see on distribution maps is more than just a pretty picture. If we set that distribution against a number of other landscape features we can better draw inferences about why a taxon occurs where it does and even make some guesses about its biology.

The technology to do that is available to you. Geographical Infor-

mation Systems (GIS) are free, as are a lot of useful background maps. Do take advantage of it, you can grab geology, habitats, and a host of other features to toy with your ideas. Even other species maps (plant hosts) can be downloaded to your desktop GIS to place as overlays like the classic Floras of old, no need to be restricted to simple online displays.

Data capture or data management

Online data capture is not data management.

Data capture

Online systems have their place, they are being taken up by some schemes to augment desktop biological recording. The advantage of online data capture methods being that they facilitate rapid on-line publication thus enhancing a record’s value in conservation.

Data management

To manage data you need data management tools. Management can be achieved to some extent using spreadsheets and databases whilst desktop systems such as MapMate and Recorder were designed specifically to manage. These two applications have achieved a high degree of functionality and flexibility, Local Environmental Records Centres¹ in particular depend upon them for their day-to-day work so they’ll last as long as LERCs do. It’s unfortunate that development funding by JNCC (see DF Forum) has ceased as further progress is needed with the management of documents (DMS), specimens, digital photographs, GIS and the development of versions capable of managing and sharing overseas data. We use a variety of other tools to assist with these functions, several are detailed in this Bulletin.

Darwyn Sumner

Entomological equipment supplier in Spain

Incredible. Ire al camiro de nuestras escaleras. Michael Ackland discovered a Spanish supplier whilst he was on the lookout for DMHF. Huge range of equipment, as Ken Merrifield says the best way is to download their “Nuestro catalogo” pdf and look at the pretty pictures <http://entomopraxis.com/tienda/> anyone know the Spanish for “Please can you come and exhibit at the AES exhibition”?

John Sawyer (1968 - 2015)

Top man at NBN in all senses of the phrase, John had been with the NBN since early 2014. In that time he’d introduced many innovative ideas that will be appreciated by all of us in the network for many years to come. I was fortunate enough to have met him a couple of times and found him a thoroughly nice and enthusiastic man, such a sad loss.

Darwyn Sumner

Zen Colouring Book of Bugs for Dummies™

Visiting my local bookshop the other day I overheard a little girl say to her father “I could live here”. Such a change in bookshops these days I had to get an assistant to point me to the technical section, once three bays, now down to half a bay, pretty well all “Dummies” books. Craft section now half devoted to colouring-in books and a “nature” section without any of the marvellous titles we know to exist (New Naturalist, FSC guides, Bees book now on its second print run.) Returning an hour later the girl was still there poring over the offerings and ignoring the half of the shop devoted to “gifts”. There is hope then, if only those amazing books were on the shop shelves instead of the back pages of a magazine.

Notice board

Recording Schemes

Feedback

It's a little tricky sometimes knowing whether I'm on the right track with items selected to report upon in the Bulletin so it's helpful now and then to get a little feedback. One such was a phone call the other day from a DF member asking me for tips on iMatch and telling me he was about to install a GIS application so that he could use the biogeographical data he'd got to do a bit of mapping in his own region. That was a helpful conversation, it confirmed that I was on the right track with two of the items I was in the middle of writing for this Bulletin.

Similarly with our item reviewing Diptera data from recording schemes and summer field weeks. There have been several enquiries in the months I've been writing it, from the late NBN CEO John Sawyer wanting it for an NBN eNews item, from Dave Heaver wanting to put together IUCN reviews and "Assessments" for Natural England (see Rob Wolton's explanation in Bulletin #80), from Ben Brown (a PhD student interning at NBN) carrying out a survey, from Buglife wanting data for their IIA mapping project (see Rob Wolton's report in this issue) and from BRC, so I guess that item is not only relevant but very timely.

Photography too, I was pleased to get a response from a request in the last Bulletin, Joan Childs sent me a wonderful collection of Hoverfly photographs for general use in the Bulletin, she's contributed an article too. Thanks also to Alan Outen and others who send me material, the Bulletin may not be the best showcase for your work as I can't guarantee when they'll appear but at least they get seen by Dipterists who appreciate a good fly photo. Twelve per year is a good crop, don't let Steve Falk's amazing productivity on his Flickr site put you off.

Feedback is valuable then. Dipterists Forum has a great place for anyone to comment on what we've been doing: the Forum part of our website. Do let us know what you think ("fly" = a one-horse hackney carriage - Adrian got it, others won't be drawn)

Not just the Bulletin editorial team either, Peter does a great job on the Digest, there's a team of Dipterists constantly answering identification questions on our Forum, Erica's forever tapping away at her social media stuff, the Recording Scheme people, trainers, publicists, contributors and organisers are all doing a terrific job.

Remember, we're a Forum. Peter Chandler describes this concept elegantly later in this Bulletin: "*an opportunity for an exchange of ideas on a wide scale, welcoming all comers*"

The discussion Forum on the Dipterists Forum website was set up for this very purpose - don't be afraid to make use of it. Forums on websites are where we Dipterists have the edge, Paul Beuk's Diptera.info uses the same Forum technique.

Darwyn Sumner

Adit ended

The environmental recording suite of programs published by Adit limited have reached the end of their life, see <http://adit.co.uk/AditSite.aspx>

Darwyn Sumner

Please send your records to the Recording Schemes ...

"The most important requirement of a recording scheme is that it should be motivated by the need to produce something, at least maps, although better an overview of the conservation status of a species or, more dangerously, evidence in support of an hypothesis."

Foster, G.N. 2015. Taking the oldest insect recording scheme into the 21st Century. Biol. J. Linn. Soc. 115: 494-504

"All organisations who accept biological records should have a published policy on how they will manage and disseminate them, so you can be an 'informed consumer' when deciding where to send your records."

National Forum for Biological Recording

collate: to bring together different pieces of written information so that the similarities and differences can be seen.

compile: to collect information from different places and arrange it in a book, report, or list.

... and specimens to the Study Groups

Anthomyiidae Study Group

Michael Ackland no longer feels up to organising the Anthomyiidae records. I had enquired about the status of NBN Gateway uploads and received the following letter:

Dear Darwyn

I have decided to retire from the position of organising Anthomyiidae records and submitting them to the NBN Gateway. I have told them this, although they keep sending me emails etc.

I have found recording this family very time-consuming, and as I am now 87 I really have too many tasks to deal with, which are of greater importance to me as I have done all the preparatory work and need time to publish the results. These include many new species from various parts of the world, including Mongolia, the Altai region of Russia, Armenia, etc.

Because there are very few people working on antho taxonomy now (about 3 at the present time worldwide) I tend to get many manuscripts for review, and this also takes time.

Because I also don't travel much these days, visiting museums to check and note the records (where there are many big collections such as Fonseca's in the NHM) is impossible. As a result of making my provisional keys and genitalia drawings available to DF members online, quite a few members have sent me spreadsheets of their records. The checking of some of these records is time consuming as it may involve receiving some voucher specimens, and returning them afterwards. In spite of supplying sample spreadsheet layouts, they arrive in different formats with different fields, and re-arranging them is very laborious, and I think my time is better used elsewhere.

The few correspondents who have taken recognisable genitalia photos have made the recognition of these species easier, but not enough photos are of sufficient standard. It was this situation that prompted me to take up photomicrography and write of my experiences. As you know almost every species of Anthomyiidae can be recognised in the male sex by their genitalia. The keys on the other hand are difficult to use and can be unreliable.

It seems to me that to make GB recording valuable, many more recorders of families such as Anthomyiidae are needed.

One can spend all of one's time recording common species and filling in the many gaps in distribution, which don't add much to our knowledge.

At present the fashion of photographing flies on leaves (without voucher specimens) is of no value in recording Anthomyiidae. I am afraid old fashioned dissection and study is needed.

Best wishes

Michael Ackland

Pipunculidae Study Group

Following an appeal for records/specimens from David Gibbs on the DF Forum in advance of a review he is working on, I wrote to him asking for a few details about the current status of his work:

When taking it on I insisted that it would stay a study group not a recording scheme as I don't want to feel obliged to do any more than time allows.

Pipunculidae are notoriously difficult and I am afraid even the very best dipterists get them wrong, especially if they do not dissect, therefore I try to persuade people to send specimens rather than records.

I have very recently started putting records on my database without seeing specimens, but very reluctantly, as this will inevitably lead to errors getting through. So I am being careful to exclude those genera/species particularly prone to error.

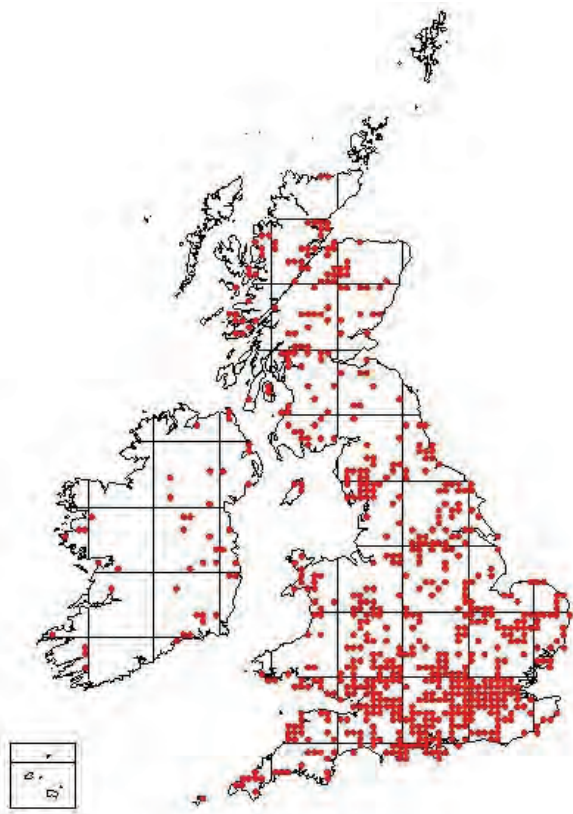
I am finding that some people are still working with Coe 1966, and are not using the keys I have provided or the works by Mike Ackland or Christian Kehlmaier (posted in the Pipunculid Study Group section of the DF website - Ed). Also some do not dissect males and are reluctant to have their specimens dissected, rendering some males unidentifiable.

Currently my database has

4537 records

122 recorders, 9 of them with over 100 records

91 of the 97 species with records (no *Chalarus gynocephalus*, *perplexus*, *Eudorylas caledonicus*, *haemorrhoidalis*, *restrictus* or *unicolor*)



As for uploading to NBN, as I have said all along, I won't do this until ... the records are accurately assigned. As it stands datasets have been uploaded without any verification, some very obviously incorrect. Sort all that out first. (actually just had a look, species list does now appear to be up to date, but still some very unlikely records there)

David's DF website posting adds:

I would prefer specimens, either identified or not, but would also be very grateful for records on spreadsheets.

If the latter please include number, sex and, in the case of males, whether or not dissected.

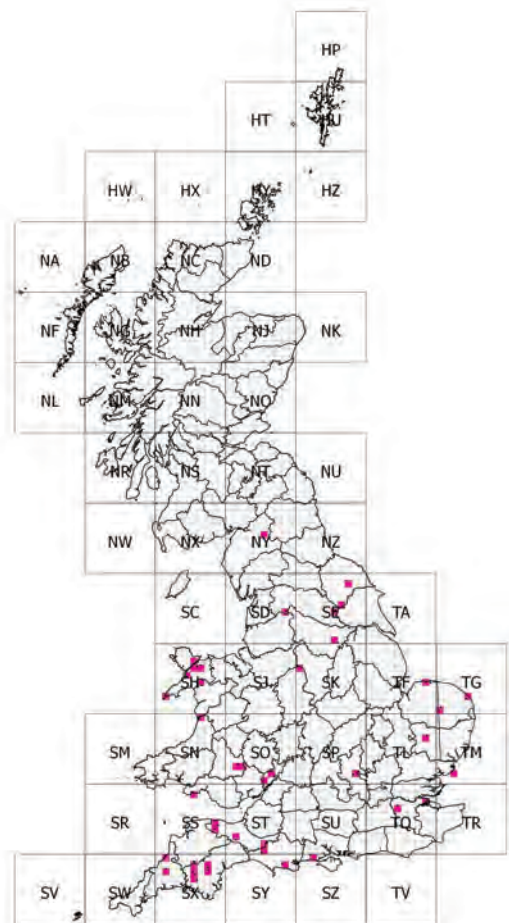
David Gibbs david.usia@blueyonder.co.uk

Oestridae Study Group

Often found chewing the fat together when we turn up at the same event, at this year's DF AGM you'd have found Andrew Grayson and me on a hunt for street food that resulted in our wielding enormous Bratwursts at the Birmingham Christmas Fair. (Barbara Ismay says thanks to Birmingham Council for laying on a German Fair at our AGM especially for her.) When he mentioned that he was selling up and moving to his dad's house, away from internet access for a little while it occurred to me that I might be able to use his Oestridae spreadsheet to demonstrate mapping techniques, particularly since he said it was "(very) incomplete". Surely the numbers (of both taxa and occurrences) would be low enough not to be difficult and there'd be an opportunity to add a couple of spreadsheet tips to help mapping. So just as he pulled the plug on his computer preparatory to packing it in the van, the spreadsheet arrived in my mailbox.

First thing I did on downloading the file was to make a copy to avoid accidents. Andrew's spreadsheet treatment is very thorough, there's just about every bit of data you could imagine. Arranged in groups so that each species is named on a row followed by the records for that species. A method of data management for very low numbers that's ideal.

Predictably I chose *Gasterophilus intestinalis* for the map as it has the most occurrences. All I needed for a 10k square map was a single text column of 10km grid references, easily created in that copy using string formulae. The technique is detailed under the Stilt & Stalk recording scheme on the DF website, all the mapping tools needed are free.



Darwyn Sumner (for Andrew Grayson)

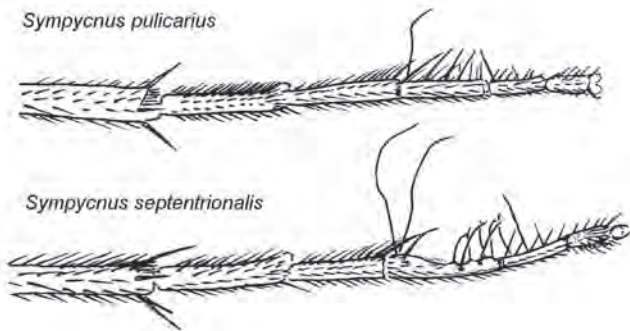
Empid & Dolichopodid Recording Scheme

***Sympycnus desoutteri* name change and a new species described!**

A note in the Autumn, 2014 Empidid & Dolichopodid Newsletter No.19, drew attention to a study being undertaken by Dr Marc Pollet on the taxonomic status of *Sympycnus desoutteri*. The results of the study have now been published in:- Pollet, M., Persson, M., Bøggild, E. & Crossley, R. 2015. 'A long-lasting taxonomic problem in European *Sympycnus* resolved, with the description of a new species and data on habitat preferences.' *Zootaxa* 4032 (1): 81-102.

Quoting from the Abstract: 'Type specimens of *Sympycnus pulicarius*, *S. annulipes*, *S. cinerellus* and *S. desoutteri* were examined to clear up a long-lasting taxonomic confusion. Our study revealed that they represent, together with *S. pygmaeus* and *S. annulipes* var. *brunnitibialis*, a single species, with *S. pulicarius* as the senior subjective synonym.....' The only British species involved is *S. desoutteri* whose name is now *Sympycnus pulicarius* (Fallén, 1823). This change was foreshadowed by Jon Cole in an earlier E&D Newsheet (No.3, March 1987).

In his 1987 note Jon also drew attention to the presence in Britain of two forms of '*desoutteri*', and the second has now been described and named *Sympycnus septentrionalis* Pollet in Pollet *et.al.*, 2015. (*septentrionalis* = 'from the north'). The most obvious difference between the two species is found in the males, in the relative lengths of the tarsomeres of the hind tarsi, and the different shape and chaetotaxy of the third segment as illustrated in the accompanying sketch drawn from photographs in the paper. Females of the two species are not reliably separable.



As indicated by the name, *S. septentrionalis* occurs in Denmark, Finland, Norway and Sweden. Currently, the only British records are from Culbin Sands (Moray Firth) and a salt-marsh at Walberswick (Suffolk). Both sites were visited during Dipterists Forum summer field meetings (1991 & 2003).

It is believed that additional British material of *S. septentrionalis* exists, and the purpose of this brief note is to alert colleagues, who have not yet heard of the recent paper, to revise their collections and above all to be vigilant in the coming field season!

Roy Crossley

Sepsidae Recording Scheme

Records have continued to be submitted to me during 2015 and have been received from Roger Morris, Martin Harvey, Andy Musgrove, Ali Shuttleworth, Del Smith, Andrew Cunningham, Colin Le Boutillier, Howard Bentley, Martin Drake, Phil Brighton and a number of LRCs. The records from the LRCs will need to be checked against the scheme's existing database in case there are any duplicates of records that have reached me via alternative routes. In addition, I have been verifying records submitted on the iRecord and iSpot websites. The iRecord site contained several hundred records, although I suspect there is a degree of overlap with some of the records extracted from the documents passed onto me by Adrian Pont and that I mentioned in my last report. I hope to arrange for the verified iRecord material to be moved onto the NBN Gateway soon. The UK Diptera Facebook group has produced a few more records from the photographs placed on it although, sadly, these are rarely identifiable to species.

I attended the very enjoyable July 2015 field meeting based at Nottingham University and volunteered to deal with any sepsids that were caught. This produced a total of over six hundred records although, as noted in the last Bulletin, these were dominated by five species, namely *Sepsis cynipsea*, *S. fulgens*, *Themira lucida*, *T. superba* and *T. minor*. The last Bulletin's report of the meeting included mention of the finding of a specimen of *Themira biloba*, a rarely recorded species. Amongst the material I hadn't determined during the meeting, a further rarity has been identified and this will, hopefully, be the subject of a note for the Dipterist's Digest.

A feature of the Sepsidae is that they are the only known family of Diptera where both sexes possess secretory "Dufour glands" that are presumed to be responsible of the many mentions of a sweet odour that is presumably used for defence as Sepsids rarely fall prey to other insects. We tend to notice the scent when large swarms of mostly *Sepsis fulgens* are found. These swarms may contain up to an estimated 50,000-100,000 individuals and they may persist for up to three months. This swarming is thought to be related to hibernation (Pont, A.C., 1987: 'The mysterious swarms of sepsid flies': an enigma solved? - *J. nat. Hist.* 21 (2) 305-317.). As I discovered during the Nottingham meeting, it is possible to replicate this swarm odour release effect on a smaller scale, although I wouldn't recommend my method. On the banks of the River Derwent close to Ambaston, Howard Bentley and I were sweeping some rough, sheep grazed pasture plus the banks of the river where some bank slumping had created ideal water fowl resting areas. Both these proved to be rich in sepsids and I collected a sample in my pooter, but at some stage the numbers collected must have reached a critical mass as my next sampling suck left me coughing and spluttering with a foul, acrid taste in my mouth. Checking my records now, I see that my catch at this site totalled 131 specimens spread over 8 species, although *T. superba* and *T. lucida* accounted for over 100 specimens (roughly 50/50). My experience is that the odour isn't 'sweet' as previously described but more of a burning oily hydrocarbon taste. Oddly, I had a repeat experience a few days later when a careless bit of pooting left me with a stink bug sucked to the intake tube of the pooter and I was left with a similar taste and an out of action pooter.

I don't have any news about the new sepsid website I mentioned in my last note but I will try to chase this up during 2016.

Steve Crellin

Calliphoridae Recording Scheme

Recording Blowflies

The Calliphoridae are a small family with only 38 species, many of which are under-recorded and in need of further research. They are an important group, however, a number of species helping crime investigations – their larvae feed on carcasses and can be used to establish the post mortem interval. Some cause myiasis – a condition in which eggs are laid and larvae feed on live hosts such as people, sheep (e.g. ‘sheep-strike’), birds, etc. Other Calliphoridae parasitize earth worms, slugs, locusts or snails. The adult flies pollinate plants while feeding on their flowers. There are however many things we still do not know, for example how widespread are some species and what is their biology?

The Calliphoridae Recording Scheme is a new initiative with the aim of recording the spatial and temporal distribution of British blowflies. Other important goals are informing the general public about blowflies, promoting them, inspiring and aiding research leading to a better understanding of this family of flies.

The first step being taken is producing an easy-to-use photographic key, aimed at the amateur entomologist. A simplified version of the key covering sub-families and species of forensic importance has already been produced and presented as a poster at the Annual Student Conference 2015 at the Natural History Museum in London.

Calliphorid records are being gathered from iRecord, social media (e.g. Facebook groups: UK Diptera, Dipterists Forum, Insects of Britain and Ireland), from numerous individuals and from museum collections. Many of these are photographic records, but for a number of species keeping specimens will be necessary. Some of the characters that need to be examined are too small/difficult to see on a photograph (i.e. coxoplural streak, some bristles) or require further preparation of the specimen (genitalia extraction). Whenever possible I am happy to assist with identification.

In the near future the key will be completed, tested and hopefully published. I will be working on a website focused on Calliphoridae, with interesting facts and identification tips. Also, a survey project is being prepared. It will run for a year (or longer!) and cover sites across the Britain. This aims to produce a large amount of data in terms of distribution records, and also specimens that could enrich museums’ collections. The project will be volunteer-based and is planned to run in 2017.

In the meantime I am happy to receive records (through iRecord) as well as spreadsheets, photographs and specimens (the majority of which will be donated to the Natural History Museum in London). The data collected will then be made freely available through NBN Gateway.

I wish to thank all of the recorders and those who support me in this endeavour providing their advice, time and expertise.

If you have any questions or wish to donate your records email me at aruma@wp.pl or find me on Facebook.

The photographs have been produced by O. Retka using professional equipment kindly provided by Angela Marmont Centre at the Natural History Museum.



Cynomya mortuorum

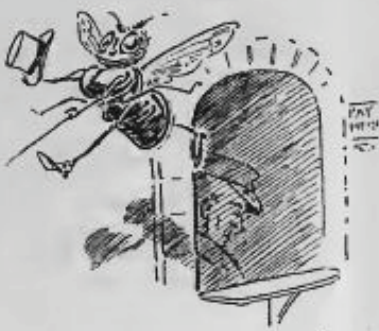


Lucilia caesar



Stomorhina lunata

Olga Retka



ONCE TOO OFTEN.

THE BLUEBOTTLE PAYS A FLYING VISIT TO THE ZOO.

Stilt & Stalk Fly Recording Scheme

There are currently 3094 “taxon squares” in the database. An upload to the NBN Gateway is planned as soon as I complete this Bulletin. Many thanks to all the people who have sent me records. Don't worry if you think you've missed the boat,

I've taken a brief look at the iRecord system recently. According to the list in this Bulletin there are just 4 Megamerinidae, 34 Micropezidae and 84 Psilidae, so far I've only looked at the Psilidae. There's an outside chance some may be verifiable from photographs, if you can see the base of the arista on *Psila*, otherwise I don't expect much to be possible from pictures. For *Loxocera* I'd like to see indications that the new keys have been used on actual specimens. Paul Beuk is the only person in the world prepared to have a stab at these from photographs - and he only seems to attempt a small fraction of the postings on Diptera.info. It seems one or two dipterists are testing iRecord out and there's signs of an LERC or two uploading batches which may have come from a survey. I've got the same issues with keys and photographs that Michael Ackland and David Gibbs report.

I've only a dozen or so contributors sending me records for this scheme so if you have a handful of records, don't be shy about emailing spreadsheets or even post a single record to me. Happy to deal with LERC records too, Leics. and Worcs. are working with me at the moment. Exchanging and sharing data using Recorder 6 is pretty easy (as Steve Crellin will attest as he and I have been working together), just set up a taxon filter, run the search and email the resulting file.

I'm looking forward to getting to grips with Tombio tools in QGIS so don't be surprised if a few maps crop up somewhere.

There were many records of *Micropeza lateralis* during our Notts meeting and I have a report in preparation but otherwise there's nothing of special interest to report this year.

Darwyn Sumner

Hoverfly Recording Scheme

Newsletter #60 included in this Bulletin

David Iliff

Coelopidae

The key to this Family was incorporated into the workshop key that I put together to help Sciomyzidae identification. It's one of the Superfamily *Sciomyzoidea* (along with Dryomyzidae and of course Steve Crellin's Sepsidae). Just two species in the Family:

Coelopa pilipes (Furry-legged Seaweed Fly)

Coelopa frigida (Bristly-legged Seaweed Fly)

Both have pictures by Steve Falk on his Flickr site.

As for records, the NBN Gateway has maps, both of which show a neat coastal distribution. The data sources are extremely varied.

This Family is a good candidate for a small project for anyone who would like to explore Gateway records, do a bit of mapping, chat to Dipterists or spend time at the seaside.

Ideal for a “citizen science” project too, fitting in nicely with the current South West Coast Path initiatives and coastal safety campaigns.

Field Week records collation

Inverness 2002

I was able to have a crack at this to help us catch up a little because it wasn't on Roger's to-do list. Chris Spilling sent me all the files he'd received: Paul Gatt, Ken Merrifield and Richard Underwood (plus me). The data from Coleopterists who were with us (Derek Lott and Brian Levey) I sent to Garth Foster who kindly said he'd try to pass on the records to other Coleoptera schemes once he'd grabbed those from his water beetle scheme.

If you've any data from this Field Week, do send it to me. I'll be uploading to NBN Gateway. After 13 years anything published is a positive, later submissions can be added in the future.

Skye 1991

Roy Crossley was at Culbin Sands during this Field Week, now there's a conundrum, Culbin's a long way from Skye.

Notts 2015

I now have 2607 records from 7 attendees (~620 spp), you've until the end of March to catch the first Gateway boat.

What to do with non-Diptera records?

“Am I correct in thinking you will be sending the records on to national recorders? If not, I will do it.” - Andrew Halstead

Amongst the spreadsheets I've processed over the years are some large batches of records that belong to non-Diptera groups. Some are on separate spreadsheets, others are mixed into the one spreadsheet. Many of them comprise small sprinklings of readily-identified records from other groups. Others have substantial numbers of records that really need to be passed on to the appropriate recording schemes (e.g. Coleoptera) in order that the scheme organisers of those groups can perform their verification magic on their taxa.

In order to conform to the standards required to upload to the NBN Gateway (NBN Exchange Format), names of taxa need to be matched to the standard NHM dictionary. Mis-spellings, discontinued names or “double-meanings” are inevitable in the spreadsheets submitted and the compiler has to judge which taxon was intended. That's usually not a problem with Diptera but for non-Diptera taxa it can involve some judgement that others are more qualified to make.

If your spreadsheet contains non-Diptera records you should really be sending them to the appropriate schemes. Please avoid mixed spreadsheets, non-Diptera taxa aren't included in my export filters and will not reach the NBN Gateway (except Symphyta - see below.)

Non-Diptera records are your chance to try out submission of records via online systems (check the BRC website for **iRecord**) from where the relevant scheme will presumably pick them up. This is true of the Heteroptera, could we claim the same if the situation were reversed? Amongst those **iRecord** occurrences waiting for us to check (see David Roy's list) are ones from skilled entomologists with other specialisms.

The one exception would be **Symphyta**. We're all honorary Symphytists, bribed by one jar of honey each year from Andrew Halstead. All the records have been verified by him. I hope Stuart Ball doesn't try this method with his Scathophagidae, a bag of his bribe would be rather less pleasant by the end of a week in a hot lab.

Darwyn Sumner

BRC and Diptera Recording Schemes meeting January 2014

In January 2014, now two years ago, BRC organised a meeting for Diptera recording scheme contributors to discuss issues. Here is a belated report of that meeting. The Natural History Museum hosted the meeting, with Helen Roy from BRC as the hostess. The aim of the day was to raise issues that were impediments to recording and offer different approaches to the standard model. Several speakers covered these topics. Given the time-lag in writing this report, what I didn't note at the time, I have mostly forgotten, and a few things have moved forward a little since then.

Helen Roy confirmed that data entry, both electronic and paper, is still a core activity of BRC, along with publishing and distributing atlases and newsletters (like ours). A migration of newsletters from paper to websites is underway, for example, those of BWARS and the Ladybird Recording Scheme, and this may be the future for other schemes. Recording is moving towards online data capture, with a phasing-out of desktop systems, such as Recorder, which will eventually be replaced by open-source programs such as Indicia*. With such a lot of data, BRC also puts effort into analysis, for example of trends, so the data are used for more than simple mapping.

Martin Drake briefly outlined the history and scope of recording Diptera schemes since their inception in 1972. While about a third of the fauna is covered by a scheme or study group, only a few schemes could be rated highly for continued activity, and these included schemes with two organisers – presumably goading each other on. Productivity in terms of atlases and publications is disappointingly low, with just a few outstanding exceptions.

Martin Harvey talked about iRecord, using his scheme, the Soldierflies and Allies, as an example of what it can do. He started by clarifying the often-made confusion between iSpot, a website that helps people learn about wildlife identification, and iRecord, an online recording system. There's no need to go through its capabilities here, but Martin described it as a warehouse into which all recording schemes and systems could feed, and, since it is fast at data-sharing, it is a good base for distributing records to all schemes and local record centres. Using iRecord, Martin had received c. 2500 records since the program started in 2012. About two-thirds of records failed automated checks but the error rate fell considerably when scanned by eye. About a fifth of records required recorder feedback, particularly with species whose rating for ease of identification is moderate to high (i.e. difficult), but human contact behind the faceless computer was important to engage recorders. A small proportion of records with photos helped in rejecting obvious errors.

Paula Lightfoot from the NBN gave a sobering talk whose message was that Diptera schemes were not really pulling their weight on the NBN. The 1¼M fly records formed 1.4% of all records on the NBN, of which just over half came from schemes themselves, a quarter from local record centres and a smaller proportion from conservation agencies. But in the last ten years there had been a big decline in contributions compared to other organisms, although recent sources did include the Dipterists Forum's field meetings (but see Darwyn's comments on this possibly spurious result). A big problem is verification since the records usually do not pass through a scheme organiser. Record Cleaner rules help but have been produced for only hoverflies and soldieries & allies so far. Records for orphan families – with no scheme – just sit there until someone takes an interest, and this is an issue that Dipterists

Forum may wish to tackle.

Ensuing discussion covered many issues, some old chestnuts which cannot be resolved, but here are some that may warrant attention.

1. For iRecord, a Diptera-specific online input sheet may be needed, as the coleopterists are currently designing. This would include all the fields we feel are needed. It could sit on the Dipterists Forum website as well as on iRecord. *[it is currently being developed and should be available early in 2016]*

2. iRecord could include two levels of verification – absolutely certain and very likely. *[During 2014 iRecord's verification terms were revised, and there are now six terms to choose from, which allows for the distinction between "absolutely certain" and "very likely" that Martin lists – these would become "Correct" and "Considered correct" respectively:*

Verification status 1	Verification status 2
Accepted	Correct
	Considered correct
Not accepted	Unable to verify
	Incorrect
Unconfirmed	Plausible
	Not reviewed

3. On-going problems with synonyms and unpublished new-to-Britain names.

4. Unified terminology for habitat descriptions (the subject of a forthcoming NFBR symposium)

5. Helen offered BRC funds and manpower for new atlases and for setting up schemes for orphan families.

6. BRC help with a new website. *[On 21 December, David Roy and Biren Rathod from BRC met with Chris Raper and myself (MH) to progress this. We're hoping to have a prototype for the new website early in 2016]*

Martin Drake [progress updates by Martin Harvey]

***Data management vs data gathering**

Online tools are not a replacement for desktop systems (like Recorder and MapMate - or even spreadsheets and MSAccess databases), they have substantially different functions. The desktop systems' ability to gather, collate, compile, manage, exchange, publish, verify, map and analyse provides a suite of functions that are essential to work on data incoming from a range of sources, specimens and formats. They are critical in addressing the backlogs detailed in the following Review. Online data-gathering systems don't provide the same functions, some verification systems are built in, (see Martin Harvey's experiences.) Their broad purpose is to address data gathering by the public and upload to NBN Gateway speedily. They don't work without the internet however (as on our Notts Field Week) but a desktop data management system on a netbook or laptop in the field does the job, we'd have missed much data without it.

Some OPAL project money was spent on an OpenSource toolkit called Indicia (out of which BRC's iRecord has arisen) utilising the data model that underpins Recorder 6. OpenSource efforts can be pooled but it needs technical expertise beyond the skills of an average naturalist.

LERCs use Recorder 6 and Mapmate and will continue to do so whilst the naturalists they're supporting use them and whilst they rely on these applications to conduct their business. There is a skills difference between the naturalist/data manager using desktop tools like Recorder and the developer working with Indicia tools. They are not the same animal and neither are we amateurs. LERCs are cash-strapped too.

Moral:

Stick with your aluminium net poles, there's a whole angling industry will be producing them forever - but think about experimenting with a purpose-built collapsible carbon fibre entomologist's pole.

Stick with your desktop Biological Recording systems, there's a whole industry that will need to have them to hand forever - but think about experimenting with iRecord.

The word naturalist is synonymous with adaptation, ingenuity and innovation, what works for you works for you. But please give a thought to dissemination - those records on your desktop are far more valuable if they are uploaded to the NBN Gateway.

Darwyn Sumner

A Review of the Status of Diptera Recording in the UK, 2015

Around a quarter of all the National Schemes listed in the back pages of the Biological Records Centre’s latest brochure are of Diptera. With only around 400 members worldwide we may not have the popularity of schemes able to hire the best talent in the country but we have some of the best ones toiling away for nowt (*so many flies, so little time* (Adrian Plant).)

Prompted by several initiatives arising recently (BRC, NBN) it seems timely to compile an account of the current status of Diptera recording in the UK.

1. DF Summer Field meetings data - an historic account

A summary of DF Summer Field meetings was first detailed by Stubbs (1999), this was followed by Sumner & Ball in 2004 who indicated that most of the records were finalised to 2001 (Table 1). By “finalised” we mean that the records were made publicly available by virtue of being published on the NBN Gateway (green).

Dipterists Forum Summer Field Meetings 1987 to 2003					
Year	Place	Records	Collated	Compiled	Published
1987	Bangor	557		Stuart Ball	Gateway
1987	Herefordshire	113		Stuart Ball	Gateway
1988	Galashiels	3629		Stuart Ball	Gateway
1988	Bideford	122		Stuart Ball	Gateway
1989	Bideford	5032		Stuart Ball	Gateway
1990	Winchester	2835		Stuart Ball	Gateway
1991	Skye				
1992	Stirling	5860	S. Ball	Stuart Ball	Gateway
1993	Norfolk	7363	S. Ball	Stuart Ball	Gateway
1994	Preston Montford	596		Stuart Ball	Gateway
1995	Ayr				
1996	York	1367	R Morris	Stuart Ball	Gateway
1997	Abergavenny	10657 (1487sp)		Mike Howe	Gateway
1998	Dorset	9120 (1209sp)		M. Howe & M. Parker	Gateway
1999	Grange-over-Sands	5063		Darwyn Sumner	Gateway
2000	Cornwall	~833		Darwyn Sumner	Gateway
2001	Cornwall	~1800		Darwyn Sumner	Gateway
2002	Inverness	949	C. Spilling	D. Sumner 2015	ongoing 2015
2003	Suffolk	?	I. Perry	Roger Morris	?

Stuart Ball did all the work collating, compiling and uploading/publishing the records from 1987 onwards.

Mike Howe compiled the records from the 1997 Abergavenny and 1998 Dorset field weeks which weren’t uploaded to the Gateway as specific individual datasets but form part of a bigger one: the Welsh Invertebrate Dataset. Mike tells me that if you select records on the Gateway by VC and date or date range (7/6/97 - 14/6/97 and 27/6/98 - 4/7/98), you should be able to find them all, both were published in printed form too, see Howe 1998, Howe *et al* 2000.

The 1999 Grange-over-Sands and 2000/2001 Cornwall field week data was collated by me and uploaded in 2003. They can be found on the NBN Gateway as individual datasets, this simply reflects

different ways in which compilers find convenient to work.

The task of compiling the records in 2002 (Inverness) was taken on by Chris Spilling and in 2003 (Suffolk) by Ivan Perry. I have written to both and as a result Chris and I agreed that I would compile and upload the records he had received. Ivan had passed the records he had received on to Roger Morris.

During the following period (2004 to 2014) the field meetings secretary Roger Morris took on the task of compiling the field week records. He reports on this initially in 2004 (Morris, 2004) with a request for records for a rained-off (Autumn) Preston Montford meeting. Roger detailed the status of the field meetings (Morris, 2009; Morris, 2011), including our additional spring and autumn meetings and the following year (Morris, 2012) dealt with recording.

Full accounts of all the following summer meetings were written up by him and printed in the DF Bulletin and in each he asks for records to be submitted to him.

It is estimated that only around half the attendees at these meetings submit records to those compiling. The records “lost” in this way may not represent half the potential data as many of those not submitting collect very little or have non-Diptera specialisms.

Dipterists Forum Summer Field Meetings 2004 to 2015					
Year	Place	Rec. 6	Collated	Compiled	Gateway
2004	Wiltshire	130,000	R. Morris	Roger Morris	sooner (awaiting a fix by Stuart Ball)
2005	Durham		R. Morris	Roger Morris	
2006	Lewes		R. Morris	Roger Morris	
2007	Aberystwyth		R. Morris	Roger Morris	
2008	Cairngorms		R. Morris	Roger Morris	
2009	Swansea		R. Morris	Roger Morris	
2010	Pembrokeshire		R. Morris	Roger Morris	
2011	Exeter	50,000	R. Morris	Roger Morris	later
2012	Speyside		R. Morris	Roger Morris	
2013	Lancaster		R. Morris	Roger Morris	
2014	Bangor		R. Morris	Roger Morris	
2015	Nottinghamshire	Ongoing	D. Sumner	D. Sumner	April 2016

Roger continues to work on data from the above meetings. He tells me that there are problems with a glitch in the data that Stuart Ball has yet to sort out and with species dictionaries (not up to date) which may be solvable for Diptera but other Orders present a problem. Both Mike Howe and I have offered to assist Roger in working on certain of the above datasets but the task of disentangling material from a job already started or for jobs that are in the finishing stages would be inefficient.

In 2014 Roger resigned as Field Meetings Secretary. In his account detailing the duties of FMS he mentions “*The FMS is also responsible for assembling the data generated by the meeting. There may be scope for another member to do the data entry onto RECORDER but in recent years this job has also been undertaken by the FMS.*” (Morris, 2014.)

For the 2015 DF summer field meeting, Derek Whiteley stepped in as co-organiser and Darwyn Sumner as records collater and compiler (Sumner, 2015b.)

Spring and Autumn Field Meetings have also been organised by Dipterists Forum. These will be the subject of a future review.

2. Recording Schemes

Verification

Verification may require considerable expertise, often acquired through a lifetime of study. BRC are working with various experts to set up “Record Cleaner Rules” which provide a kind of sliding scale of identification ease for use in iRecord. Verification is going on all the time in Dipterists Forum, under your microscopes, in the Identification section of our website (and on Diptera.info), at DF workshops and is a key task undertaken by Recording Scheme organisers and other specialists. The trend for online identification is worrying due to the decline in taxonomy as a science (Morris pers. comm., Plant 2015, Sumner 2013, House of Lords 2008). Efforts are being made by key members to provide training (Ball & Morris, Kramer, B & J. Ismay plus our annual workshops) but no-one’s getting younger.

Diversity

There is a diversity of views, motivations and opinions amongst Recording Schemes and Study Groups and many different means of running them. Different recording schemes want different things and make use of a wide variety of tools, from online such as Facebook to desktop systems like Mapmate.

The impression gained from communicating with various Dipterists involved in Recording Schemes is that all the Diptera experts are currently either fully engaged or swamped.

If there is more data being gathered than we can deal with under our current systems, then there are choices to be made: we can choose not to deal with some elements of it, and stick to the models that have served us well for many years; or we can try to develop new ways of working that make it easier for us to deal with the new challenges; or we can look to expand the pool of people who help to run recording schemes and get involved with verification (this is easier to do for some taxon groups than for others).

Crowds get in my way

The issue of crowd-sourcing and online recording illustrated the diversity of views, with the following being expressed:

Crowd-sourcing and online recording aren’t going to address verification needs, they just exacerbate the problem. Adrian Plant puts this succinctly “*it is much easier to source funding for recording tools than it is to fund taxonomy and the design of far more useful taxonomic tools. Recording tools are desirable, taxonomic tools are essential.*” (Plant 2015)

I think there are many examples of online activity helping in this regard, with many people able to get reliable identifications of photographed insects via iSpot, Facebook etc., and iRecord and other online tools make it easier for recorders and verifiers to communicate and to deal with larger amounts of data. (MH)

We need to get better at defining the boundaries between what crowd-sourcing can achieve and where expert time can most usefully be applied, and we need to continue improving the various tools we have so that they do what recording schemes need them to do. And I do agree that there is a mismatch between the amount of funding that has gone in to encouraging beginners to get involved in recording, as opposed to supporting the routes by which beginners can become more expert and play a wider role (MH)

Recording Scheme data

Dipterists Forum Recording Schemes & NBN Gateway				
Scheme	Organiser	Method	Gateway	Uploaded
Anthomyiidae	Ackland	Excel	+	2010
Calliphoridae	Retka	iRecord	-	
Chironomidae	Roper	R6	In other datasets	
Chloropidae	Ismay	Excel	-	
Conopidae	Clements	MM	-	
Craneflies	Stubbs & Kramer	R6, BRC	+	2012
Culicidae	Medlock	?	+	2009
Dixidae	Small	MM	+	2007
Empid & Doli	Plant & Drake	MM	-	
Fungus gnats	Chandler	Excel~ BRC	ongoing	
[Muscidae]	McGill	2018 - ?	+	2007
Oestridae	Grayson	Excel	-	
Pipunculidae	Gibbs	?	-	
[Sarcophagidae]	Whitmore	see 2016 workshop		
Scathophagids	Ball	R6	-	
Sciomyzidae	McLean	R6	-	
Sepsidae	Crellin	R6	+	2007
Stilt & Stalk	Sumner	R6	+	2016
Soldierflies	Harvey	MM, iRec	+	2015
Syrphidae	Ball & Morris	R6	+ ongoing	2006
Tachinidae	Raper & Smith	R6 & MM	+	2015
Tephritidae	Clemons	MS Access	-	

A “Diptera” filter for datasets on the NBN Gateway would be nice

Please note that some of the above consider themselves to be “Study groups”, collection and collation for them is a secondary activity which may not result in Gateway upload in the immediate future.

I made enquiries to the organisers of the Recording Schemes in September asking them what their plans were regarding uploading to the NBN Gateway, what tools they were using and what help could we provide, the following summarises those replies:

Anthomyiidae: At 87 Michael Ackland no longer feels up to organising the Anthomyiidae records, his letter to me is to be found in the Scheme reports as he makes several very valuable points.

Calliphoridae: Begun by Olga Retka this year (see notice in this issue)

Chloropidae: Barbara & John manage a “small and difficult” group, they’ve made progress with Record Cleaner Rules which would address 2/3 to ¾ of the Family and are currently asking those with iRecord for comments on their experience regarding the time it takes to verify single records. It’s really a study group so they’re concentrating on Chloropid verification and running Family identification courses.

Craneflies: One of the more active schemes, John and Alan are very busy with the book at the moment and John produces regular newsletters which provide updates on recording.

Conopidae (& “picture wings”): David shares the concern expressed by others of the difficulties surrounding the unverified data on the NBN Gateway, he’d like to check it through in detail before committing to an upload of the master dataset which he holds; he estimates a couple of years.

Dixidae: Julian has been in touch with BRC about his datasets (they uploaded the current dataset for the previous organiser). He

wants to bring the NBN data more up-to-date, particularly since there's a new species.

Empids & Dolis: Adrian Plant writes: “*Uploading to NBN could be a future option but at the moment, I don't think Martin and I see it as a priority. We have much to do to 'clean' the database, search out historical data and include sundry small datasets that are knocking around before we are happy with what we have got.*”

Fungus gnats: Peter too is working with BRC. They have records up to 2011 (96,000 records) on their in-house database almost ready to upload pending the resolution of many transcription errors. Post 2011 records are on cards.

Muscidae: James McGill is currently only studying the Muscidae and anticipates that he may address the issue of records in 2018 after he has finished his PhD

Oestridae: Andrew writes “*Upon initiation of the Study Group, I began entering the national records on an Excel spreadsheet. I have continued to add to the spreadsheet when I have had time, but it is not up-to-date and far from complete.*”

Pipunculidae: David is emphatic at describing his as a Study Group and not a Recording Scheme, consequently his interest is focussed, like other Study Groups, on the study of this difficult group. NBN Gateway is a long way down his list of priorities, much delayed until recently by inadequate species lists and currently by unverified and obviously incorrect records there.

Sarcophagidae: Daniel Whitmore is running our DF Workshop shortly, more news then.

Sciomyzidae: Ian says “*The Sciomyzidae Recording Scheme data are not yet loaded on the NBN Gateway, although I have been working through checking the data that I have (as well as digitising paper records) preparatory to submitting data to the NBN and sharing with record centres.*”

Stuart Ball and I talked briefly about the data for this scheme when we were at the DF summer field meeting. Most of it is on Recorder 6 but it all needs collation to form a master dataset. We are gradually hatching a plan. I'm to hunt down strays that might not have been submitted to **both** me and Ian. DS

Sepsids: Steve (a Recorder 6 user) wrote *I haven't submitted anything during my time and I think the data on the NBN is Adrian's atlas records. I have been considering bringing the NBN more up to date so those that give me records have something to show for their efforts. If anyone has a simplified guide or advice I'd be grateful to receive it.* (I've produced such a guide for Steve - Ed)

Soldierflies: Martin Harvey reports that data up to about 1990 was uploaded to NBN by BRC, and that data that has arrived via iRecord since 2013 is getting automatically uploaded (Martin verifies them first of course!), but that there is still a large gap in the period 1990-2012 where data is securely stored within the scheme but has yet to be fully verified and made available.

Stilt & Stalk: An NBN Gateway upload is in progress, I'm currently promised records from a couple of recorders and one LERC (Worcestershire) in an attempt to fill a map gap.

Syrphidae: Roger Morris reports that work is progressing, a winter 2015/6 upload is a possibility.

Tachinidae: Matt and Chris are very much up to date with their Gateway records, Matt tells me that he's got another 2000 which he hopes to upload by Christmas.

Tephritidae: Laurence tells me that his records are stored in MS Access and that he has no plans to upload to NBN Gateway (his 2015 atlas is on the DF website)

3. Outstanding data

Individuals known to have undigitised data. One example is the project to digitise Steve Falk's data. The latest news on this is that BRC have issued a small contract to continue this work and it is anticipated that 4/13ths of the material may be digitised by the end of January (see Bulletin #80). There are others with large collections of undigitised data.

Museum collections are a significant source of records too, some have been selectively studied by Dipterists, others will require a good deal of effort. The following article by NHM summarises the overall situation in our Museums:

Blagoderov, V., Smith, V., 2010. No Specimen Left Behind: Industrial scale digitisation of natural history collections. Natural History Museum, London.

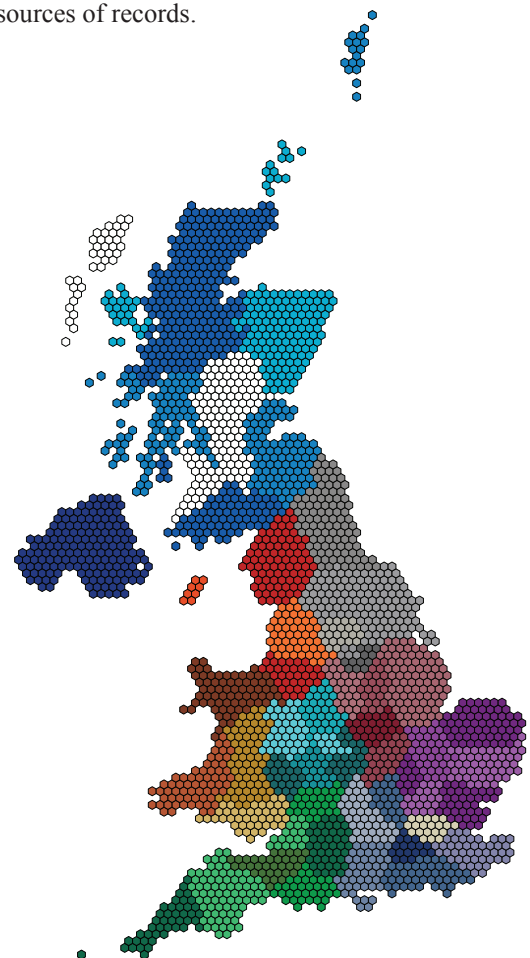
Historic paper records which were deposited with Museums have long been an issue. Shuffled around until they finish up in some Record Office oubliette, (part of The National Archives,) never digitised due to cost-cutting.

4. County recorders and other regional sources

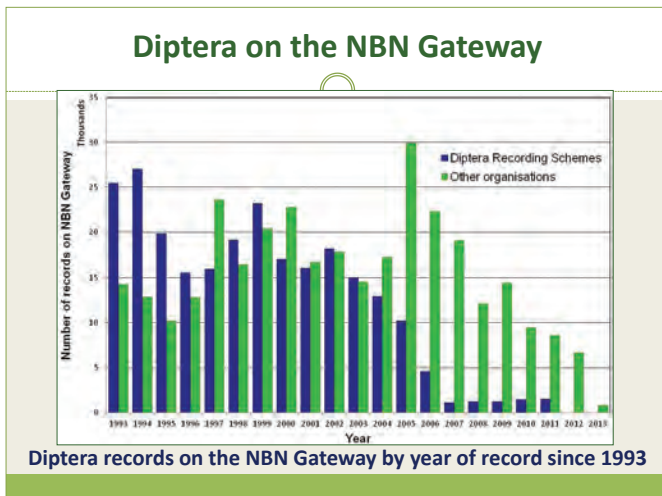
Regular readers of this Bulletin will have noticed a gradual emergence of a regional network of Diptera recorders over the past couple of years (see inside back cover of Bulletin). We're not so numerous that this can be as comprehensive as, say, the one the botanists have, but it is proving useful.

Other significant sources of regional data are increasingly coming from LERCs and from consultants hired by developers.

Dipterists Forum's own regional groups and others like Alan Outen's Bedfordshire Invertebrate Group are also becoming significant sources of records.



5. If seven maids with seven mops ...



Martin Drake kindly wrote up the BRC/DF recorders meeting held in January 2014 (this issue.) When I was seeking someone to do that, Rob Wolton (not present at that meeting) remarked particularly about the above slide in the presentation by Paula Lightfoot (Lightfoot, 2014b) saying “I was worried to see the large decline in numbers of records submitted by Diptera recording schemes that started about year 2003” and enquired as to the likely cause.

Such quantities of sand

For the field meetings we have ~55k from 1987 to 2002, that’s ~3.5k per year. The figures rose for subsequent years, Roger tells me that the total is ~180k (over 10k per year.)

The figures are harder to estimate for the Recording schemes as they are so variable in size (especially compared to hoverflies) but there are some sizeable ones such as Sciomyzids, Tephritids, Empids and Dollys, let’s be generous and say we could nearly double the current recording scheme component of the published records if we uploaded everything.

If we assume that the major component of the blue bars in the chart above are hoverflies (note the drop at around 2006, the last time they were uploaded) then just catching up with those would take the bars to around the 10k mark, field meetings* would add a further 10k and other schemes up to another 10k per year. Adding records from individuals known to have lots of undigitised records would simply raise the height of those bars across the range of years.

If all that came to pass we’d expect the chart to show blue bars in the 20 - 25k region with a gradual drop in the most recent 5 years or so signifying the essential lag due to processing time; for the most recent year, half the records would still be in the field waiting to be recorded. Lag would be a little longer than the green bars which will include sources that, starting around 2003, included many paid & fast workers (Natural England’s “Memoranda of Agreements” with LERCs: “if only this were cleared away it would be grand” Lewis Carroll.) Our turnaround time simply isn’t fast enough to deliver LERC services so they do it themselves. The green bars include our efforts too, County recorders’ work is in there if they liaised with their LERC (like Phil Brighton, me and all the experts who did any verification for them) as are BRC (helping us.)

Neither Roger nor I agree with the term “decline”, we’re simply observing a perfectly normal feature of such a chart, the processing time lag. Contrariwise, that’s a darn good chart for unpaid maids.

That’s got to be the most detailed and lengthy answer to an email I’ve ever put together.

*I do hope Paula put those in the blue and not the green, I bet some were misassigned, like our 1997 and 1998 meetings (Mike Howe), the green bars for 1999 to 2001 look suspiciously high too (I did them, “other organisations” indeed!)

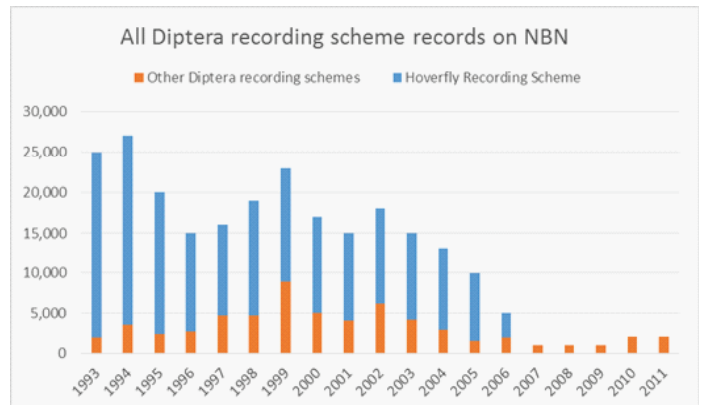
“... swept it for half a year, do you suppose”, the Walrus said, “that they could get it clear?” “I doubt it” said the Carpenter ... Lewis Carroll

A second look:

Martin Harvey studied the data too and came up with the following observations:

It would be interesting to know where the tall green bar in 2005 came from – was that one LERC with lots of Diptera data, or just a busy year for LERCs across the board? Or did Environment Agency or another big organisation suddenly release lots of data? (the bar represents data recorded in a single year, maybe it correlates with Bioblitzes before Dipterists got bored with them (DS))

I also had a look at the number of Hoverfly Recording Scheme records on the Gateway, as it is easy to see the data, and plotted them as a proportion of the total number of Diptera recording scheme records (the total numbers are estimated from your graph, so these are not precise). This does seem to back up Roger’s argument that the main reason for the apparent decline in scheme records is that the hoverfly records have not been uploaded since 2006, although there is also a decline in the non-hoverfly recording schemes from the peak in 1999:



So I agree that Paula’s graph doesn’t really show a major decline in recording scheme activity, but it does show why such a decline could be perceived from the raw data. And it does show that there is a considerable opportunity for Diptera recording schemes to become more involved with NBN if they choose to do so. Personally I would hope that more do choose to do so in future, but I’m aware once again that different scheme organisers have different priorities over this. Help in uploading data to NBN is available for those who are willing to make their data more visible. (MH)

6. Methods

Dealt with in previous Bulletins (Sumner 2015c, Harvey 2012, Harvey 2013, Brighton 2015)

7. Initiatives

The very first initiative intended to deal with Diptera recording was the formation of Dipterists Forum. The Forum has made considerable progress over the years with recording tasks, the following are just a handful of recent significant attempts to make further progress (the first 2 items provide some context):

2007 OPAL

The Open Air Laboratories network received a grant of £11.75M from the Big Lottery Fund and began working on a series of 31 projects (one was Indicia, out of which arose iRecord).

2011 Recorder 6

JNCC’s Steve Wilkinson announces their withdrawal from new development (£100k per year) and began to seek private sector funding. He said “Recorder is now in a reasonably good shape providing a stable, scalable platform for collating biodiversity records”. Maintenance still continues, see forums.nbn.org.uk

2012 Collection and collation of records not dealt with by Recording Schemes

Roger Morris highlighted the problem of records that are not covered by existing Recording Schemes in Bulletin #73 (Morris, 2012) and proposed the setting up of a Recorder database, managed by DF, that would gather those records.

A good number of these are accumulating on iRecord (see David's table) and elsewhere, and it would be good to discuss within DF what might be done with these records. Personally I would like to see them made available via NBN, as long as there were clear health warnings that the records were unverified. This would at least allow us to put these non-scheme species into some sort of provisional context, and you never know it might alert some keen volunteer to the fact there is data out there just waiting for a recording scheme enthusiast to take it on and do something with it! (MH) (*I've begun to do just that (Ed)*)

2014 BRC & data mobilisation

The BRC presentation at NHM in 2014 was intended to help Dipterists and Recording Schemes mobilise their records. A strong emphasis was placed upon the use of iRecord, Martin Harvey giving a presentation and outlining ways in which this BRC system might aid.

Links to presentations by Paula Lightfoot and Martin Harvey are available on the DF website.

Data verification

Dipterists Forum have a number of verification initiatives already under way in the form of websites and workshops. Two additional notable initiatives have begun, the identification and publicising of County Recorders (Sumner, 2014a) and the BRC initiative to set up formal verifiers (mainly Recording Scheme organisers) for records gathered into BRC's iRecord and intended for the NBN Gateway (see letter from David Roy below)

2015 onwards

There are a number of initiatives scheduled for the near future, BRC are organising workshops at Wallingford in January 2016 and the NBN are establishing a working group on data quality and verification as part of the action plan arising from their strategy review in 2015. Recording scheme organisers will be consulted by this working group, and if anyone would like to know more they can contact NBN or go via Martin Harvey, who has been involved with setting up the working group on behalf of NBN

8. Addenda

1. BRC's hunt for further verifiers

David Roy sent me a request regarding verification, he's seeking any verifiers he might have missed, Rather than risk the wrath of experts who might wish to remain undiscovered I gave him no names, just some good clues.

- I agreed to check out the iRecord verification system regarding my Stilt and Stalk fly scheme (~100 records out of the 55k or so on iRecord, see his list below)
- I told him that the county recorders that are listed in the Bulletin are as much as we know or that dipterists in those areas want to be known (Nigel Jones has volunteered to be an iRecord verifier for Shropshire Diptera)
- I indicated that he might look on our forum if he wants to find other active verifiers (my apologies if you get discovered as Diptera experts by BRC there, you did stick your head above the parapet)
- His final question was "*Is it worth trying to develop a group of verifiers for Diptera under the DF banner, or to let it build up as experts become interested?*" In view of the opinions expressed to me by the various respondents to my enquiry amongst the Recording Schemes I suggested the latter.

Darwyn Sumner

2. Data on iRecord (September 2015)

Family	Records	Taxa			
Acartophthalmidae	1	1	Lonchopteridae	445	7
Acroceridae	5	3	Megamerinidae	4	1
Agromyzidae	1958	156	Micropezidae	34	6
Anisopodidae	121	6	Microphoridae	21	3
Anthomyiidae	1387	99	Milichiidae	3	3
Anthomyzidae	62	11	Muscidae	2575	173
Asilidae	676	26	Mycetobiidae	2	1
Asteiidae	44	5	Mycetophilidae	827	197
Atelestidae	3	1	Odiinidae	11	3
Athericidae	12	2	Oestridae	4	2
Bibionidae	551	21	Opetiidae	19	1
Bolitophilidae	19	9	Opomyzidae	558	10
Bombyliidae	933	9	Pallopteridae	114	9
Calliphoridae	975	34	Pediciidae	108	15
Camillidae	11	3	Phaeomyiidae	14	1
Campichoetidae	27	2	Phoridae	79	42
Carnidae	4	3	Piophilidae	18	4
Cecidomyiidae	3241	95	Pipunculidae	72	24
Ceratopogonidae	197	47	Platypzeidae	26	14
Chamaemyiidae	34	5	Platystomatidae	27	2
Chaoboridae	48	3	Psilidae	84	21
Chironomidae	324	76	Psychodidae	256	43
Chloropidae	439	63	Ptychopteridae	106	7
Chyromyidae	4	3	Rhagionidae	634	12
Clusidae	37	5	Rhinophoridae	90	7
Coelopidae	15	2	Sarcophagidae	430	34
Conopidae	640	24	Scathophagidae	755	31
Culicidae	284	18	Scatopsidae	66	17
Cylindrotomidae	7	2	Scenopinidae	8	2
Diadocidiidae	26	3	Sciariidae	257	57
Diastatidae	55	5	Sciomyzidae	503	44
Ditomyiidae	13	1	Sepsidae	587	19
Dixidae	80	12	Simuliidae	101	18
Dolichopodidae	1438	132	Sphaeroceridae	1064	69
Drosophilidae	435	27	Stratiomyidae	1253	51
Dryomyzidae	62	3	Syrphidae	19547	252
Empididae	1183	122	Tabanidae	605	23
Ephydriidae	543	59	Tachinidae	1850	127
Fanniidae	615	32	Tephritidae	942	63
Heleomyzidae	257	35	Thaumaleidae	5	1
Heterocheilidae	1	1	Therevidae	48	7
Hippoboscidae	13	8	Tipulidae	1402	61
Hybotidae	1006	91	Trichoceridae	148	10
Keroplattidae	111	25	Trioxscelididae	7	2
Lauxaniidae	564	41	Ulidiidae	49	14
Limoniidae	978	129	Xylomyiidae	15	2
Lonchaeidae	33	14	Xylophagidae	31	1
				145	2
				55421	2989

David Roy

Roger adds a note to this, he's got a lot of experience with such work:

"I would be wary of creating a huge pool of iRecord verifiers - scheme organisers need to do this. For most schemes it is a small job and just the HRS where there is a big job - I have about 4,000 records to deal with at the moment - which I think is probably in the region of 50-60 hours work. The trouble is that one gets data of all sorts of quality so beware - I doubt there are really 250 taxa at species level for hovers - my guess is nearer 70 species and lots of dodgy records! I dealt with about 14,000 records last year on iRecord and am jibbing this year's job"

For soldierflies the dodgy records have been only a small proportion but MH acknowledges that hoverflies are a much more high-profile group and that Roger consequently has a tougher job.

3. NBN's data capture summit

Invitations to an event to help mobilise undigitised data were sent out to Scheme organisers:

NBN Crowdsourcing Data Capture Summit (25th September 2015, Manchester Museum)

I had indicated that DF had vast quantities of undigitised data holdings. Presentations can be seen via link posted on DF website.

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Dipterists Forum Bulletins may be downloaded freely from the Dipterists Forum Forum at <http://www.dipteristsforum.org.uk/forums.php> For the latest 3 issues you'll have to join (showersjohn@gmail.com)

There are also numerous reports and articles on Diptera, mainly by Alan Stubbs, in *British Wildlife*.

Acknowledgements

Many thanks to Roger Morris for all his help in compiling this report and the Recording Scheme and Study Group organisers for their responses. Martin Drake and Martin Harvey have made numerous comments and contributions and have striven to put me right. Any inclusion of stray opinions or asides intended for me only are my fault.



"Your laptop? Whatever possessed you to lug that thing around with you?"

"Recorder 6".

Darwyn Sumner

(Another contribution to NBN's "National Societies and Recording Schemes Steering Group" 2003 as a member of the "Technical & Resources" subgroup - see Bulletin #57.)

Consultants Portal

You may have spotted an article about this in British Wildlife (October 2015). It's an online data recording system aimed at consultants and developed by their professional body (CIEEM = Chartered Institute of Ecology and Environmental Management) and NBN. The site itself is detailed on DF website under Web Links for this issue. Just how much value it may be to our recording is debatable, the most likely use might be that members attending one of our field meetings who happen also to be consultants might find this a useful means for recording, especially if they use it for their work too.

Data entry is form-based, allowing you to complete lots of the details a consultant would usually need to fill in about the site, you can even draw an outline of the site onto a Google map (no Ordnance Survey maps yet), following which you can add the taxa (from a spreadsheet if you have one.)

For anyone wanting to check this out, I've set up a Dipterists Forum "consultancy" (their term) so if you register, join that group and try it out. Inconsequential records might be a good idea initially if you are only experimenting.

Data entered into this portal can be accessed directly through iRecord so Scheme Organisers and other verifiers who want to keep an eye on Diptera data arising from consultants should use that.

Tool Tips

Document Management Systems

DMS are software applications that help you store, track and manage electronic documents. Used a lot in businesses to organise "assets" they're also very useful for tracking your own stuff, especially if you record, collate, publish, photograph or just collect stuff.

A DMS is not something you're likely to find as a free application anywhere but **iMatch** is a form of DMS and can be used very effectively to organise emails, pdfs, spreadsheets and documents as well as photographic images. **Mendeley** is useful for organising your collection of publications, pdfs of keys & published papers. It also helps you collaborate online with workers in your area of interest and gives you suggestions for other papers in your area of interest - that's how I found the item about Macrophotography in the Reviews section.

Aquila non captat muscas

References to Diptera abound in literature and film. William Shakespeare made numerous references to flies and was clearly ahead of understanding of epigamic behaviour in his age, as evidenced by his delightful "*more courtship lives in carrion flies than in Romeo*" (Romeo & Juliet). The Bible is a prolific source of dipteran allusions, many disparaging or even scatological, but some surprisingly erudite such as "*like a moth in clothing, or a maggot in wood, sorrow gnaws at the human heart*" (Proverbs 25: 20). Probably, many dipterists will know of Henri Fabre's "*human knowledge will be erased from the world's archives before we possess the last word that a gnat has to say to us*" and might also know the sublime words of that great soothsayer Groucho Marx, "*time flies like an arrow, fruit flies like a banana*". Dipterological allusion is not however, entirely the province of high-brow intellectuals like Marx or great bards such as Shakespeare. Indeed many of the bardic colossi of western culture appear to make no mention of Diptera; thus William McGonagall, the Bard of Dundee, unarguably the greatest tragedician in history, makes no mention of flies, unless you include (as he probably would have) line such as -

*Forward without dread and make them fly
Saint George for England, be our cry!*

Diptera are ubiquitous in folklore and literature around the globe. Little of this canon offers sound practicable advice to dipterists other than in the Russian proverb "*haste is good only for catching flies*" Many offer at least a little erudition and/or amusement and the following is but a small selection of the more printable dipteran sayings that caught my fancy whilst making a quick trawl of the subject on the internet.

- Do not remove a fly from your friends forehead with a hatchet..... CHINESE.
- Laws catch flies but let hornets go free..... SCOTTISH
- Laws, like the spiders web, catch a fly and let the hawk go free.... SPANISH
- In heaven you won't hear the mosquitoes..... FINNISH
- A closed mouth catches no flies.....FRENCH & MOROCCAN
- A cow that has no tail should not try to chase away flies....GUINEAN
- A fly does not mind dying in coconut cream.....SWAHILI
- Do not draw your sword to kill a fly..... KOREAN
- Even a fly has its anger... ENGLISH & ITALIAN
- Fine fruit will have flies about it.... NEW ENGLAND
- Flies and priests can enter any house.... RUSSIAN
- Flies come to feasts unasked ENGLISH
- Flies are caught more readily with a single drop of honey than with a cask of vinegar.....TURKISH
- Flies know well the sweet seller's beard..... LEBANESE
- If you are looking for a fly in your food it means that you have a full belly...SOUTH AFRICAN
- Make yourself all honey and the flies will devour you.....ENGLISH
- In times of emergency the Devil eats flies..... GERMAN
- Let everyone keep off the flies with his own tail.....ITALIAN
- The biting fly gets nothing by alighting on the back of a tortoise..... AFRICAN
- The fly has no pity for the thin man.....CONGOLESE
- God in his wisdom made the fly and then in his wisdom forgot to tell us why.....OGDEN NASH

Adrian Plant



Scathophaga stercoraria [Mike Pugh]

Mapping


Geographical Information Systems

“As a naturalist, GIS had become integral to the way I think about and explore biological records” Rick Burkmar, FSC

My first introduction to GIS were the classic County Floras. Printed distribution maps with a bundle of acetate sheets that one could overlay onto the spotty maps to try and work out if rainfall, altitude, geology etc. had anything to do with where a plant decided to grow. Predating computers by many years, County Recorders wielded Rotring pens and Letraset dots, filling in a square on a photocopied County map each time a letter arrived by post with new records.

Zen Colouring Book of Maps for Dummies™

Nowadays, despite marvellous online systems, you can't beat a bit of do-it-yourself with distribution maps. The Letraset dots have given way to spreadsheets and the hand-drawn maps and acetate sheets to GIS.

It's not difficult to make a start, full details of how to do it are posted on the DF Forum ( under the Stilt & Stalk scheme)


Current use of GIS in Dipterists Forum

A number of Dipterists are using GIS in some form or other. The majority of the schemes will have some means of examining the records they manage in a geospatial context.

Methods employed to do this fall into the following categories:

1. Spreadsheet routines
2. Output from biological recording applications (Recorder, MapMate)
3. BRC to make printed versions
4. Online (NBN Gateway)
5. GIS applications and other mapping tools

1. Excel spreadsheets

Malcolm Smart uses this, the methodology is described on a blog by Teresa Frost (

2. Recorder & MapMate output

Both these have some form of built-in map output, The mapping in Recorder is basic but it can produce a quick distribution map on the fly.

3. BRC atlases

A traditional role for BRC is to construct printed atlases.

4. Online systems

Not a DIY method either unless you're prepared to wait until you've processed all your data and uploaded it (which we encourage you to do so that others can access it). There is a way of grabbing data that's already uploaded to NBN Gateway so that you can use it in a GIS on your own desktop (see below).

5. Geographical Information System applications

Professional GIS applications have been around for a long time (ArcInfo, MapInfo) but due to expense the method of choice for many has been Alan Morton's **DMap** <http://www.dmap.co.uk/> which simply provides distribution mapping; Morton's website is very informative, read his tips whatever GIS you choose.

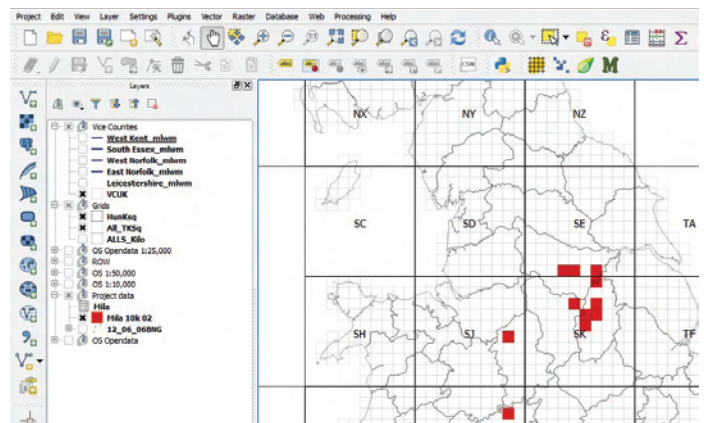
In recent years, some **free GIS applications** have become available to us. One that's straightforward is **MapWindow** (v5 just released. you can get the 64 bit version at www.mapwindow.org/). Not one especially favoured by naturalists but an excellent uncluttered interface that provides you with an easy introduction to GIS principles. Open Source and with a good online forum.

QGIS




QGIS (www.qgis.org/en/site/) has been widely adopted by naturalists. A versatile application, now used by several LERCs instead of commercial products.

The initial appearance can be daunting as it adds all conceivable tools as little icons on the menu bar, you'll only be needing a small handful of them initially so don't be put off. The main area is divided into two panels, to the left are your "acetate sheets", stacked in a sequence you choose and able to be turned on and off. The larger right-hand panel is your map.





QGIS project workspace displaying just Vice-County and Grid squares as an outline map plus distribution records of one taxon. See what I mean about the icons, I could only explain a third of them.

Large amounts of map outline data can be obtained free. World and UK outlines, Vice County boundaries, UK grid squares and a whole bunch of other Open Source data from OpenStreetMap and Ordnance Survey (limited availability ) , even Natural England for SSSIs and the like. If you're working at a County level, simply zoom in, start adding reserves, woodlands and such and get colouring-in.

According to the new adult colouring book fad it's meant to calm you down, with or without lavender-scented candles.

Extra tools for QGIS

Once you've developed a little familiarity with QGIS, take a look at "**FSC Tom.bio productivity tools for biological recorders**"  by Rich Burkmar of the Field Studies Council who has written a suite of plugin tools (Tom.bio) that provide an amazing number of useful mapping tools within QGIS that work on .txt data easily exported from your spreadsheets (or on data downloaded from NBN Gateway).

There's a write-up of this on NBN's website entitled "**QGIS - tools for biological recorders**"  and a number of Youtube videos where Rich shows you how to use them.

Tim Smith of Five Valleys Ecology is conducting training courses entitled "**Practical Open Source GIS**" (advert in British Wildlife) utilising QGIS, he's running them as a kind of tour around the country, check it out on their website.

Darwyn Sumner

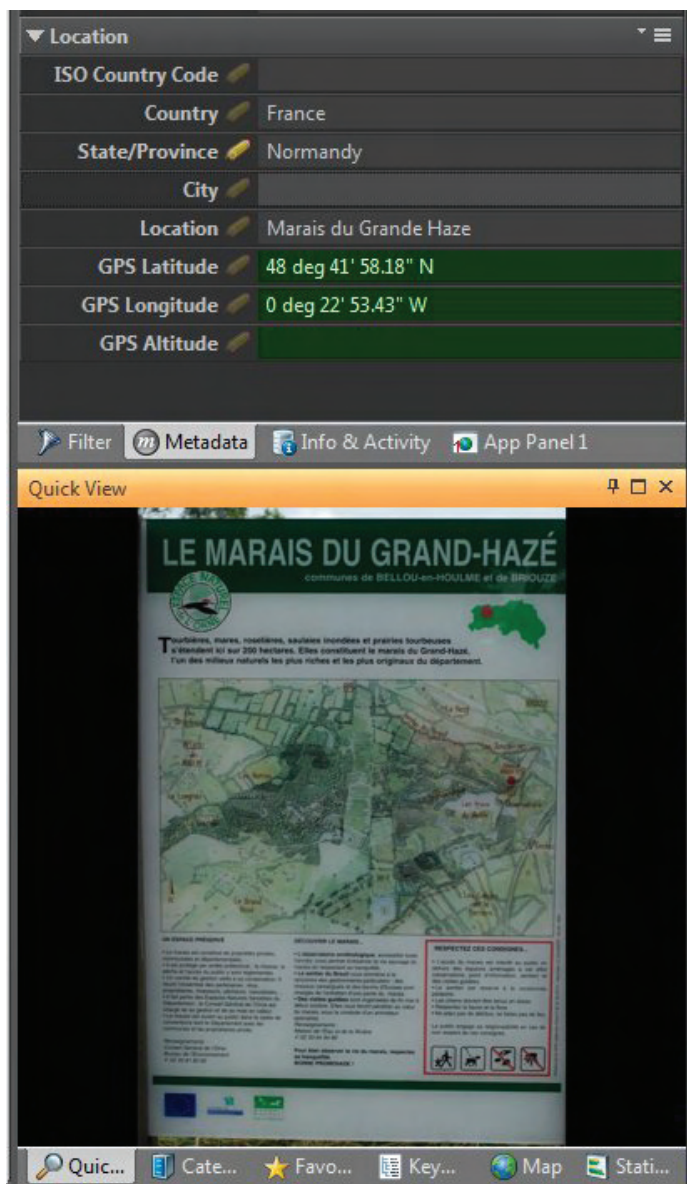
Photography

PhotoTools.com have updated their image management application iMatch to Version 5.5. Not as striking an upgrade as 5 was but there are a couple of new features you might find useful. One is a new facility to create prints of batches of thumbnails - portfolios (see example below), the other involves the topic of geotagging.

Geotagging

There are 3 fields in a digital image's metadata that are capable of storing Lat, Long and Altitude. You can get these put into your images via several methods:

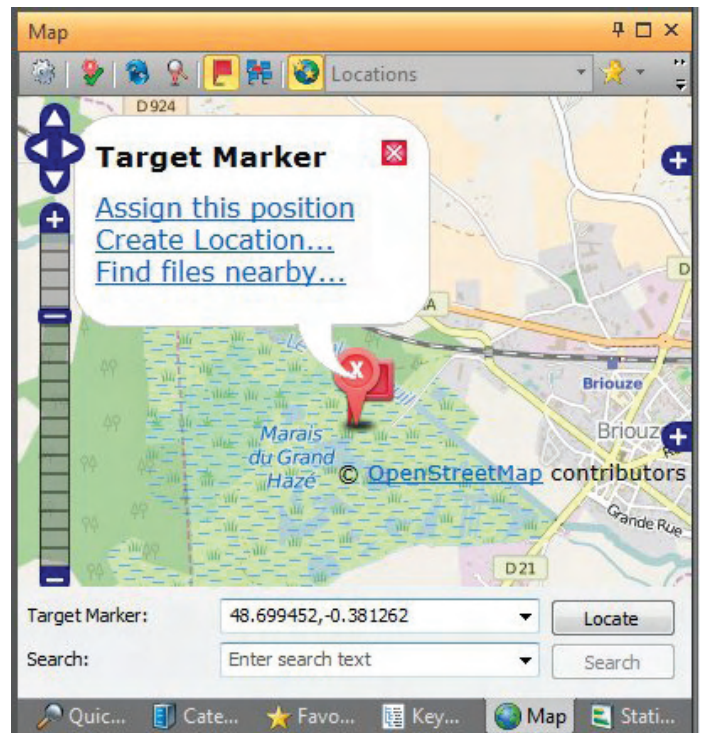
- your camera does it automatically,
- you buy a gadget that attaches to your camera that writes the data to your image as you take the shot,
- you use Garmin's Basecamp which will use time stamps on the saved tracks from your GPS to write Lat/Long onto images with the same time stamp.



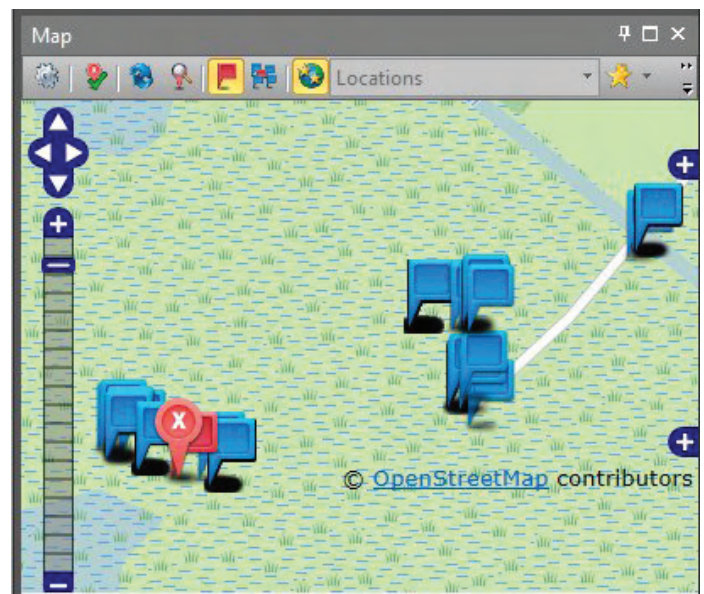
- use other applications (see <http://www.brighthub.com/electronics/gps/articles/62141.aspx>) such as Picasa 3, GeoSetter (both Google Earth compatible), Microsoft Pro Photo Tools 2 (which seems a bit like iMatch but not as good), and GeoImgr

- you tag in iMatch (helped by Google Earth or your saved tracks from GPS)

iMatch has an OpenStreetMap window (you can also enable Google Maps with satellite imagery); when you select a geotagged image a little flag pops up at the spot. This means, for example, you can then work out a location name and add that to your image. In the new version there's an option on the flag to seek out other pictures in your system within a radius you specify - and up they all pop as thumbnail images in a separate window ...



... which if you select them pop up as blue flags on the Map



There are a number of reasons why you might wish to consider geotagging your pictures,

- they are helpful when you are trying to organise your library of digital photographs,

- the photographs can be attached to maps either personal or online like Google Earth, and shared,
- if you post your photographs online, the geotag turns it into a biological record by adding location details
- they might form the basis of location details both at home and, especially, abroad where these Lat/Long details might be the only location record of your foreign catches
- they help you pinpoint locations you've visited, especially if you form the habit of photographing reserve signs and notice-boards everywhere you go,
- helpful to others if you submit pictures to a journal or magazine competition and don't state the location
- in published articles a Lat/Long in a picture caption is very good practise
- reduces the need to struggle with, or even buy paper maps (especially if you forgot to get all the right IGN maps on your visit to France - those little figures around the edges - so hard to get a good Lat/Long from them)
- use them in any of your biological recording/GIS work
- Museums archive collections of photographs, same as specimens (perhaps increasingly so in the future,) the value of yours will be substantially enhanced if they are geotagged

- enhance the value provided by your GPS device
- speed up your identification of Diptera in photographs by checking what was previously recorded nearby (with that new iMatch "Find files nearby" function)

Please note that geotagging is illegal in some countries.

[If you are in Normandy then do pay a visit to Marais du Grande Haze near Briouze, *Tanypeza longimana* is there in good numbers in late June.]

Photo appeal

Many thanks to Joan Childs, Alan Outen, Mike Pugh and others for responding to my appeal in the last Bulletin. We've now got a good resource of hoverfly pictures to draw upon for general illustrative purposes, they'll just crop up randomly to fill spaces from time to time alongside my photos and anything I have left from previous contributors and anyone else who'd care to contribute to the little image library ... anyone?



Output from iMatch portfolio function:

Joan Childs' collection (page 1 of 4)

There are several forms of "print" output from this iMatch function, once you've chosen the numbers of rows and columns. The one chosen here was a low resolution jpg file, a handy size for emailing



Output from iMatch portfolio function:

Reserve notice boards for geotagging



Cheilosia albipila, The Lodge, 14 Apr 13 [Joan Childs]



Chrysotoxum bicinctum being eaten by a crab spider, The Lodge, Sandy [Joan Childs]

The Dipterists Malaise, or Grandad's Special Fly Tent

Last Summer I bought a Malaise trap. That is such a simple statement, but the whole experience turned out to be far from simple. If you're thinking of indulging in such a thing yourself, you might like to read what follows before dipping into what's left of your bank account after Christmas.

I did a bit of research first, put "Malaise trap" into Google images and came up with a bewildering array of pictures. It appears that Malaise traps are as individual as dipterists – no two are exactly alike. How to choose one? I'd like to tell you that I went through a process of careful selection based on scientific principles and taking account of prospective locations, the nature of the expected catch and half a dozen other criteria – but in the end I actually picked one that *a*) looked quite nice and *b*) didn't cost too much. I ordered it on line from NHBS and waited. A month later, with no sign of it in evidence, I made the first of a series of phone calls which finally resulted in its arrival some six weeks after I ordered it.



An all-white version, Aldborough, Norfolk, 2002. (Ed)

I fished it out of its box. There was a quantity of gauzy material, some black and some white, fastened together in a complex manner, and fastened to a strip of metal with two plastic containers attached; there was a considerable length of white nylon string-type stuff presumably intended as guy ropes; there were six red plastic tent pegs. What was conspicuously lacking was any printed material – no instructions for erection, even ones translated from the Chinese by a first-year student of English, and not even a picture of what it should look like as a working artefact.

The description of my chosen trap had included the phrase "Pole not included", from which I deduced that I would need to buy one. So off I went to my local camping shop to buy a tent pole. "A what?" asked the yoof who had ambled over to me, "Whossat?" It was only then that I discovered that in the mere forty-odd years since I last slept in a tent, the design of tents has changed, and they are no longer triangular in cross-section with a pole at each end. Tent poles have gone the way of motor-car running boards and nine-inch television sets. Wickes came to the rescue with a length of steel tubing which I cut to the required length.

Now I should explain that I have a problem with 3D visualisation. If the rest of the world were as inept as I am in this matter, flat pack furniture would never have been invented. On the odd oc-

casional when I've had to deal with one of these ineffable puzzles I have relied on my lady wife passing me the next required bit, the proper screw, the right screwdriver and saying "Put it in that hole there". So I took the box and the pole out into my garden along with a selection of knives, scissors, hammers etc, found a flat bit of lawn, and attempted an experimental erection.

I won't go into the details. I am grateful that there was nobody around with a mobile phone to record the next bit for posterity. Laurel and Hardy, Frank Spencer, Marcel Marceau with a roll of invisible sticky tape, and Mr. Bean all flashed through my mind as I struggled. It took me a while to realise that it should be open at the sides and partitioned down the middle – a kind of sleeping compartment for outdoor-loving puritans. But in the end there it was – my very own Malaise trap – standing proud on the heavily trampled lawn. As I drank my well-earned ale it occurred to me that I might leave it *in situ* overnight, just to see whether it worked. So I unscrewed the collecting bottle, put an insecticide strip into it (I won't delay things by relating the saga of how I finally got hold of that) and screwed it back on. A couple of days later my granddaughters visited. Said the younger, "What's that?" Replied the elder, "Grandad's Special Fly Tent", and that's how

I now think of it.

The bit of garden where I'd put it appeared sterile – closely mowed grass surrounded by six-foot fences, a garage wall and a horrible cypress hedge that the Council won't let me replace – so my expectations were low. On the morning following my epic struggles, the trap contained something in excess of six hundred insects! Admittedly a large majority were aphids, but there were flies, wasps, bees, beetles, bugs and moths, all bound together in a matrix consisting of some mysterious powdery deposit which I later discovered was moth scales. (A statistical fact not well known is that a single moth bears enough scales to contaminate hundreds of other insects.) Disentangling and sorting the catch was several hours of work, back-breaking, but in the end rewarding. I will just mention one revelation among the many: I had my first detailed look at Cecidomyiids. The trap had caught half a dozen of them; tiny delicate midges, bright orange all over. A whole new world of Diptera to me.

A few days later I put up the trap in a meadow on the edge of woodland in my local nature reserve, and its catches occupied much of my time for the next three months. But that's another story.

Howard Bentley

Conservation

News from the Conservation officer

Brownfield sites

Following my request in the last edition for information on key, or flagship, fly species for brownfield sites, I am most grateful to John Coldwell for sending me a brief account of species found on brownfield sites in the Barnsley area. Many ex-colliery sites locally have been lost over the years but he spent some time in 2015 at the former Elsecar Colliery (SE 3900) and reported some of the more interesting Diptera to the local Planning Department.

Species of note, at a national or Yorkshire level, he has found at this site and others are: *Pachygaster leachii* (Stratiomyidae), *Solva marginata* (Xylomyidae), *Eudorylas obliquus* (Pipunculidae), *Cephalops pannonicus* (Pipunculidae), *Cephalops straminipes* (Pipunculidae), *Dorylomorpha fennica* (Pipunculidae), *Tomosvaryella palliditarsis* (Pipunculidae), *Dolichopus signifier* (Dolichopodidae), *Cheilosia nebulosa* (Syrphidae), *Heringia latitarsis* (Syrphidae), *Acanthophilus helianthi* (Tephritidae), *Campiglossa malaris* (Tephritidae), *Orellia falcata* (Tephritidae), *Herina nigrina* (Ulidiidae), *Melieria omissa* (Ulidiidae), *Geomyza subnigra* (Opomyzidae), *Anthomyza dissors* (Anthomyzidae), *Cnemocanthe muscaria* (Lauxaniidae), *Leucopis albipuncta* (Chamaemyiidae), *Parochthiphila coronata* (Chamaemyiidae), *Elachiptera austriaca* (Chloropidae), *Phytobia errans* (Agromyzidae), *Madiza glabra* (Milichiidae), *Siphonella oscinina* (Chloropidae), *Discomyza incurva* (Ephydriidae), *Parydra pubera* (Ephydriidae), *Botanophila dissecta* (Anthomyiidae), *Egle lyneborgi* (Anthomyiidae), *Egle subarctica* (Anthomyiidae), *Egle suwai* (Anthomyiidae), *Delina nigrita* (Scathophagidae), *Hydrotaea parva* (Muscidae), *Lispocephala brachialis* (Muscidae), *Angioneura acerba* (Calliphoridae), *Phyto discrepans* (Rhinophoridae), *Cylindromyia interrupta* (Tachinidae), *Subclytia rotundiventris* (Tachinidae), *Lophosia fasciata* (Tachinidae).

I should be grateful for further information on the special flies of brownfield sites.

Important Invertebrate Areas – Putting Bugs on the Map

Buglife is just starting a five year project to identify and map the UK's most Important Invertebrate Areas (IIAs), following on from Birdlife International's successful Important Bird Areas Project (IBAs), and Plantlife's Important Plant Areas (IPAs) programme. Once identified, IIAs will be the most important sites for the conservation of invertebrate biodiversity within a given geographical region. Although not a legal site designation, the information will still be of considerable use to a wide range of people, whether practitioners or policy makers, to prioritise action and conservation projects.

IIAs will be natural, semi-natural or naturalised sites which:

- support a nationally or globally important population of a species of conservation concern,
- exhibit exceptional species richness or a particularly rare or restricted (e.g. highly specialised) invertebrate assemblage, or
- feature an exceptional example of a habitat of national or global importance to invertebrate conservation.

The first step is to develop criteria for the identification of IIAs which are of relevance at both a national and international scale. Buglife will then work with partners to identify a network of IIAs

within the UK. I hope that the Dipterists Forum will be involved in both processes.

Neonicotinoids and wildflowers

Readers will be familiar with the considerable concern about the risks to non-target insects from these neurotoxic insecticides. Most research has focussed on the impact on honey bees. Until recently, the assumption was that most of the neonics brought back to hives was collected directly from the flowers of treated crops such as oilseed rape. However a recent publication from the University of Sussex has shown that 97% of the insecticide taken back to hives in June in fact came from wildflowers growing in field margins and hedges rather than from oil seed rape crops: in August, when the crop had finished flowering, all the insecticide came from wildflowers. Appreciable levels of the insecticides were also found in pollen from wildflowers growing beside treated winter wheat fields. The chemicals were present in nectar, albeit at much lower than in pollen, perhaps because the chemicals break down more rapidly in this aqueous medium.

Neonics are applied as seed dressings, so the route of contamination of wildflowers must be through the soil, the insecticides being highly persistent. Pollen from a sample hogweed *Heracleum sphondylium* had levels of the pesticide more than 10 times that of the adjacent crop. Hogweed is a favoured nectar source for many flies as are many other flowers associated with field margins and hedgerows.

The authors conclude that the application of neonicotinoid seed dressings to autumn-sown arable crops results in contamination of pollen and nectar of nearby wildflowers throughout the following spring and summer, and that wildflowers were the major route of exposure for bees in their study.

Although the levels of neonics brought back to hives from wildflowers and crops was below lethal levels, previous research has shown that they influence bee behaviour and reduce reproductive success. Surely there is a high probability that use of these insecticides must be responsible in part for the decline of many flies, including hoverflies, noted in intensively farmed landscapes? The benefits of sowing wildflower margins alongside arable crops is also open to question.

The full reference is C. Botías, A. David, J. Horwood, A. Abdul-Sada, E. Nicholls, E. Hill & D. Goulson. 2015. Neonicotinoid Residues in Wildflowers, a Potential Route of Chronic Exposure for Bees. *Environ. Sci. Technol.*, 2015, 49 (21), pp 12731–12740

UK BAP & **Adopt a species**

Species news from fly guardians (adopters) and BAP species contacts

My thanks to Paddy Saunders, Martin Drake, Iain MacGowan, Andy Godfrey, Ian Andrews, Judy Webb and Steven Falk for providing text of information for use here.

***Asilus crabroniformis*, the Hornet Robberfly (Rob Wolton)**

Since my request in the last edition for information on recent sightings of this fly, I'm pleased to say that it seems to have had a good year on the south Devon and Cornwall coasts (and perhaps elsewhere too?). At a Devon Fly Group meeting to National Trust land near Bolt Tail on the south Devon coast in September, we were delighted to see four within just ten minutes on a cattle-grazed gorse slope not far from the sea, and Andrew Cunningham found three more on cowpats at nearby Soar Mill Cove ten days later. Meanwhile Paddy Saunders reports seeing good numbers over the last 2 years at two sites in SE Cornwall in September, one near Fowey and the other at Rame Head near Plymouth Sound. In 2015 he had one turn up near Looe. At these Cornish sites they are associated with pony dung, on land managed under Higher Level Stewardship agreements. Still in Cornwall, in late August this year, Martin Drake saw about four adults at St Anthony, on herb-rich cattle grazed pasture near the shore.



Hornet robberfly *Asilus crabroniformis* on finger, Starehole Bottom, Bolt Head, 12 Sept 2014, Rob Wolton

***Blera fallax*, the Pine Hoverfly, and *Hammerschmidtia ferruginea*, the Aspen Hoverfly, by Iain MacGowan**

The annual BAP steering group meeting dealing with these two species was held in Inverness on 9th November. In attendance were Anne Elliott (SNH), Iain MacGowan (SNH), Pete Moore (RSPB), James Silvey (RSPB), John Parrot (Coille Alba), Jane Sears (RSPB), Athayde Tonhasca (SNH), Hayley Wiswell (CNPA), and Roisin Campbell-Palmer (RZSS).

Blera fallax

At the core site partial monitoring of the 43 newly cut stumps took place in October – in total 20 of the holes were examined – all were in good condition but only three third instar *Blera* larvae

were found, all in the one hole. Other first instar larvae were present but too small to distinguish from the very similar *Myathropa florea*. The survey was carried out later in the season than we had hoped and it is possible that some mature larvae had already left the breeding sites.

A report was given on the captive *Blera* larvae held at Edinburgh zoo that were taken from Finland by Graham and Ellie Rotheray in May 2015. There are currently 23 larvae at the rearing facility and these appear to be doing very well. They have been split into a number of jars and provided with chips and sawdust. It was agreed that a larger number of specimens would be needed for genetic viability if these specimens were to be used for rearing on more larvae in the long term.

Recently published paper: E. I Rotheray, D. Goulson & L.F. Busiere. 2015. Growth, development, and life-history strategies in an unpredictable environment: case study of a rare hoverfly *Blera fallax* (Diptera, Syrphidae). *Ecological Entomology* (2015). Published online at DOI: 10.1111/een.12269.

Hammerschmidtia ferruginea

Five aspen stands were surveyed for dead wood in Strathspey during the summer by two volunteers using the standardized monitoring protocols and a report was presented to the group. At present the dead wood situation is good with dead wood levels being generally high. Detailed examination of dead wood in northern Strathspey indicated that larval numbers were high during the autumn. A survey carried out by RSPB at Insh Marshes noted that suitable dead wood was rare in summer 2015 but that fresh dead trees were already entering the system. As part of an initiative to increase the training for surveyors and raise awareness with landowners a short video has now been produced which shows how to monitor for *Hammerschmidtia*, identifying the appropriate size of tree and the correct conditions for larval development. This video will in due course be available to view online.

An excellent article has been published by Graham Rotheray, Iain MacGowan, Ellen Rotheray, Jane Sears and Anne Elliott in the October 2015 issue of *British Wildlife: Conserving the aspen hoverfly*. *British Wildlife* 27(1), 35- 40.

***Lipara similis*, Least Cigar-Gall Fly (Robert Wolton)**

This species, one that forms galls on the stems of common reed, has turned up in Devon this year, Martin Drake and I each finding single specimens, a male and a female, at the Devon Wildlife Trust's Old Sludge Beds reserve, on the outskirts of Exeter, on 29 June this year. This reserve has extensive reed beds. A couple of days later, on 1 July, Martin swept a female from a seepage on soft coastal cliff with sparse stressed reed and sallow scrub near Axmouth Harbour, also in Devon.

This UK BAP chloropid was formerly known from only three sites in East Anglia (Wicken, Chippenham and Woodwalton Fens) but is now known also from Redgrave and Lopham Fen on the Suffolk/Norfolk border, two sites in the New Forest, Hampshire, and the above two sites in Devon.

***Lipsothrix* - yellow splinter craneflies**

Andy Godfrey has drawn my attention to a paper by Matthew Petersen (Roanoke College, Salem, USA) which provides a detailed account of the evolutionary history of the genus. British material was used in this research. The paper includes male genitalia diagrams for most (possibly all) of the British species, including those for the four which are UK BAP species (*ecucullata*, *errans*, *nervosa* and *nobilis*). Full details are: Petersen, M. (2015). The evolutionary history of *Lipsothrix* Loew (Diptera: Tipuloidea) inferred through systematic revision and historical biogeographical

analysis. *Invertebrate Systematics* 29: 239-286. The paper can be downloaded for free on the ResearchGate website (you have to be a member, but this is also free).

***Odontomyia hydroleon*, the Green Colonel, by Ian Andrews**

Following unusually high numbers of *O. hydroleon* seen at its only British site, Seivedale Fen in North Yorkshire in 2013, the species was not located in 2014 or 2015. Summer 2014 was unusually warm early on and anecdotal evidence suggests that the flight season of many flies finished far earlier than usual as a result. It is possible that the species also emerged earlier than normal, and so visits at the usual peak period of the second week of July could have missed it (many other species were also very thin on the ground at the same location at that time). However, in 2015 conditions were apparently suitable for the species and yet visits across the first three weeks of July failed to locate any adults, in spite of searching for hovering males and sweeping in the usual spots. While this is concerning, it is still possible that the species is there but was not located. The site does seem to have deteriorated somewhat in terms of drying up and being overgrown by rushes, coinciding with a hiatus in the management of the site due to staff changes within the Forestry Commission, though the exact reason why is not clear. Winter 2015-16 has seen the return of cattle to the site thanks to the efforts of a new Forestry Commission ecologist and the springhead at the main site has been opened up manually, which has already produced more water across the main seepage. Monitoring is ongoing.

***Stratiomys chamaeleon*, Clubbed General Soldierfly by Judy Webb**

My rearing studies on large soldierflies from Cothill Fen SAC, Oxon, continue to produce surprises. On 27th July last summer I collected a *Stratiomys* puparium from the surface of a *Chara* alga pool in a peat cut area at Parsonage Moor SSSI. It was kept on damp moss in a rearing pot, hoping for either a *Stratiomys chamaeleon* or a *S. singularior* (the Flecked General) adult fly to emerge (these are the two species I have reared from these shallow *Chara* pools before). Another possibility, on past experience, would be the emergence of a single large chalcid wasp parasite, *Chalcis sispes*.

However, I noticed on 9th August that large numbers of very small metallic green wasps had emerged through a hole on the back of the puparium. Such parasitoids had not before been reported from *Stratiomys* sp., so I put some in alcohol and passed them to Chris Raper to take to the relevant hymenoptera expert at the NHM. They proved to be Pteromalidae, specifically *Pezilepsis dentifera* (Thomson, 1878) determined by Natalie Dale-Skey Papilloud of the NHM and confirmed later by a pteromalid expert. A species new to Britain **and** on a new host – therefore a contribution to knowledge about the ecology of the pteromalid species and its host soldierfly! No material of this species was in the NHM collections, so all specimens are staying there.



Photographs of *Pezilepsis dentifera*, male top, female bottom – not to scale, by Natalie Dale-Skey Papilloud, copyright NHM. Both sexes about 2mm long.

According to Natalie the biology of this pteromalid appears to be largely unknown: there is nothing in the original description, or in later records - the only information found so far is a mention that “the female goes underwater to oviposit in hosts in submerged decaying wood” and that it is “widespread in Europe but local, in marshes with *Phragmites*”. The host soldierfly at Parsonage Moor is most likely to be *Stratiomys chamaeleon* but really there is no way of being sure of this as several *Stratiomys* species have similar larvae and puparia. Perhaps DNA analysis would enable us to distinguish between them.

It is of course not yet possible to know if *Pezilepsis dentifera* is a recent coloniser from somewhere in Europe, or perhaps it has been living at Cothill Fen for years, but simply no-one had identified it. I hope to continue my rearing studies of soldierflies from this site next year. I’m grateful to both the Berks, Bucks and Oxon Wildlife Trust (BBOWT) and Natural England for permission to remove small numbers of mature *Stratiomys* larvae and puparia for rearing study over the past couple of years.

Extinct flies rediscovered

2015 has been a good year for re-finding flies presumed to be extinct. My record of *Raphium pectinatum* from near Exeter, as reported in the Empidid & Dolichopidid recording scheme newsletter (No. 20) in the last edition of this Bulletin, was the first since

1868, while Steven Falk has re-found *Palloptera laetabilis* at the Den of Airlee, Angus – probably the first record since 1908 and new to Scotland. Let us hope that this good news is not offset by the loss of *Odontomyia hydroleon*, the Green Colonel – see Ian Andrews' worrying report above.



Paloptera laetabilis, Fem, Den Of Airlie, Steven Falk

Incidentally, Steven Falk has now left Buglife and is working freelance, hoping to develop pollinator advisory work, including audits, plans and strategies.

Rob Wolton

Members Membership Matters

By Mid December 2015 we had 352 paid-up members. This is about 60 more than in July but still less than we had at the end of 2014. In 2015 37 new members joined and 6 more have joined to start in 2016. Although we have had one or two resignations, and, sadly, members passing away, the main loss seems to be down to people who did not change their standing order when we moved bank accounts. We have written to all of these people and that did lead to surge towards the end of the year. I hope a few more will catch up in 2016.

I do urge all members to keep up to date with subscriptions, which fall due on 1st January each year. I am happy to answer any email queries about subscriptions if you are not sure you have paid.

All subscriptions, changes of address and membership queries should be directed to John Showers at:

103, Desborough Road,

Rothwell,

KETTERING,

Northants,

NN14 6JQ

Tel.: 01536 710831

E-mail: showersjohn@gmail.com

Membership & Subscription Rates for 2015

Members and Subscribers are reminded that subscriptions are due on 1st January each year. The rates are as follows:

UK

Dipterists Forum: £8 per annum. This includes the Bulletin of the Dipterists Forum.

Dipterists Digest: £12 per annum.

Both of above: £20 per annum

Overseas

Dipterists Forum and Dipterist Digest: £25 pa.

There is only this one class of membership. Payment must be made in Pounds Sterling.

Cheques should be made payable to "Dipterists Forum".

BANKERS ORDER PAYMENTS

You can set up a banker's order or bank transfer to pay the subscription via online banking using the following details:

Dipterists Forum

NatWest Bank

Sort code 60-60-08

Account no. 48054615

Please add your name to the payment reference or we will not know from whom the payment was made.

Alternatively you can send your bank the banker's order mandate form, which can be found on the DF website. This form explicitly states that it cancels previous payments to Dipterists Forum.

John Showers

Dipterists Forum Forum “Dipterists Forum”

Ken Merrifield draws my attention to interesting threads that crop up from time to time on our website’s Forum, here’s one illustrated with Ken’s picture:

Alternative Specimen Storage Methods



<http://www.dipteristsforum.org.uk/t4855-Alternative-Specimen-Storage-Methods.html>

The **Identification** section is extremely busy, well worth visiting regularly even if the topic isn’t of immediate interest, some of those threads can turn out to be very informative. Messages there tend to scroll away very rapidly so if you’ve something you want to draw to the attention of a scheme organiser, pop a link to the topic in their **Recording Scheme** section or enter it on iRecord.

More sections on our forum would be useful, the topics of **Mapping (aka Biogeography)**, **Biological Recording** and **Photography** crop up a lot.

Identification section

One thing you can be certain about with postings in this section, or at least those that have been replied to, is that they are verified to the best possible extent. A potential source of good records for the respective Recording Scheme then? Not necessarily so.

The “unread” flags to the postings are easily lost and the posting gradually drifts down the list into semi-oblivion and aren’t easily retrieved by search routines.

Did they contain enough information to constitute a record? (location, grid-reference, date). How would I find them all? Did the identifier inform the Recording Scheme organiser? Are all those posting identification queries regular contributors to the Recording Schemes?

Darwyn Sumner

In mid September 2015 Alan Stubbs made a formal proposal to the Dipterists Forum Committee as follows:

- That the name ‘Dipterists Forum’ was expedient when adopted but does not convey the fact that the Form now operates as a national society with a wide range of activities.
- That the Dipterists Forum Committee give early attention to deciding on a new name.
- That ‘British Fly Society’ be adopted,

The committee considered that this discussion should be opened out to all members:

Judy Webb

An alternative name for the Forum?

In my view our society and our work will attract more interest, and more novices, if we take on an additional, more easily understood, name. So I am writing in support of Alan Stubbs’s proposal.

I say this with some trepidation since I have only been a member for seven years and don’t wish to rock the boat unnecessarily. But I feel I have to speak out. I’m dismayed at the look of blank incomprehension I so often receive when people hear our name, and how the first line of any press release has to explain what it is that we do rather than start the story. I am proud of belonging to the society and its achievements, and want us to have a name that facilitates understanding rather one which acts as a barrier.

Nowadays, to most people a forum is akin to a chat room, while they have no idea what a dipterist is. The whole thing sounds desperately unexciting or highbrow – perhaps even elitist. So, I have to explain – we are the society for the study of flies. That, by the way, is the strap line we use on our website – the Society for the study of flies.

The majority of people I speak with, of all ages, are actually intrigued, sometimes fascinated, by the idea of others being passionate about flies. Far from shying away in disgust they want to know more. They have, though, not the least interest in Diptera! We ourselves should not shy away from using the word fly. There are far fewer people out there who think the only good fly is a dead one than we fear.

So why not have an alternative name? One which the common man can understand? My personal favourite is simply The British Fly Society, but am open to others such as the British Society for Flies – although this sounds like you have to be fly to be a member, or perhaps that we stand only for the rights of oppressed flies!

I must stress I am not proposing doing away with the name Dipterists Forum altogether – we can have two names, just as Buglife is also the Invertebrate Conservation Trust. Then we can pick whichever is most suitable to the audience concerned.

Rob Wolton, Conservation Officer

What’s in a name?

Thoughts about who we are

There has recently been some discussion among the Dipterists Forum Committee and a few other people about the name of our organisation. The discussion was initiated by a document from Alan Stubbs, in which he argued that the name “Dipterists Forum”, while appropriate at the time when the Forum was founded, is now out-dated and should be replaced. Both words in the title are objected to, “Dipterists” on the grounds that this is “a jargon

term [which] creates a barrier in promoting interest in the study of flies”, and “Forum” because that “could be construed as an inwardly looking discussion group”. Alan’s preferred alternative is “The British Fly Society”.

I wish to argue for the inclusion of “Diptera” or some derived word such as “Dipterists” in our title. Readers of this bulletin will know the meaning of the word, and anyone exploring our literature, looking at our website or just googling for information about flies will soon get to know it. It has the great advantage of having a precise and unambiguous meaning. I have heard it argued that the general public doesn’t know what Diptera are but knows perfectly well what a fly is. The first of these statements is true, but what about the second? How many people know that midges, craneflies, hoverflies, mosquitos, horseflies and so on are flies (in the sense in which we mean it) while greenfly, whitefly, caddis flies, mayflies, damsel flies etc. are not? Also, in the minds of many (perhaps most) people the word “fly” has negative connotations; the immediate response to it is “yuck”.

As to “Forum”, I admit that I am on shakier ground here. The argument is that younger people, or older people who are conversant with social media, understand the word in a different way from what is understood by ancient fogeys like me. And yet the modern definitions of the word given in my Chambers Dictionary are “a publication, regular meeting etc. serving as a medium for debate; a location on the World Wide Web where people may exchange views and information, usually about a specific subject”. Is this not precisely what we are?

Another argument was put to me by a former chairman of DF, who said that during his time as chairman he had striven to give the Forum an international reputation as a source of reliable information about flies. He believes (and so do I) that we actually have such a reputation, principally through the international distribution of the Dipterists Digest, and that the continuing use of the name by which we have become known is necessary to preserve that reputation.

Finally, I have a practical objection to changing our name. We have recently changed our bank account, and our subscriptions. Simultaneous with those changes has been a loss of membership of about 80. I have no proof that the former is the cause of the latter, but I would be very surprised if that were not the case. Many members who paid by standing order or direct debit have had their subscription instructions rejected by their banks as a direct result of the changes to our bank and our subscriptions, and have either been unaware of that or have not got around to remedying the situation. A change of our name would duplicate this problem.

Let us proudly retain the name “Dipterists Forum”. Google searches around the topic of flies will lead many to our website where they will see the subtitle “The Society for the Study of Flies”. Where’s the problem?

If you wish to contribute to this debate please write to the editor of this publication.

Howard Bentley, Chair

Diptera is not a jargon word

– in support of keeping Dipterists Forum as the name of the Society, while retaining “The Society for the Study of Flies (Diptera)” as an alternative strap line

The present name

“Dipterists Forum” was originally coined to avoid using the word “Society” as it might have been construed as a rival to the BENHS

while seeking affiliation to that Society, as explained by Alan in an article published in that Society’s journal in 1995 (8: 121-124), and also in the Dipterist’s Handbook (2010, pp 62-63). Alan doesn’t say what led the initial committee (comprising himself, Stuart Ball and Martin Drake) to select “Forum” but they were, perhaps unwittingly, ahead of the time in choosing such a modern concept, albeit one derived from classical antiquity.

The concept of a forum may have changed a little in the 20 years since then, but it is perhaps more widely understood now since the development of the internet. I suggest that usage of the website, and the way the Bulletin content has progressed, have made the term “Forum” even more appropriate now than it was when first proposed. It certainly doesn’t imply a small inward-looking group, but the exact opposite – an opportunity for an exchange of ideas on a wide scale, welcoming all comers.

Societies, on the other hand, have become a rather dated concept, rooted in the 19th century. The designation of an interest group as a “Society” may therefore be off-putting to some, especially potential younger members, so any alternative name including “Society” is unlikely to be more attractive or appealing than “Forum”.

Anyone who takes an interest in flies quickly realises that Diptera is the scientific name of the Order that distinguishes two-winged flies from other insects that have English names that include “fly”, and that dipterists are people who study them. It would be an insult to the intelligence of potential members to suggest otherwise, and neither word could be sensibly defined as jargon.

The existing alternative name

The proposal to change the name to “The British Fly Society” apparently overlooked that we already have an alternative name heading our website, i.e. “The Society for the Study of Flies (Diptera)”. This was well chosen by Stuart when setting up the website as it provides a clear explanation of what Dipterists Forum is, and entering this or part of it (“Flies” and “Society” are enough) on an internet search immediately reaches our website.

The most obvious advantage over “The British Fly Society” is that because “Flies” is plural it is unambiguously clear that it refers to insects. There are about 17 non-entomological meanings of the word “Fly”, and there are of course many insects with four wings with English names including “fly”, such as sawflies, barkflies, riverflies and scorpion flies, and there is already the British Dragonfly Society. If we made the proposed change of name it would be necessary to qualify it in some way to indicate its restriction to two-winged flies, as in the addition of “(Diptera)” as above.

The existing alternative name also has a second advantage of not including any national definition in the name, and is consequently welcoming to anyone interested in Diptera. I disagree that there is any presumption in this of becoming a World Society, but we do have a number of members outside the British Isles and I would hope that their number increases. Dipterists Digest has also become increasingly international in covering the Palaearctic fauna.

When the British Entomological and Natural History Society changed its name from the “South London” in 1968, a change which I supported at the time, this was to widen its appeal and recognise that it was a national society that had long outlived its East, North and West London rivals. They had all existed before its foundation in 1872, but it differed from them in being the first not to meet in a pub. However, it had already had a national membership through most of its history, so it is surprising that Alan didn’t learn of its existence and location earlier from work colleagues or his contacts at the Natural History Museum, many of whom were members.

Although its national allegiance might be construed from its affiliation to BENHS, Dipterists Forum wisely avoided such a designation from the start. To add “British” now would be a retrograde step. For example, in the Digest I stringently restrict “British” geographically to refer to the island of Britain and avoid use of UK, which also includes Northern Ireland, where Britain is meant by the author. Any such problems of national identity are avoided in our present two alternative names, and we should continue to apply that principle.

There is of course a “North American Dipterists Society”, which has a rather larger geographical coverage, and the corresponding Society in Germany is called “Arbeitskreis Diptera” – its nationality only indicated by the language. Neither felt the need to omit reference to Diptera, and Arbeitskreis can be translated as Study Group.

It has been suggested that inclusion of the word “Study” makes us sound too academic, but it provides a succinct definition of what we do. To qualify it to cover all our activities would require more words of explanation – unless somebody can think of a more appealing one word alternative that means the same.

While I propose that we should retain this existing explanatory name as a strap line, I would not support it replacing Dipterists Forum as the primary name for the above-mentioned reason of the perception of the word “Society”, which may also be ambiguous in meaning.

The implications of a change of name and conclusions

Those who have had difficulty explaining what Dipterists Forum is about, will if such a change takes place find themselves having first to explain that the Fly Society is about insects and then what sort of flying insects it includes. Even when that is understood, “Fly Society” is likely to have a negative connotation with the general public, whose perception might not extend beyond the more unsavoury habits of some muscids and calliphorids. Journalists will pay little attention to accurate reporting – whatever the name might be.

We are not likely to acquire many new members among those who come across our website accidentally while looking for the latest news on fly-fishing or the cheapest holiday flights. However, the most prominent entries on the internet relating to “Fly Society” concern a brand of men’s wear based in Los Angeles. A range of tee-shirts with “Fly Society” logos is already available.

If a change of name were thought necessary because we are not attracting sufficient younger members, I suggest that we should do this through the Bug Club, established as a junior branch of the AES, which is now managed jointly by the AES and BENHS. The Bug Club Magazine includes occasional items on Diptera, but we could improve on that with regular contributions by those of our members who wish to awaken this interest. That of course would require commitment that might be difficult to sustain, but it would be preferable to dumbing down the name of Dipterists Forum to a Fly Club equivalent.

Change to the “British Fly Society” would inevitably invoke amusement and satire from other entomologists.

Dipterists Forum is widely known and respected for what it has achieved, and the name should not be abandoned for what might seem expedient reasons. We have already apparently lost some members due to confusion over amending standing orders following our recent change in bank account, and this could be further compounded by a change in name.

The name of the Digest

When the proposal to change the name of Dipterists Forum was brought before the committee, I was assured that, whatever was decided, it would not affect the name of the journal, so I was surprised that Alan has now included a suggestion that this should also change.

I strongly oppose any such change, which at the very least would result in confusion among librarians, as has happened with some recent name changes of entomological journals (especially if journals are arranged in alphabetical order as in the BENHS library). The only worse thing you can do from a librarian’s point of view is to change the size of a journal, which has also happened recently with several well-known entomological journals, including one on Diptera.

I disagree that the name is unappealing. It may appear quaint and could be the reason why relatively few museum and university libraries recognise that it might be a scientific journal, and therefore may not consider that it should be added to their regular subscriptions. This is best addressed by better publicity and continuing efforts to maintain its quality – not by a change in name.

**Peter Chandler,
Editor Dipterists Digest**

Review

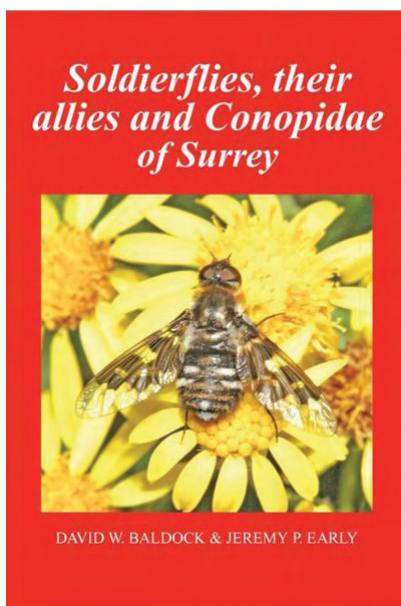
Books

Diptera

Identified Flying Objects

According to Christopher French, a psychologist investigating UFOs, the majority of UK sightings of Unidentified Flying Objects originate in Surrey (Off the Page, BBC Radio 4 extra, 23rd Dec 2015, 18:30). Rather less “unidentified” were the flying objects that Alan Stubbs and Roger Morris recorded in Surrey when they lived there. Their sightings began a series of publications by Surrey Wildlife Trust that set the scene for a number of excellent books.

Picking up these reins, David Baldock (after writing *Bees of Surrey* and *Wasps of Surrey*) began to work on the 2000 draft of *Soldierflies & Conopidae*, later joined by Jeremy Early and his photographs.



Don't be fooled into thinking that the restricted geographical coverage of this book makes it of less interest than one with full UK coverage. Surrey happens to have a particularly rich fauna and there are many other reasons why this book deserves a place on your shelves:

- Excellent species descriptions, in particular I found the notes on recognition in the field and behavioural descriptions very useful
- Historical notes fascinating, especially the account of the extinct *Clitellaria ephippium*.
- The focussed survey turned up many new and rediscovered species to the county, this part of the book is well written, a format for surveys in other counties perhaps?
- Colour photographs - there's enough there for an enthusiast to get to grips with most of the UK species
- Conopids! - the first book I've seen with a set of photographs of this Family and again, Surrey has all but 4 of the UK species.
- Conopid species descriptions and observations again to the same standard, and for this Family, this stuff is totally new in book form.

All species accounts are soundly accompanied by maps. I'll be seeing this book amongst the collections that dipterists take with them on our Dipterists Forum Field weeks - if only for the Conopids.

David W. Baldock & Jeremy P. Early

Soldierflies, their allies and Conopidae of Surrey

ISBN: 978-0-9556188-5-7

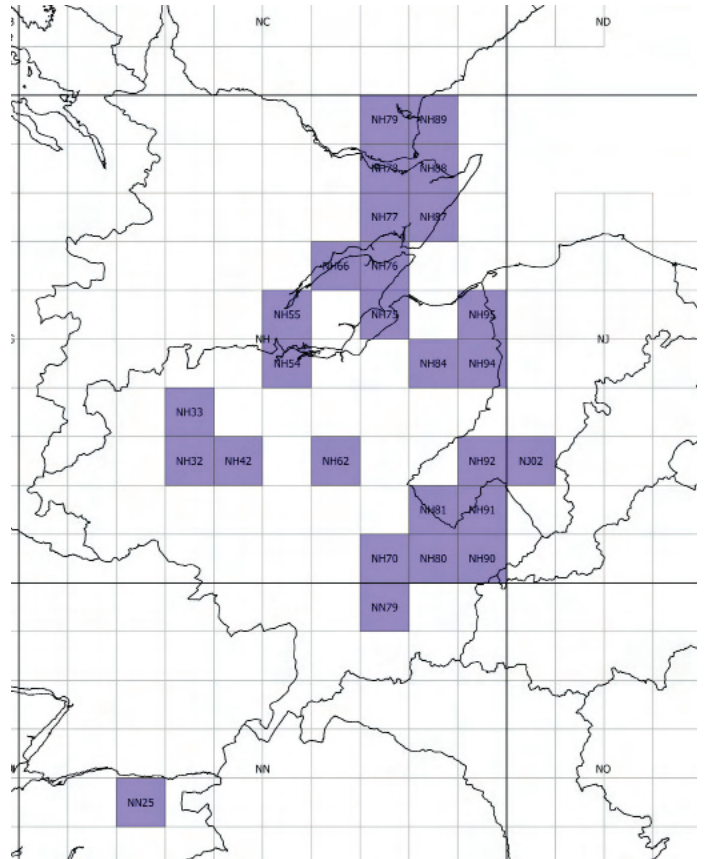
Surrey Wildlife Trust, 2015, hardback, 32 colour plates, 208 pages, £18

Darwyn Sumner

Recording

Dipterists Forum Meetings

Dipterists Forum Field Meeting, Inverness, 2002



10Km squares recorded during the week. Recorders: Paul Gatt, Richard Underwood, Ken & Rita Merrifield, Darwyn Sumner.

Orientation: Vice County boundaries (anticlockwise from top centre) East Sutherland, East Ross, Easternness, Moray, Main Argyll in the South West

Tomorrow's Biodiversity

Rich Burkmar of the Field Studies Council is spearheading a project to help identify gaps in biodiversity monitoring and barriers to wider uptake and participation in biodiversity monitoring.

He's giving a presentation on the project at the Leicestershire Recorder's meeting in February, just up the road from me.

[Web Links section of DF Forum](#)

Websites

There have been conversations amongst Dipterists Forum members about our website. All very speculative at this point in time so a look at websites with similar objectives and of a similar size to ours could be worthwhile.

Sites of a similar scale would be something in between the large BSBI/RSPB sites and the small sites set up for our individual Recording Schemes.

Two that spring to mind are the **British Dragonfly Society** (www.british-dragonflies.org.uk/home) and **BWARS** (www.bwars.com/). Each have some very nice features. On the BDS site the “Upcoming events” is very practical, allowing members with appropriate access to post details of events. On the BWARS site there’s a very good online system for submitting records of certain species of interest (e.g. *Vespa crabro*) - their special projects. Both have some terrific resources (bibliographies, downloads, recording methods, maps, galleries etc.) and both are doing a good job of dealing with identification requests (as are we.)

A lot of the stuff we’re still dealing with on paper (this Bulletin) they’re doing online (I should know, it’s me that deals with it all.)

We have an edge with our online Forum and an additional feature that we have to deal with is our plethora of individual Recording Schemes and Study Groups.

Darwyn Sumner

Online Publications

Natural history’s place in science and society

Tewksbury, J.J., Anderson, J.G.T., Bakker, J.D., Billo, T.J., Dunwiddie, P.W., Groom, M.J., Hampton, S.E., Herman, S.G., Levey, D.J., Machnicki, N.J., Del Rio, C.M., Power, M.E., Rowell, K., Salomon, A.K., Stacey, L., Trombulak, S.C., and Wheeler, T. a. **2014. Natural history’s place in science and society.** *Bioscience* 64: 300–310

( Publications section of DF Forum)

The term Naturalist seems to be used more broadly in the US, being applied to any scientist required to have knowledge of the natural world. Here in the UK it tends to be less cross-disciplinary, the term began to refer to a caste division between the amateur and the professional (Barber, 1980) and gave rise to a community which doesn’t exist elsewhere in the form with which we are familiar.

Chris Thompson (2010) of the Smithsonian Institution remarked on this when he told us that public involvement in the science of Natural History is so much older and more active and productive in the UK than in the US.

Accordingly it proves difficult for a UK naturalist to identify with the term “naturalist” in this paper - we are in there, but not dealt with as a category.

Notwithstanding, the authors of this US paper deal with Natural History in its broadest sense, familiar to all regardless of which species of naturalist we happen to be. They discuss its decline as an essential background discipline in respect of its impact in a wide range of sectors such as medicine, agriculture, academia, museums, food security, water quality, health, recreation and conservation.

Neglect of Natural History is having an impact throughout the world, this paper provides a very valuable global perspective on the decline.


References & background reading:

Chris Thompson 2010. Dipterology, Yesterday, Today and Tomorrow. *Bull. Dipterists Forum* 69: 19

It wasn’t included in our account of Chris Thompson’s talk **Dipterology, Yesterday, Today and Tomorrow** at our 2010 AGM but I recollect a slide which showed the distribution of active dipterists across the world, like a night-time picture from space with lights showing bright in the UK and some spots in western Europe but rather scattered elsewhere. Not surprising since Chris told us that more than a quarter of all diptera occurrences in the world are from the UK.

Barber, L. 1980. *The Heyday of Natural History*. Jonathon Cape Ltd, London
Heath, J., and Leclercq, J. 1981. *Provisional Atlas of the Invertebrates of Europe: Maps 1-27* Institute for Terrestrial Ecology

Biological Recording: Mapping species distributions

van der Wal, R., Anderson, H., Robinson, A., Sharma, N., Mellish, C., Roberts, S., Darvill, B., and Siddharthan, A. 2015. **Mapping species distributions: A comparison of skilled naturalist and lay citizen science recording.** *Ambio* 44 Suppl 4: 584–600
( Web Links section of DF Forum)

A truly fascinating article, well worth a read. What caught my interest however was that whilst the introduction described several concepts of “citizen science” recording, all the examples are UK-based. If you’re recording in the UK you’ve access to a huge variety of tools both desktop and online. If you’re elsewhere all you’ve got is institution-based online publishers (e.g. GBIF, EOL, not in the article) - and they’ll only take on “Biocollections Data Publishers”, which, with the exception of the UK’s NHM, BRC and NBN (theoretically), don’t provide their citizens with any tools to get involved*.

Lord Selborne speaking at the recent Lord’s World Biodiversity Debate stated “*Other parts of the world clearly do not have access to the same amount of records as we have.*” Could the reason for this be the endemic UK species of naturalist, the “skilled naturalist recorder” who paved the way for the modern cybernaturalist and achieved this long before the online digital revolution.

Abstract: *To assess the ability of traditional biological recording schemes and lay citizen science approaches to gather data on species distributions and changes therein, we examined bumblebee records from the UK’s national repository (National Biodiversity Network) and from BeeWatch. The two recording approaches revealed similar relative abundances of bumblebee species but different geographical distributions. For the widespread common carder (*Bombus pascuorum*), traditional recording scheme data were patchy, both spatially and temporally, reflecting active record centre rather than species distribution. Lay citizen science records displayed more extensive geographic coverage, reflecting human population density, thus offering better opportunities to account for recording effort. For the rapidly spreading tree bumblebee (*Bombus hypnorum*), both recording approaches revealed similar distributions due to a dedicated mapping project which overcame the patchy nature of naturalist records. **We recommend, where possible, complementing skilled naturalist recording with lay citizen science programmes to obtain a nation-wide capability, and stress the need for timely uploading of data to the national repository.***

* There is a handful of examples where the gulf between Biocollections Data Publishers and “citizen scientists” is bridged. Atlas of Living Australia is an online system like our NBN Gateway, which permits naturalists to upload data. Termed “global biodiversity gateways” (GBG) in a recent study by Paul Jepson of Oxford University, of the 6300 nature-related smartphone apps, 219 logged sightings but only 25 had the capacity to upload records to a GBG like our NBN Gateway.

(You shouldn’t have any specimens in your collection if you ever visit Australia as they have a ban on export.)

Diptera Checklist: Czech Republic and Slovakia

Jindřich Roháček sent me the following link to the Checklist of Diptera of the Czech Republic and Slovakia:

<http://www.edvis.sk/diptera2009/families/micropezidae.htm>

Oops, that’s just Micropezidae, I guess you can work your way backwards to find other Families.

Meetings

Reports

2015

Spring 2015- Wicken Fen

26 -28 June 2015

Wicken Fen has a long history of recording and research with 9,175 species listed on the database. Of these, 1,922 species are Diptera. Interest in the wildlife of the site began in the early 1850s and Wicken rapidly developed a reputation among Victorian naturalists. Interest in the natural history of the sedge fen increased, but demand for sedge declined, and the fields and ditches became neglected. The fen was also under increasing threat of drainage. This prompted entomologists to buy portions of the site to protect them, starting with J C Moberley purchasing 0.8ha (two acres) in 1893. Six years later, his sale of this land to the National Trust for £10 marked the humble beginnings of the reserve. G H Verrall was also buying parts of the sedge fen and when he died in 1910 he owned 89ha (220 acres), all of which he bequeathed to the Trust.

On the weekend 26-28 June 2015, a band of intrepid entomologists came to Wicken Fen for a Dipterists' recording weekend. The weather held on the Friday and Saturday, but was 'sub-optimal' on the Sunday! I am grateful to recorders Dave and Lin Brice, Martin Harvey, Tony and Trish Irwin, John Showers and Malcolm Smart for giving their time to record on site.

Records are still coming in, and no doubt the majority of flies will be processed over the winter, but breaking news is that Dave Brice swept a male and female *Norrbomia costalis* (Sphaeroceridae) from water mint and rush, which is a new record for the site. Tony Irwin confirmed the identification. This species has been taken from horse and cow dung in some eastern counties and may result from our increasing herds of semi-wild Konik ponies and Highland cattle used for conservation grazing. These semi-wild herds are perfect sustainable managers for the Fens, creating a dynamic mosaic of Fenland habitats, and the dung fauna is proving extremely interesting as no chemicals are given to the animals.



Eristalis abusiva, found at Wicken Fen on the Dipterists' recording weekend [Joan Childs]

A few specimens of *Platycheirus occultus* and *Eristalis abusiva* were the pick of the Syrphidae crop, and *Tropidia scita* is common across the Sedge Fen. A total of 123 hoverfly species have been recorded, of which one is a Red Data Book species and nine are Nationally Scarce.



Tropidia scita, commonly found at Wicken Fen [Joan Childs]

Recording is welcome at Wicken – please send me an e-mail at joan.childs@nationaltrust.org.uk so that I can organise a permit.

Joan Childs
Strategic Manager, Wicken Fen



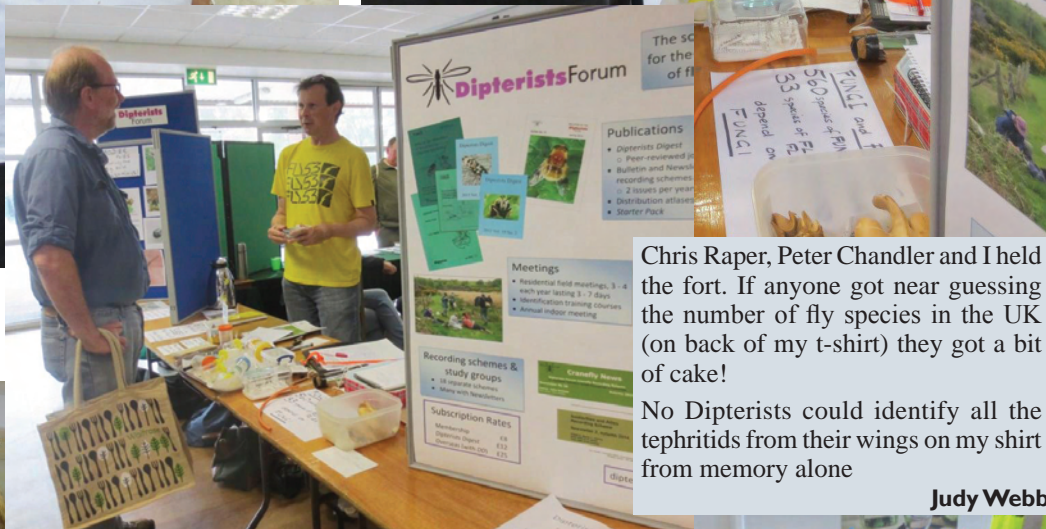
Left to right: Malcolm Smart, Trish and Tony Irwin, Martin Harvey, Dave and Lin Brice [Joan Childs, National Trust]



John Showers shows flies to Wicken Fen volunteers and visitors [Joan Childs]

AES Exhibition

3rd October 2015



Chris Raper, Peter Chandler and I held the fort. If anyone got near guessing the number of fly species in the UK (on back of my t-shirt) they got a bit of cake!

No Dipterists could identify all the tephritids from their wings on my shirt from memory alone

Judy Webb

Annual General Meeting

Saturday 21 November 2015

The Chairman, Howard Bentley, opened the meeting at 12:15pm

Apologies for absence

Amanda Morgan

Minutes of the last AGM and matters arising

The minutes of the previous AGM were accepted unanimously as correct (proposer Erica McAlister, seconder Richard Underwood), and there were no matters arising.

Secretary's Report – Amanda Morgan

The report was read by the Chairman in Amanda's absence.

Membership

We have about 315 members, although the exact number is not clear as subscriptions filter in slowly throughout the year. Around 276 members also subscribe to the Digest. Over the past 18 months we have made a concerted effort to contact all members who had lapsed payments and also members paying at incorrect rates. This has led to a lower membership on paper as, while some members were happy to continue, others had moved away from dipterology. As in previous years, we urge all members to pay by bankers orders, and to check that they are paying at the correct rates.

Committee Meetings

We held 3 meetings in 2015:

BENHS' meeting room at Dinton Pastures near Reading, 15 February

Nottingham University during Summer field meeting, 13 July

AMC at Natural History Museum, London, 31 October

Field Meetings

We have had 3 field meetings this year:

Spring meeting in North Norfolk, based in Cromer (15-17 May)

Summer meeting in Nottingham (11-18 July)

Autumn meeting in New Forest and Isle of Purbeck (10-17 October)

Yet again all three meetings were organised by Roger Morris, despite his having left the committee two years ago. We are most grateful for all that Roger has done, and continues to do, especially as he also collates records made during the Spring and Autumn meetings. Darwyn Sumner is now collating records from the Summer meeting at Nottingham.

The committee has not managed to replace Roger in the role of Field-meetings officer, and are therefore splitting the roles required between existing officers until such time as a volunteer can be found. We have booked Canterbury Christ Church University for next year's Summer field meeting and very much hope that Roger will continue to facilitate the spring and autumn meetings for as long as he is willing to do so.

Local Fly Groups

Two local fly groups continue to be active, Northamptonshire run by John Showers and Devon by Rob Wolton and Martin Drake. They provide excellent opportunities for new and experienced

dipterists, and provide many records for the various schemes.

The Northants and Peterborough Group held field meetings every Sunday morning from the end of April until early September, and meetings will be held next year covering the same period. The Spring 2016 Bulletin will include a report of activities and records.

The Devon Fly Group met monthly between April and October, and generated many records, including a number of scarce or threatened species. Following the meetings during 2014, 934 records were submitted to the Devon Biological Records Centre.

Local groups are now able to benefit from the Dipterist Forum's insurance policy that covers members during organised field meetings.

Training and Materials

During the past year, the Committee has funded a number of training materials including microscope carrying boxes, storage boxes, and ring lights for training microscopes.

A £500 contribution towards expenses was made towards a hoverfly course in Orkney, delivered by Roger Morris and Stuart Ball. Roger and Stuart also ran 3 other hoverfly training courses during the past year, in Shropshire, Somerset and Northamptonshire. They already have 3 Introduction to Flies and 2 Hoverfly training courses arranged for 2016, so get in touch with them if you feel that you need a refresher course!

The Dipterists Forum annual advanced workshop at Preston Montford was held in February, with John and Barbara Ismay and Alan Stubbs being the tutors on Acalypterate flies.

John and Barbara Ismay also ran two Introduction to Fly Families (Diptera) training courses.

The Committee are very grateful to the individual members of the Dipterists Forum who give their time and skills towards the various training courses, and who contribute so much in developing a new generation of Dipterists.

Recording Schemes

Olga Retka has been approved by the Dipterists Forum Committee to start a Calliphorid Recording Scheme; it is currently being authorised by the BRC. She will be verifying records on IRecord. An article is appearing in National Federation of Biological Recording about this new scheme.

James McGill is producing a new draft key for Muscidae, and is intending to start a new Recording Scheme.

Website Development

The Committee has been looking at ways of redeveloping and improving the Dipterists Forum website, for example that the gallery should be organised by family. We have approached the Biological Recording Centre, but as yet no progress has been made. We hope that this can be pushed forward in the coming year.

BENHS

Paul Harding of BENHS produced a document setting out the relationship between BENHS and affiliated groups, including ourselves. The Committee have discussed this document, suggested some minor changes and hope to finalise matters soon.

Publicity

This past year, the Dipterists Forum was present, with banners and leaflets at the AES exhibition at Kempton Park and BENHS exhibition in London. We also had a presence at the Staffordshire Invertebrate Fair and the Big Nature Day at the Natural History

Museum in London.

Rob Wolton was responsible for a huge amount of publicity this Summer, when he found the previously presumed extinct fly *Rhaphium pectinatum* at a Devon Wildlife Reserve near Exeter. The news made headlines on local BBC TV evening news, the BBC website and BBC Wildlife magazine, the Guardian and the Metro among others. The Dipterists Forum was mentioned in several of the reports.

Also from the Devon Fly Group, following their visit to a Devon Coastal site (Bolt Tail) where they found hornet robber flies, a press release was issued by the National Trust which appeared in local ITV news and also local newspapers.

Alan Stubbs produced an excellent article *Bringing Soldierflies to attention* in the August edition of British Wildlife, and there was also an article from Graham Rotheray and others on *Conserving the aspen hoverfly* in the October issue.

For the first time in the history of the Dipterists Forum Secretary's report, I am including a section on Social Media. This has been an area very much taken forward by Erica McAlister, with the help of Victoria Burton and Chris Raper. Over the past year the Forum tweet has gained 272 new followers and 425 mentions, which means that a Tweet has been passed on by someone else. There have been over 80,000 Impressions, meaning that a Tweet has been delivered to the Twitter stream of a particular account. 73% of our followers are from the UK, about two thirds of whom are male.

The Dipterists Forum Facebook Group (where people have to apply to join) has 417 members and the open access Facebook page has 185 likes. For further information see Erica McAlister!

Conservation

Rob Wolton, our conservation officer, reports that the failure in the last two years to find the UK BAP species Green Colonel *Odontomyia hydroleon* at its last remaining British site, in the North York Moors, is of great concern. Natural England, together with the Forestry Commission which owns the site, will now be restoring cattle grazing to the site. The larvae can live for several years, so it is hoped that this will result in adults being seen again next year, although there remain concerns about the site's hydrology.

Publications

As in previous years, we extend a big thank you to Darwyn Sumner and Judy Webb for the continued production of the Bulletin, and to John and Barbara Ismay who help in getting it sent out. I think that all members look forward to the arrival of the bi-annual publication, and it is always full of interesting and informative articles. The editors would really appreciate any contributions, whether regarding a field meeting or a discovery, and would be particularly pleased to receive any good quality colour photographs – of dipterists as well as Diptera!

We would also like to extend our thanks to Richard Underwood for his assistance in the distribution of the Digest.

Treasurer's Report

Income and expenditure account 2014

Thanks to Howard for his training and patience with treasurer-related queries as I complete my first year as Treasurer. The 2014 audit was completed slightly later than usual while I familiarised myself with the role, thanks to Tony Pickles and his colleague Alec Harmer, who again audited our accounts without expecting payment for their services.

The Santander current account was closed on the 28th October 2014 with the balance of £406.23 transferred into the NatWest account. A surplus of £1274 was recorded in 2014, but this is due to the invoice for the Dipterists Digest 21.2 not being received until the New Year; if this had been paid during the same calendar year the accounts would actually show a small deficit. A report and balance sheet is attached.

Present financial situation

Currently we have £30,353 in the bank, which is £1885 more than at this time last year. We also have material assets (microscopes, display boards, storage boxes etc.) with a total value of nearly £5000, so the Forum's finances are very healthy.

Future plans

To support those who would not otherwise be able to attend courses and field meetings, up to £1,000 has been set aside as a bursary fund. Bursaries are offered for up to two places at half price on the Preston Montford course and up to three places at half price on the Summer Field Meeting in Canterbury, with applications made to the Chairman Howard Bentley. We are also subsidising the work-room cost for the Canterbury Meeting to the sum of £1,000.

[see detailed report in Bulletin #80]

The treasurer's report was accepted unanimously (proposer Darwyn Sumner, Seconder Richard Underwood)

Victoria Burton

Dipterists Digest Editor's Report

Although we managed to produce two issues of 102 pages each in the four years from 2011 to 2014, this has not been possible in 2015 because of insufficient material coming in.

Only one part of Volume 22 has so far been published, and was distributed towards the end of September. This contained 35 items by 22 authors, but most were short and there were 21 notes of a page or less. In order to get an issue published this year I included a 42 page article on my surveys of Bushy Park, which increased the overall size to 110 pages of text. I expect to return to 102 pages as a standard in subsequent issues.

Some corrections are necessary to that issue, in particular to Peter Langton's paper on *Metricnemus ephemerus*. An earlier version of Fig. 3 was unfortunately inserted, with the genitalia of one of the five species illustrated (*M. inopinatus*) omitted and the other four wrongly numbered in the figure and key. A corrected pdf has been supplied to the author and a replacement for the key and figures will be published in the next issue.

By the date of the AGM I had received only seven more items totalling 30 pages, so there was no chance of getting enough material together for publication of a further part in 2015. I urgently require more articles and notes to be submitted for the publication schedule to be restored, and a note stating this position was included in the Autumn Bulletin.

However, the supplement to the 2014 Volume 21, predicted in my last two annual reports, had been printed and would be distributed soon after the AGM. This consists of 118 pages of text, which is near the limit for our type of binding, and contains a single article, my biographical account of Colonel J.W. Yerbury and Dr John H. Wood. As previously reported, this celebrates their contribution to knowledge of Diptera, and acknowledges 2014 as the centenary of Wood's death, hence its association with the 2014 volume. 1914 was also the last year in which Yerbury was an active fieldworker, though he lived till 1927.

It was decided to make this a separate additional issue to avoid holding up articles on other subjects (it was anticipated that more other items would be received!).

Supplements on other subjects additional to our usual two issues per year can be considered, and it may possibly be a way of publishing keys to some families as a more streamlined alternative to a full scale RES handbook.

I thank all authors for their support, Stuart Ball for keeping up to date the Digest contents on the website and placing the updated checklist there, Mike Pugh and Richard Underwood for proof reading and Richard for efficiently carrying out distribution.

Barbara Ismay observed that some of the articles included in the Bulletin under recording scheme newsletters may be better placed in the Digest. Peter confirmed that he would welcome short notes for the Digest. Authors and newsletter compilers were urged to consider the most appropriate place for articles.

Peter Chandler

Amendments to constitution

The following changes to the constitution were proposed by the Chairman:

The Addendum at the end of the Constitution will be removed

Sections 7f to 7i of the Constitution will be removed

New sections 7f to 7k with the following text will be inserted into the Constitution:

- f) The Chairman will be elected for a period of two years, and for the two succeeding years may serve as Vice Chairman
- g) Ordinary members of the committee who have no specific responsibilities shall stand down after serving a two year term of office, to be re-elected or replaced by new elected members. When ordinary members are appointed to take specific responsibilities during their terms of office they need not stand down, but should stand for re-election as specified in part f above.
- h) The Officers with specific responsibilities referred to in parts f) and g) above shall be Secretary, Treasurer, Membership Secretary, Bulletin Editor and Dipterists Digest Editor.
- i) The General Committee may at its discretion call a Special General Meeting. Twenty or more fully paid-up members may request that the General Committee call a Special General Meeting stating the reasons, and the General Committee shall decide within 28 days to call such a meeting, or state their reasons for refusing to do so in the next appropriate circular to the entire membership. The General Committee shall give at least 14 days' notice to the membership of any Special General Meeting.
- j) At Annual General Meetings and Special General Meetings 20 fully paid-up members shall constitute a quorum.
- k) Changes to the constitution shall be subject to majority voting at an Annual General Meeting or at a meeting called for that purpose.

Barbara Ismay expressed concern at the apparent proposal to remove the posts of Indoor and Field Meeting secretaries. The Chairman clarified that while the amended constitution would only require that the Forum fills the posts of Chairman, Vice Chairman, and those specified in 7h, the committee remained able to allocate members to other roles. The change was being introduced to allow for flexibility in how the committee operates, for example splitting the workload of a Field Meeting secretary between committee members.

The change to the constitution was approved by all members present with the one abstention.

Any Other Business

Brian Harding asked whether the AGM needed to vote to confirm that subscription rates will remain unchanged over the year ahead.

The Chairman responded that this was not necessary.

Stuart Ball noted that the FSC is running a week-long Introduction to Flies course at Preston Montford in August, with Roger Morris and himself as tutors. It will cover both collecting techniques and identification.

Stuart Ball reported that he had discussed the website management with Chris Raper, and that Chris now has administrative rights to allow members to be registered for full access.

Chairman's vote of thanks to retiring members

The Chairman thanked Nathan Medd for his term of office

Election of Officers

Office

Chair
Vice Chair
Secretary
Treasurer
Membership Secretary
Field Meetings Secretary
Indoor Meetings Secretary
Bulletin Editor
Assistant Editor
Publicity Officer
Website Manager
Conservation Officer

Officer

Howard Bentley
Martin Drake
Amanda Morgan
Victoria Burton
John Showers
Vacancy
Duncan Sivell
Darwyn Sumner
Judy Webb
Erica McAlister
Stuart Ball
Robert Wolton

Other Committee members

Peter Boardman
Chris Raper
Malcolm Smart

The meeting voted unanimously to re-elect all officers and members of committee, en bloc, (proposer Barbara Ismay, seconder Adrian Plant).

Chairman's thanks to hosts and formal closing of the AGM

Howard Bentley thanked the Birmingham Museum and Art Gallery for hosting the meeting. The meeting was formally closed at 13:00.

Amanda Morgan, Secretary

(with thanks to Rob Wolton for providing additional notes from the meeting)

Forthcoming

2016

Diptera Workshops 2016

Calliphoridae, Sarcophagidae and Rhinophoridae

Preston Montford Field Studies Centre
19 - 21 February 2016

Tutored by Steven Falk, Daniel Whitmore and Olga Retka
Spring workshop fully booked

Field meetings 2016

Spring 2016 Field Meeting

Somerset Levels
20-22 May 2016

This meeting will be based around the Avalon Marshes Centre which will act as our base for the meeting. It should provide us with ample opportunities to investigate the magnificent Somerset Levels National Nature reserve and surrounding woodlands and grasslands on The Mendips.

Accommodation in nearby villages includes Glastonbury where there is a Travelodge that may be suitable for some members.

Please let the leader know if you plan to attend. It is proposed that we will meet at the Avalon Marshes Centre, Shapwick Road, Westhay, Glastonbury BA6 9TT but from there it is anticipated that group members will head to their chosen venues.

Please contact Roger Morris roger.morris@dsl.pipex.com

Roger Morris

Summer 2016 Field Meeting

Canterbury
2-9 July 2016

The Summer Field Meeting will be held in Kent, based at Canterbury Christ Church University, from 2–9 July 2016. The price for the week will be a maximum of £345 per person (final amount may reduce depending on numbers), and includes the following:

1. Single en-suite rooms
2. A spacious workroom, the cost of which has in part been subsidised by the Forum
3. Free parking on site
4. Full breakfast and two course evening meal

There is no bar but several local pubs to choose from during the evenings.

Laurence Clemons, the Kent County recorder, is in the process of identifying suitable sampling sites and obtaining permissions. Due to the traffic issues around Canterbury, we will aim to be out in the field for most of the day, weather dependant of course.

Early booking is advised, and a deposit of £40 is required. A further payment will be requested by early April and the full amount payable by early June. In order to secure a place please contact Victoria Burton (treasurer) at vburton@outlook.com

If you have any special requirements such as mobility issues, please

inform Amanda Morgan at amanda.morgan1000@gmail.com

We no longer have one person who is solely responsible for arranging the summer meetings, and therefore the various jobs have been shared amongst existing committee members. We are currently considering a suitable venue for 2017; accommodation must include a large workroom. If you have any suggestions please contact Amanda, details above.

Amanda Morgan

Autumn 2016 Field Meeting

Mid October 2016 (usually)

Details of this meeting will be circulated to members who regularly attend this meeting once arrangements have been finalised. Please keep an eye on the DF website for details or contact Roger Morris at roger.morris@dsl.pipex.com

Events Calendar 2016

Dipterists Forum & selected meetings

2 March 2016, Verrall Lecture 'Collections- the Last Great Frontiers of Exploration' by Maxwell V. L. Barclay, Curator and Collection Manager, NHM. Venue: Ondaatje Theatre, Royal Geographical Society, Kensington Gore, London, SW7 2AR. Time: 16:00 for tea, lecture 16:30-17:30. (<http://www.rgs.org/aboutus/visiting+the+society.htm>). Verrall Supper, details from Professor Simon Leather (simonleather@harper-adams.ac.uk)

5 March 2016 Staffordshire Invertebrate Science Fair. The emphasis will be on the recording and conservation of invertebrates. Lots of organisations and societies will be present to chat to. DF will have a stand. Steven Falk has confirmed he will come to be keynote speaker for the event. He will also be selling and signing his book. Staffordshire University Science Centre, Leek Road, Stoke on Trent, ST4 2DF, UK. Contact Andy Jukes: andy@conopseptomology.co.uk

5 Mar 2016, Devon Fly Group Indoor meeting. Woodah Farm (DWT reserve base in Teign valley). This is an opportunity to let others know about what you have seen during the year, to show photos, to talk about any studies or research you've been involved in, to share skills and knowledge, and to ask questions (for example about identification). It will all be very informal. Note this very active group plans 7 field meetings in the county this year, each one to target a different rare/scarce fly. See end of this calendar for contact.

19 March 2016, BENHS Annual General Meeting and Presidential Address. University Museum of Natural History, Parks Road, Oxford OX1 3PW. See: <http://www.benhs.org.uk/site/>

7-8 May 2016, BENHS at Sussex University. 'Collecting and Recording Insects'. Combined talks and indoor and field meetings for both experts and those who would like to extend their entomological interests. Open to student entomologists. Opportunities to collect on campus and contribute to a campus invertebrate list and pass on specialist knowledge to less experienced participants. Contribution by Dipterists Chris Raper & Matt Smith on the Saturday. See <http://www.benhs.org.uk/site/?q=node/127>

12-14 May 2016, NFBR conference at Lancaster University. There will be a field trip to the Forest of Bowland AONB and the focus will be a celebration of national schemes and societies.

20-22 May 2016, DF Spring Field Meeting, Somerset Levels, Accommodation in nearby villages. Meet at the Avalon Marshes Centre, Shapwick Road, Westhay, Glastonbury, BA6 9TT. Please keep checking the DF website for news on this. Contact: Roger Morris email roger.morris@dsl.pipex.com

25 May 2016, 10.00am – 4.00pm. An Introduction to Hoverfly Identification, The Gateway, Chester Street, Shrewsbury. Cost £45. Tutor Nigel Jones. A Manchester Metropolitan University course. Contact: biorec@mmu.ac.uk

20-26 June 2016 National Insect Week. See <http://www.nationalinsectweek.co.uk/> for events.

2- 9 July 2016, DF Summer Field Meeting to Kent, Canterbury area. Early booking is advised, and a deposit of £40 is required. A further payment will be requested by early April and the full amount payable by early June. In order to secure a place please contact Victoria Burton (treasurer) at: vburton@outlook.com

2017

Spring 2017, DF Advanced Workshop. The proposed fly families are Ephydriidae and Drosophilidae, with Martin Drake and Peter Chandler tutoring.

Throughout the Year:

BENHS Dinton Pastures Open Days in the Pelham-Clinton Building, Hurst, Reading. Open 10:30-16:00 on second and fourth Sunday in each month except April to September when only on the second Sunday of each month (except for August when there are no Open Days). We encourage you to bring along your pinned flies and use the Diptera Collections and library for identification. Other Dipterists are usually present meaning good chat and assistance with identifications may be possible. The grid reference for Dinton Pastures is SU 784718, turn left off the B3030 driving North from Winnersh. The site is about 15 minutes walk from Winnersh station, which has trains running on a half-hourly service from Reading and Waterloo. See: www.benhs.org.uk

The Northants and Peterborough Diptera Group hold meetings every weekend from end of April until sometime in September/October. See: northantsdiptera.blogspot.co.uk or contact John Showers on email: showersjohn@gmail.com

The Devon Fly Group will be holding regular field meetings throughout the year. Contact Martin Drake (01460 2206650, email: martindrake2@gmail.com).

Judy Webb

22-24 July 2016, "Celebrating Biological Recording". Event organised by NFBR, Manchester Metropolitan University and the Field Studies Council at Preston Montford Field Studies Centre, Shrewsbury. Field trips to local sites throughout the weekend and an after dinner speaker on Saturday night. This event will celebrate the 30th anniversary of NFBR and the 20th anniversary of the FSC/MMU's Biological Recording courses. Website: <http://www.field-studies-council.org/prestonmontford/>

30 July 2016, 'AES Introduction to Flies Workshop' 11:00 – 16:30, at Angela Marmont Centre, Natural History Museum, London. Contact: Victoria Burton: membership@amentsoc.org.uk

6-8 September 2016, Ento '16 - Royal Entomological Society Annual National Science Meeting. Harper Adams University, Edgmond, Newport, Shropshire, TF10 8NB. See <http://www.royensoc.co.uk/>

1 October 2016, AES Annual Exhibition and Trade Fair, Kempton Park, London Sunbury-on-Thames, TW16 5AQ, UK. DF will have a publicity stand and publications for sale. See www.amentsoc.org

DF Autumn Field Meeting. Please keep checking the DF website for news on this. Roger Morris says usual attenders will get an email when location finalised.

5 Nov 2016, Bedfordshire Invert Group Conference. Malcolm Smart and Martin Harvey will be speaking. Details from Alan Outen email: alanouten@virginmedia.com

5 Nov 2016 Worcester Entomology Day. Contact Rosemary Winnall, Email: rosemary@wyreforest.net Tel. 01299 266489 or 07732 203393

12 November 2016, BENHS Annual Exhibition and Dinner, Conway Hall, 25 Red Lion Square, Holborn, London WC1R 4RL. See <http://www.benhs.org.uk/>. Bring your best fly exhibits for the Diptera table.

26-27 November 2016. Likely to be the dates for the DF AGM, but venue to be confirmed.



Platycheirus immarginatus, Frog Firle, E Sussex [Joan Childs]



Sphaerophoria scripta, Wicken [Joan Childs]

And now ...

Pink Elephants

I have never seen a pink elephant. Nor have I seen an elephant in a room, probably because I was not looking for one. A notice on the door 'please look at the elephant' would have helped – goodness know's how many I have missed.

I suppose flies are rather like that. I have looked for *Doros*, which I call the Phantom Hoverfly*, without success. It is supposed to be yellow and black, but it might just as well be pink. In the field, one is most likely to find what one is looking for. If one is looking only for hoverflies, the presence of other types of fly will hardly register. Lots of elephants will have been missed, as evidenced by your companion's site list or the contents of pooters and pinning trays.

As experience is gained, one hopes to be better at spotting elephants. This year, as last year, I have been obtaining regular sweep samples of insects in my garden near the centre of Peterborough, and I am staggered at the range and number of species of flies that I have previously not noticed, some which I have rarely seen before. One of these is *Acanthophilus helianthi*, a tephritid picture winged fly with only a few faint wing markings and silvery grey body, almost invisible in a (dirty) white net. I poot every species in the net, but low and behold, I was pooting *Acanthophilus* without even being aware of its presence, 'an elephant in the net'. Now had such an elephant been pink, its presence would have been obvious – perhaps – possibly – if 'poot pink' was in mind? I have still never seen a pink fly! Perhaps they don't exist in Britain: We should drink to that.

Alan Stubbs

*"Who you gonna call?" - to catch the Phantom and the Wraith hoverflies (*Ghostbuster*)



Contributing Bulletin items

Text

1. Articles submitted should be in the form of a word-processed file either on disk (3.5", CD or USB Flash), via E-mail which should have the phrase "DF Bulletin" in the Subject line or placed in the appropriate Dropbox, details of which are emailed out by the editors to committee members (others please enquire). Email text alone will not be accepted.
2. Please submit in native format (http://en.wikipedia.org/wiki/Native_and_foreign_format) and in "text-only" Rich Text Format (.rtf) and additionally send pictures in their original format. An accompanying print-out (or pdf) would also be useful.
3. Please note the width of the borders used in Dipterists Bulletin; for conformity with style would newsletter compilers please match this format. The document must be A4.
4. **Do not** use "all capitals", underlining, colouring, blank lines between paragraphs, carriage returns in the middle of a sentence or double spaces.
5. **Do not include hyperlinks in your document.** Since they serve no purpose in a printed document and the editor has to spend time taking them out again (the text is unformatable in DTP if it has a hyperlink attached), documents containing hyperlinks will be sent back to you with a request for you to remove them. There's a guide on how to remove Word's default hyperlink formatting at <https://www.uwec.edu/help/Word07/hyperlinkfor.htm>
6. Scientific names should be italicised throughout and bolded only at the start of a paragraph.
7. Place names should have a grid reference.

Illustrations

8. Colour photographs are now used extensively in the Bulletin, they appear coloured only in the pdf (older Bulletins may be viewed in colour on our website) or on the covers.
9. Please include all original illustrations with your articles. These **should** be suitably "cleaned up" (e.g. removal of partial boxes around distribution maps, removal of parts of adjacent figures from line illustrations) but please do not reduce their quality by resizing etc. .
10. Please indicate the subject of the picture so that a suitable caption may be included, in some cases it will be possible for the picture file's name to be changed to its caption (e.g. 049.jpg becomes Keepers Pond NN045678 12 Oct 2008.jpg) or add the appropriate metadata to your picture. All group pictures should identify all the individuals portrayed.
11. **Powerpoint** files may be submitted, they are a useful means of showing your layout and pictures are easily extracted.
12. Pictures contained within Word files are of too low quality and cannot be extracted for use in the Bulletin.

13. Line artworks are also encouraged - especially cartoons
14. Colour pictures and illustrations will be printed in black and white (uncorrected) and so it would be wise to see what a B&W photocopy looks like first, although the print quality from Autumn 2009 onwards gave excellent B&W results.
15. A suitable colour photograph is sought for the front cover (and inside front cover) of every copy of the Bulletin, note that it must be an upright/portrait illustration and not an oblong/landscape one for the front cover.
16. Due to the short time-scales involved in production, the editors will not use any pictures where they consider there to be doubt concerning copyright. **Add your personal details to the metadata of the picture**, guidelines to this in Bulletin #76.

Tables

17. Tables should be submitted in their original spreadsheet format (e.g. Excel)
18. Spreadsheet format is also appropriate for long lists

When to send (deadlines)

Spring bulletin

19. Aims to be on your doorstep before the end of February, the editorial team has very little time available during January and so would appreciate as many contributions as possible by the middle of December; the deadline for **perfect copy is the 31st Dec**, it will be printed then distributed in late February. Please note that the date for contributions is now earlier than for previous Bulletins.

Autumn bulletin

20. Aims to be on your doorstep in mid September, contributions should therefore be made to the editor **by the end of July**. It will be printed then distributed in time for final notification of the Autumn field meeting (although you would be well advised to contact the Field Meetings organisers before this time and consult the DF website) and in time to provide details of the Annual Meeting. Please note that the date for contributions is now considerably earlier than for previous Bulletins

Where to send

21. Would Bulletin contributors please ensure that their items are sent to **BOTH** Darwyn Sumner and Judy Webb



**Hoverfly
Newsletter**
Number 60
Spring 2016
ISSN 1358-5029



My thanks to all who have contributed articles to this issue. The range of subjects they cover is a testament to the continuing growth of interest in hoverflies. Especially striking are the figures, in the recording scheme update, of the proliferation of records from photographic sources. I recall that when I began active recording of hoverflies I was something of a rarity in taking a camera to field meetings - this was before digital cameras became readily available, and in those days I experienced a fair amount of reluctance to accept records that were based on photographs. How things have changed!

Copy for **Hoverfly Newsletter No. 61** (which is expected to be issued with the Autumn 2016 Dipterists Forum Bulletin) should be sent to me: David Iliff, **Green Willows, Station Road, Woodmancote, Cheltenham, Glos, GL52 9HN, (telephone 01242 674398), email: davidiliff@talk21.com**, to reach me by 20 June 2016. The hoverfly illustrated at the top right of this page is a male *Brachyopa bicolor* about to alight on a tree trunk.

Hoverfly Recording Scheme Update, Winter 2015-16

Stuart Ball, Roger Morris, Ian Andrews, Joan Childs & Ellie Rotheray
c/o 7 Vine Street, Stamford, Lincolnshire

We had hoped to publish a revised provisional atlas in 2015 but, as readers will realise, events have conspired to delay its completion. The main issue we faced was the need to challenge quite a significant part of the dataset. Recent recording has brought to light the probability that many hoverflies have a more tightly defined flight time than we had hitherto thought and consequently there are a number of records that fall outside the likely flight times. Some of these records may be OK and simply involve larvae, but we suspect that many involve misidentifications. We are working through the data but it is a slow job. This means that the atlas is delayed and consequently we have decided to include 2015 records too.

Our decision to include 2015 records also follows a quite exceptional period of recording, with unprecedented numbers of records from photographic sources. In 2014 some 8,600 records came from this route; in 2015 the numbers can be expected to exceed 20,000.

Readers will recall that we expanded the composition of the team running the scheme to five. This has proven to be very necessary, as the numbers of people interested in hoverflies has grown exponentially. This growth is illustrated by Figure 1 which shows the numbers of photographic records received for each year since 2002. The 2014 records now approach 10,000 because there have been many further posts in 2015.

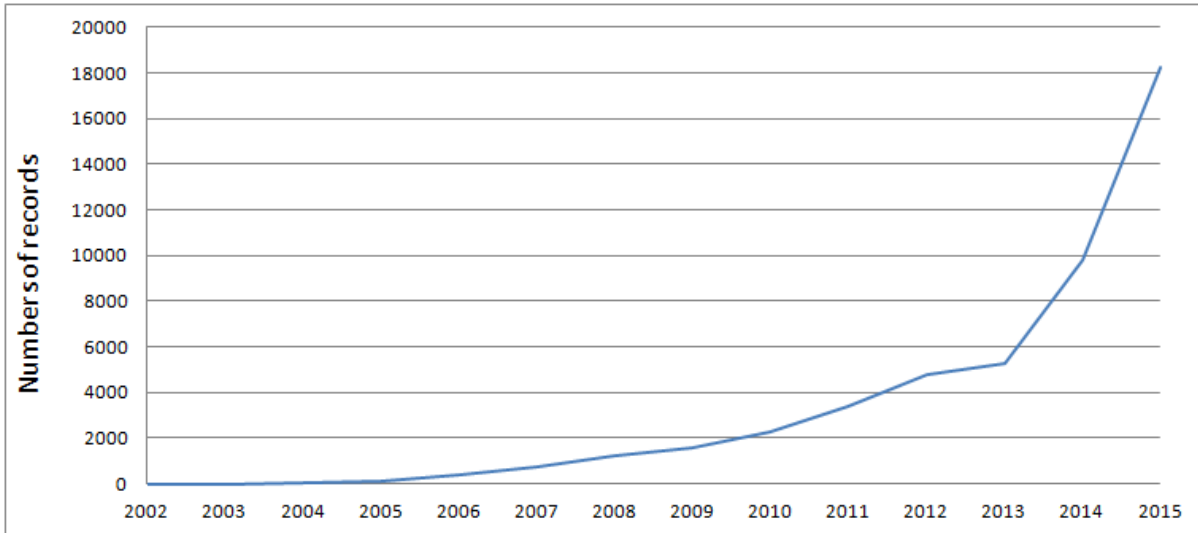


Figure 1. Growth in photographic data from 2002 to 2015.

The volume of data from photographic sources is such that it starts to dominate the overall dataset. This is not necessarily a bad thing because it now means that we have a great deal more information on many of the commoner species and can start to undertake more detailed analysis of their regional phenology each year. In due course this may help to explain why late records of less well-recorded species occur, but in the meantime it raises quite a number of interesting questions about the existing dataset, which is one reason why the production of a new atlas has been delayed.

One highly illustrative example is that of *Eristalis tenax*: a species that we know overwinters as a female. HRS phenology charts published to date combine the outputs of many years and from all latitudes. Such charts obscure what is really happening, as can be seen in Figure 2. This figure splits the UK into four regions, as in Figure 3.

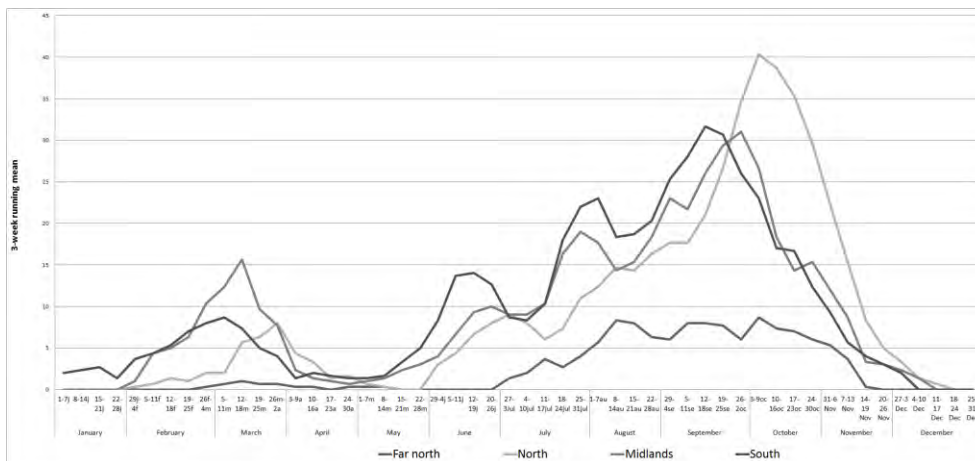


Figure 2. Phenology of *Eristalis tenax* in 2015 broken into four geographic zones.

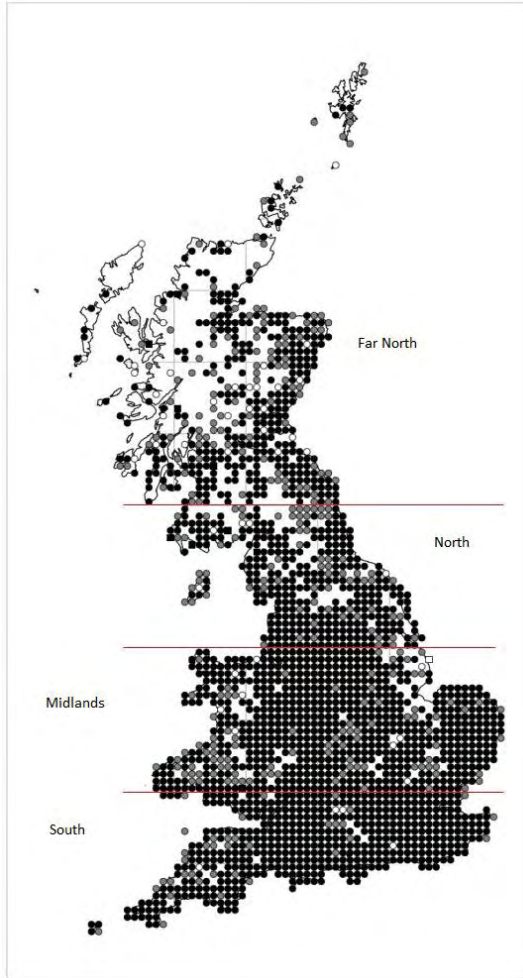


Figure 3. Distribution of *Eristalis tenax* (to 2014) with notation for regions used in Figure 2.

The data for 2015 include contributions from several people who record from their favoured 'patch' on an almost daily basis (as weather permits), which means that a reasonably accurate picture of occurrence has been built up. The records are all backed up by photographs and have been checked, so there is no reason to suppose that they are not an accurate reflection of *Eristalis tenax* phenology in 2015. These results show how winter activity differs across the regions and how the population builds during the summer. Unlike the histograms in past atlases (which indicate a progressive rise in numbers towards a peak in late summer) it seems that there is a very pronounced dip in numbers from the middle of April through to the middle of May.

Another huge advance has arisen because new recruits are far more inclined to get out in the early Spring and late Autumn. This effort is starting to change perceptions about the levels of hoverfly activity. Autumn 2015 has been exceptionally warm, and perhaps cannot be taken as the model for all years. Even so, regular recorders have shown how a remarkable number of species have persisted well into December (Figure 4). On 7 December records included *Sericomyia silentis*, *Scaeva selenitica*, *Sphaerophoria scripta*, *Syrphus ribesii*, *Episyrphus balteatus* (several), *Meliscaeva auricollis* (several), *Eristalis pertinax* and *Eristalis tenax*. One recorder reported five species coming

to ivy sprayed with a sugar solution, so maybe others will try this on sunny days.

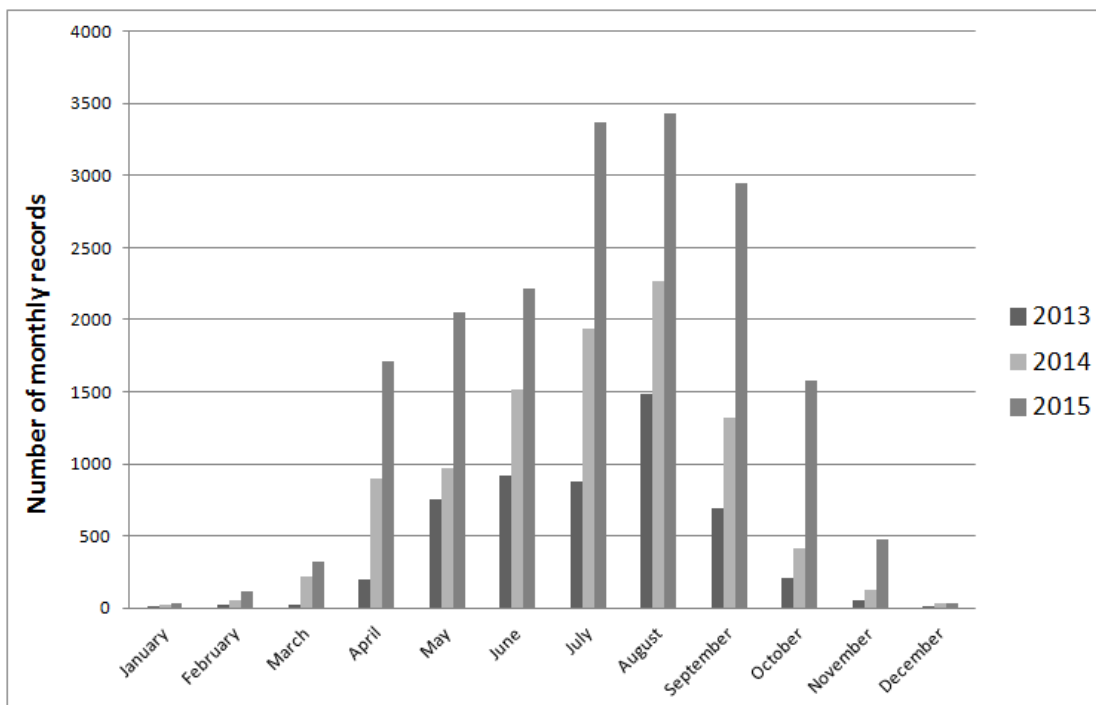


Figure 4. Numbers of photographic records for each month for 2013 to 2015.

It is difficult to be sure that the number of hoverflies seen in autumn 2015 is unusual. The year saw a huge change in the numbers of active recorders and this may be a factor behind both the numbers and range of species reported. We will get a much clearer picture in 2016. Meanwhile, the records received from conventional sources should help to provide important context.

Although there has been a small stream of data from regular contributors, the bulk of this year's records are likely to arrive in coming months, so there will doubtless be lots of interesting finds. Highlights we have seen so far include: *Brachypalpus laphriformis* (several), *Callicera aurata* (several), *C. rufa*, *C. spinolae*, *Doros profuges* (2), *Eupeodes lapponicus* (2), *Ferdinandea ruficornis* (1), *Meligramma euchromum*, *M. guttatum* (several), *Microdon analis*, *Pelecocera tricincta*, *Sphegina sibirica* (many), *Triglyphus primus* (1), *Xanthandrus comtus* (several), *Xanthogramma stackelbergi* and *Xylota xanthocnema*.

By the time this update hits your doorstep spring should be well on its way. Do please get out and see what is about - there will probably be much more than one expects. All records count. Meanwhile, there are still hoverflies to be found - as larvae. We are keen to encourage greater interest in hoverfly larvae and for this reason Ellie has established a Facebook page dedicated to hoverfly larvae (<https://www.facebook.com/groups/1580298322233838/>).

Hoverwatch

John Showers

103 Desborough Road, Rothwell, Kettering, Northants, NN14 6JQ
showersjohn@gmail.com

Hoverwatch is a project set up by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire under its Ecology Groups initiative. The Ecology Groups were set up about 10 years ago by the then Conservation Director, Brian Eversham, who stated that "Good conservation depends on good science". He was concerned that the fulltime staff of the Trust did not have enough time to carry out a lot of monitoring on top of their other responsibilities but believed that there was a pool of committed volunteers who could be recruited to do this.

Hoverwatch's purpose is to use hoverflies as a proxy (alongside flower spike monitoring) for monitoring ride and woodland management at Old Sulehay Forest SSSI and nature reserve. The project involves making four visits each year and counting the number of hoverflies of each species in a set number of compartments along the main ride in a systematic way. If a hoverfly is seen at a flower, the species of flower is also noted. The main ride runs approximately East to West and the ride margins are divided into sections each 20m long, 5m wide and separated from each other by 10m non-intervention breaks. The compartments are managed according to various cutting regimes, covering 1, 2, 4 and 8 year cycles.

Hoverflies were chosen as the subject for monitoring for three main reasons:

- they largely feed on nectar
- their larvae are very varied in their habitat requirements, thus may tell us something about the woodland as a whole
- they are relatively easy to identify (unlike hymenoptera) and training was readily available through Roger Morris and Stuart Ball's courses.

The project has been running for 7 years and nearly 5000 hoverfly individuals have been recorded, covering 91 species. To check that the Hoverwatch data is reasonably representative of the forest as a whole a number of informal surveys have been carried out around the times of the Hoverwatch visits and only 5 further species have been found.

A formal report of the project will be prepared for publication in due course so only a few highlights are mentioned here. The numbers of individuals and species have varied considerably each year. This is partly due to weather conditions (for example 2012 had a particularly cool and damp spring) but also due to large scale immigration of *Episyrphus balteatus* in some years (e.g. 2015). In fact *E. balteatus* represents about 70% of all individuals recorded. For the purposes of monitoring the woodland management, it may be better to ignore this species in the analyses. As not all individual hoverflies could be identified to species level, the analysis of numbers of each species seen is biased by ease of field identification; thus some analysis must be based on higher taxonomic levels.

When considering larval feeding ecology, many species within a tribe have similar requirements and the odd ones out can be considered in their appropriate category. Thus the data has been broken down to distinguish those hoverflies whose larvae are predatory on aphids, those associated with bee or wasp nests and saprophagous or phytophagous species. The relative abundance of individuals and species in each category has remained fairly consistent throughout the project, although the predacious proportion dipped in the cold spring of 2012 and the hymenoptera-associated hoverflies (*Volucella*) dipped in 2015. This was possibly because the dry spring had led to a delay in bramble flowering when we made the visit at the *Volucella* peak time.

An analysis of flower visits was made. A flower visit was counted if a hoverfly was seen visiting a flower head on any survey visit. No attempt was made to count the actual number of hoverflies visiting a flower as this would have been too time-consuming and it would have been difficult to know whether one hoverfly visited several flower spikes or several different individuals visited any one spike. This method may not be suitable for ranking different flower species in importance as nectar sources for hoverflies but it does indicate which species are being used. In the spring visits, 17 species of hoverfly were recorded as visiting 12 species of flowers; the top three flowers were dog's mercury, bramble and dogwood. In summer 23 species of hoverfly were recorded visiting 30 species of flower; bramble, St. John's Wort and enchanter's nightshade were the top three.

Further surveys will continue in subsequent years. Data from the flowering spike counts, undertaken by a different group, will be incorporated into the analysis and attempts will be made to relate the data to management activities.

My thanks go to Henry Stanier who was the Ecology Groups Officer at the Wildlife Trust, Roger Morris and Stuart Ball for their training courses and the Ecology Group team who have helped in the survey, particularly Dipterists Forum members Peter McMullen, Kevin Rowley and Graham Warnes.

***Orthonevra* in Lancashire and Cheshire**

Phil Brighton
32 Wadeson Way, Croft, Warrington, WA3 7JS
helophilus@hotmail.co.uk

In July 2003 Martin Drake found *Orthonevra intermedia*, a species previously unrecorded in Britain or Ireland (*Dipterists Digest*, Vol 13 No. 2, 2006, pp 87-91) in the Delamere Forest (SJ57). In their recent JNCC status review of the Syrphidae, Roger Morris and Stuart Ball stated that "There have been no further records in the intervening ten years but it is possible that nobody has looked for this species in suitable habitat". That situation has now changed, as on the 20 August 2015 I swept a female of the species only a few hundred metres from the two locations where Martin found the species. For the past three seasons I have indeed been collecting Diptera over a number of wet peatland sites in Cheshire and South Lancashire, including five previous visits to various parts of Delamere.

Martin Drake's paper gives a good summary of the habitat. The forest covers 9.7 square kilometres and the undulating terrain of glacial sands and gravels is punctuated by dozens of peat bodies, varying greatly in extent. Drainage and conifer planting has severely affected the basin mires in the hollows, but the Forestry Commission and Cheshire Wildlife have an ongoing project "Delamere's Lost Mosses" to clear trees and raise water levels to restore this habitat. Martin's survey was carried out in the early appraisal stages of this project. He visited 31 separate peat bodies, but not Blakemere Moss (SJ546712) where my new find of *Orthonevra intermedia* was made. The Blakemere basin was clear-felled in 1998 and reflooded to form a kilometre-long lake. The find was made in an area of wet heathland at the west end of the lake with abundant *Calluna vulgaris*, *Molinia caerulea* and *Eriophorum* and *Sphagnum* species (see photograph). It appears that this area still requires active management to control invasion by birch. In these respects, this



area is fairly similar to Norley Moss which is one of the two previous sites for *O. intermedia*, the other being a small bog, which Martin noted as one of the most intact.

The adult female *Orthonevra intermedia* is clearly distinguished from *O. geniculata* by the width of the face and the length of the antennae, and also by the later season of appearance. Both species are to be found in bogs or fens, and little seems to be known of the larvae other than that they are said to occur in organically rich mud. *O. geniculata* was a nationally notable species until the 2014 JNCC

review, when the number of hectads with a record since 1980 had reached 118. Nevertheless in **Britain's Hoverflies** Ball and Morris state that records of this species are on a downward trend since 1980.

I have found *O. geniculata* myself on two of the Lancashire Wildlife Trusts mossland reserves in Greater Manchester (SJ69): Astley Moss (SJ6997) – two records in May 2013 and one in May 2014; and one further record at Cadishead Moss (SJ6995) on 28 April 2014. These are lowland raised bogs which have been drained and hand-cut for peat in the past. Recent restoration has raised water levels and removed extensive birch scrub. The species was also recorded in an unpublished survey at Astley Moss by World Museum Liverpool (WML) in 2010. Their four records are from malaise traps between April and June; the traps were in three separate locations on restored bog, wet woodland, and an area of formerly cultivated peatland. All 7 records from Astley Moss have occurred within a 400×500m rectangle centred in the so-called "carrot field".

There are very few other modern records in Lancashire and Cheshire (vice-counties 58, 59 and 60) on the NBN Gateway or the Cheshire LRC database: two in VC59 at Formby near the coast (SD2806) and at White Coppice (SD6219) where the Pennine moors begin east of Chorley, and one in VC58 at Hatchmere (SJ5572) on 11 June 2003. Hatchmere is in fact contiguous with Norley Moss where *O. intermedia* was first found. It is also the site for the only record of *O. geniculata* in **The Diptera of Lancashire and Cheshire** by Kidd and Brindle (1959): this was by Herbert Womersley in the month of May – the year is not given but it would have been in the period 1905-1915.

Orthonevra brevicornis is similarly scarce nationally, so it seems particularly noteworthy that Martin Drake also found it at Norley Moss on 2 July 2003. It was recorded by Kidd and Brindle only in the Furness area of South Lakeland (which in 1959 was part of Lancashire and VC60, being later transferred to Cumbria and VC69). There are however modern records from Claughton in VC60 and from Rostherne (SJ7484) and Manchester Airport (SJ88) in VC58, as well as just over the southern and western borders of VC58.

To complete the story, Kidd and Brindle's sole record of *Orthonevra nobilis*, the only other British member of the genus, was from VC69, apart from a mention of the species in Lancashire in Verrall's **British Flies** of 1901. There is a fair sprinkling of modern records in the area, in line with its position nationally as the most frequent *Orthonevra*. Rather remarkably it again crops up in the Delamere area at SJ5572 in 1991, completing the set for this kilometre square.

The recurrence of these species at the same sites at intervals of 10 or even 100 years and their known association with bogs and fens does suggest that these are persistent populations, even though there has been considerable disturbance of the habitat. It might indicate some feature of behaviour that makes them difficult to find – Hatchmere in particular has been frequented by such eminent Dipterists as Harry Britten, Leonard Kidd and Alan Stubbs – though this is difficult to reconcile with the abundance of records at Astley Moss.

Thanks are due to the Forestry Commission and to Cheshire and Lancashire Wildlife Trusts for granting access to their sites, to the latter for supplying the WML survey report for Astley Moss, and to Martin Drake for a copy of the report on his Delamere survey.

Fleeing larvae

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Over the last few years I have spend a lot of time staring at an oak tree very near the farmhouse which has copious sap runs near its base. In the summer viscous streams of alcoholic white ooze flow out from under the bark over exposed patches of the underlying wood. But look as I may, I've failed to see any larvae wriggling in this sap, although the sheer number of flies about and the books tell me that the "slime flux" should be stuffed with them.

It was therefore with some amazement and delight that one day last summer, 5 June, I saw white larvae streaming out from a sap run over bare dark wood in a highly conspicuous fashion. The reason soon became apparent – an ichneumon! She was actively exploring the run, periodically inserting her abdomen into it, searching for grubs into which to lay her eggs. The behavioural response of larvae about her, fleeing her attentions, was to me most remarkable.

I captured a couple of the larvae and using Graham Rotheray's excellent **Colour guide to hoverfly larvae** was able to identify them as *Ferdinandea cuprea*. I often encounter adults of this brassy hoverfly around the tree, and have watched the females oviposit on several occasions. They place their eggs in crannies in the bark several centimetres away from any exposed sap. The first instar larvae must either travel over the bark to the sap, a feat akin to us crossing a mountain range or, more likely, use small cracks to pass through the bark to hidden sap runs beneath.

I captured the unfortunate ichneumon too. Mark Shaw in Edinburgh kindly said he would have a look at it, and has identified it as *Bioblapsis polita* (Vollenhoven) (Ichneumonidae: Diplazontinae). This, he tells me, is a very rarely collected parasitoid which, as far as is known, is an absolute host specialist, restricted to *F. cuprea*. The specimen, and another I caught later, are being deposited with the National Museums of Scotland collection.

At the same time as I was observing the ichneumon terrorising the hoverfly larvae, I noticed another, slightly larger, ichneumon species lurking below the sap run where the tree meets the soil. This species Mark

identified as *Rhembobius perscrutator* (Thunberg) (Ichneumonidae: Ichneumoninae), an uncommon species that oviposits into puparia of various sap-run and rot-hole syrphids.

Armed with my new knowledge that the sap runs are indeed inhabited by larvae, I collected some of the sap and looked at it underneath the microscope. Sure enough, there were plenty of fly and beetle larvae to be seen. Normally, they must have little reason to move and being the same colour as their environment, do not attract the attention of the human observer above!

Reference:

van Eck, André & Zwakhals, C. J (2015) *Bioblapsis polita* (Hymenoptera:Ichneumonidae) gekweekt uit *Ferdinandea*-puparia (Diptera:Syrphidae). Entomologische berichten 75 (6): 247-251

(Editor's note: just before this newsletter went to press Martin Speight sent me a recent image of a *Ferdinandea cuprea* puparium; it seemed appropriate to print it alongside this article).



Ferdinandea cuprea ovipositing



Ichneumon *Bioblapsis polita* ovipositing in sap run

(photos: Rob Wolton)



Ferdinandea cuprea larva fleeing from Ichneumon
(photo: Rob Wolton)



Ferdinandea cuprea puparium
(photo: Martin Speight)

Callicera rufa in Shropshire - update

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Callicera rufa was recorded for the fifth consecutive year at two of its Shropshire haunts in 2015: Keith Fowler ascended Little Hill, near The Wrekin, on 6 June and found a single male on one of the usual hilltop pine trees and I recorded *C. rufa* at the top of Haughmond Hill, near Shrewsbury on 26 May, when a single male was noted on the hilltop pines that have been used by lekking males every year since 2011. Over three weeks later, on 18 June, I found a very worn male on the same tree as previously, but this time there were also two females close by, hovering around and entering the rotten, hollow trunk of a fallen pine. Both females showed some interest in this medium, but eventually flew off, not having oviposited in the trunk. These were the first females seen at Haughmond Hill. I was thrilled to discover *C. rufa* at a new site, Nesscliffe Hill north west of Shrewsbury, where on 27 May, a cool, overcast day, I managed to reach a hilltop location of particular promise, noted on a previous visit in February. The clouds cleared for about fifteen minutes whilst I was on site, and very soon two males were seen sitting on the open sunlit trunks of pines. I saw males on three different trees, suggesting there may have been more than two males present. Unfortunately the sun did not reappear and nor did the *Callicera*, so I was unable to ascertain if there were more than two present. There are now four sites within a fifteen mile radius of Shrewsbury where *C. rufa* has been noted, indicating that there is a well established meta-population locally.



A fresh male *Callicera rufa* at Haughmond Hill on 26 May 2015 (left); hilltop pines (right) at Nesscliffe Hill with trees used by *Callicera rufa* as “lekking stations” arrowed (photos: Nigel Jones)

Finding hoverflies on coniferised lowland heath

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My local site for hoverflies in East Yorkshire has for the last 8 years been Allerthorpe Common (SE755480), a small Forestry Commission plantation south of York within which is a Yorkshire Wildlife Trust reserve preserving a tiny parcel of the original lowland heath, which once covered a far wider area locally.

Most of the site is plantation blocks of Corsican and Scots Pine which have been thinned out and have an understorey of brambles. A few sections have been cleared and are seeing a regrowth of heather. There are scattered oaks across the site, areas of birch scrub, and the two main tracks across the site are maintained with wide flowery edges. Finding hoverflies on a site like this can be hard work, as for much of the year there is no obvious food source for adult hoverflies, and even in the usually productive months of May and June there is not much flowering at all.

Summer 2015 saw the 100th species found at Allerthorpe, which is a considerable list for what is essentially a small coniferous woodland site in the North of England. It is easy to waste a lot of time finding very little on a site like this though and I have found the key times to visit are:

- Late March-early May for *Salix*
- July-August for *Torilis japonica/Potentilla erecta*
- September for *Calluna vulgaris*

Outside those periods there are hoverflies around, but it can be immensely frustrating to walk round in May/June and find very little at all, when other sites are producing all sorts of unusual species. Those three periods and the associated plants provide most of my sightings.

Sallows flourish in one or two damp areas and fringe the paths across the site. It is always worth spending time checking these out in early spring; late March and early April see *Syrphus torvus*, *Melangyna lasiophthalma* and *Cheilosia albipila* among the first hoverflies to appear, with a considerable supporting cast often including the odd scarcer species like *Cheilosia nebulosa* or *Megasyrphus erraticus*. *Syrphus torvus* usually outnumbers other species many times over. Management on site ensures that there are always some very young sallows, no more than 4 or 5 feet tall, which flower ahead of the older bushes and are worth staking out for species like *Criorhina ranunculi*, which is easy to find as a result (unlike a couple of weeks later, when it seems to stay high up in the taller sallows). *Salix caprea* flowers first, but once that finishes, the low *Salix repens* is superb for *Sphaerophoria* spp. and others.

After that early rush the site is very quiet indeed and barely worth visiting at all until high summer when upright hedge parsley (*Torilis japonica*) and tormentil (*Potentilla erecta*) flower. Tormentil thrives at the edge of tracks and is especially attractive to *Sphaerophoria* species, *Paragus haemorrhous* and various *Platycheirus*. It is worth taking a sample of the *Sphaerophoria*, as several species can be found together. The most abundant species here is *S. fatarum*, but *interrupta*, *batava*, *philanthus* and *scripta* can all be flying in the same area at any one time. Upright hedge parsley is the main tall flowering plant at track edges through July and August and it is incredibly attractive to *Cheilosia* species in particular: 19 species of *Cheilosia* have been found on site and 14 species taken from the plant at this time of year. As the genus includes what are essentially small, black flies, most unidentifiable with certainty from a field view, it is worth taking a sample

a couple of times through the summer. The most abundant species are usually *C. pagana* and *C. scutellata*, but there is a nice suite of supporting species regularly found, including the nationally scarce *C. mutabilis* and *C. velutina*, and locally scarce species like *C. vulpina* and *C. longula*.

As the *Torilis* dies away, heather (*Calluna vulgaris*) starts to flower, and this is generally the most productive plant for hoverflies through to the end of the season, especially larger species like members of the Eristalini and *Sericomyia silentis*, as well as members of the Syrphini including *Scaeva pyrastris* and *S. selenitica* (the latter probably resident, as found through the year), *Didea fasciata* and *Syrphus* spp. The sheer number of hoverflies on heather in August and early September is the most impressive thing and a couple of sweeps of the net can see it buzzing with *Eristalis*, *Syrphus* and *Episyrphus balteatus* especially.

Those four plants and those times of year provide the vast majority of the species I find on this plantation/heathland site. Of course each habitat within the site has its own attractions and there is a row of roadside Bird cherry (*Prunus padus*) across one side of the site, which is incredibly attractive to many hoverflies for just a couple of weeks each year. Then there are the damp areas of rushes (*Juncus* spp) which produce *Trichopsomyia flavitarsis* and *Xanthandrus comtus*, and the ruderal edges of a small set-aside field within the common which produce *Triglyphus primus* each year. A short period in early June produces a lot of *Dasysyrphus* spp on *Ranunculus repens* across the site.

All sites produce their own species on particular plants, but at a relatively dry heathland/monotonous plantation site like this a little time spent thinking about when to target visits in order to find the best variety of species can pay huge rewards and avoid wasted visits at the wrong time, when efforts would be better spent at other sites locally.



Sphaerophoria fatarum on *Salix repens*



Cheilosia scutellata on *Torilis japonica*



Torilis japonica flowers alongside the main tracks

(photos: Ian Andrews)

Sphaerophoria species determination: some traps

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Although the genus *Sphaerophoria* is fairly easy to recognise in the field, the same is far from true for its individual species, only *S. rueppellii* and *S. loewi* being identifiable in both sexes. In these two species the yellow thoracic side stripes reach only as far as the transverse suture, and they are separable from one another by the colour of their antennae. The other British species all have complete side stripes but it is currently accepted that the females cannot be determined, and that in the case of males only *S. scripta* is readily identifiable (due to the length of its abdomen, which extends well beyond the wings), examination of the genitalia being necessary for identification of all the others. However, during May 2015 we learned that in some circumstances it is possible to be misled into errors even with the "easy" species.

On 16 May 2015 we were searching for insects during a field meeting at the former Windrush Airfield (SP182120). The weather was sunny and fairly warm, but a strong wind was blowing across the site as a result of which very few insects were seen at flowers. However we came across a banked field margin the lee of which was rich in insects. Among them were several *Sphaerophoria*, including male *scripta* and a pair in cop (tail-to-tail) where the male appeared at first glance to be one of the short-bodied species (hence something other than *scripta*). We photographed the pair and Martin caught them, and a few days later when he had pinned them he provisionally identified the pair as *S. rueppellii* as the thoracic stripe stopped before the wing base. When David saw the pair he was immediately doubtful although the thoracic stripe character clearly looked good for *rueppellii*; the male was in fact built like *scripta* with the characteristic long abdomen and did not have the typical clavate shape of *rueppellii* - its abdomen had appeared to be short when observed in the field, but this turned out to have been an optical illusion caused by the fact that its last two tergites were curled underneath its body while in cop. Close observation of the genitalia of the male proved that it was indeed *scripta*. Below are photographs of the pinned male and female of the pair, illustrating the absence of the rear section of the thoracic stripe in the male. That section of the thoracic stripe is discernible in the female, though it is much fainter than the front portion. It is not uncommon for the rear part of this stripe to be fainter than the front part in *Sphaerophoria*, as evident for example in the photograph by Ian Andrews of *S. fatarum* that accompanies the previous article.



Sphaerophoria scripta male (left) "masquerading" as *S. rueppellii* and female (right) with which it was mating (photos: Martin Matthews)

***Sphaerophoria scripta* having fun?**

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In my garden on 19 September I was doing a round of monitoring when I came across a blur of a yellowish thing flying in vertical, flattened ovals. I was mesmerised trying to work out what insect might do this and had just about realised that it must be a male *Sphaerophoria scripta* before it slowed down and flew in a more leisurely manner. Perhaps I would have done better to see if there was a resting female close by. If this was a normal courtship display, it seems odd that I have not met with it before, so perhaps the fly was just having fun in the sun.

The action was low down, only about 6-8 inches above a patch of daisy flowers and the duration of the display was about 6 to 8 seconds. If other people have met with this performance, or alternative courtship display, I shall be pleased to hear. Conceivably, in a genus with so many species, display differences between them could be used as a means of identification.

Living under the radar?

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All too many insects remain little more than labels – the scientific names we have given them. What they do in their lives is an almost total mystery. At this point in time hoverflies would not usually be thought of in that way, but as being more at the other end of the spectrum, as “well known”. A few of them, *Episyrphus balteatus* being the extreme example, might even be regarded as very well known. There is so much literature about *E. balteatus* you could fill a short book with it. There is, however, a big BUT: the general, background level of information about hoverfly species is distinctively uneven, with the developmental biology of a substantial number of species remaining largely in the realms of mystery and conjecture. A great number of those have something in common – it looks as though their larvae are in the soil.

One of the interesting things about syrphids is the wide diversity in larval biology exhibited by different species in the family. In the case of soil-inhabiting larvae all three trophic groups are represented, phytophages by *Cheilosia* and *Merodon* for instance, saprophages/microphages by *Eumerus*, and predators by a miscellany of syrphine genera plus a few *Volucella* and *Microdon*. What is far from obvious at first glance is how the larvae belonging to these trophic groups differ from one another in their accessibility to study.

Syrphid species with phytophagous larvae are, de facto, associated with plants. Characteristically they are associated with plants that have bulbs, tubers, expanded stem bases or fleshy rhizomes, in which the larvae feed. At any given locality this can narrow down the search for larvae to those plants which have such structures. Another way to identify the plant host of a syrphid with phytophagous larvae is to observe oviposition by females – accumulated data show that the plant on which a female lays eggs is very likely to be the plant in whose tissues the larva feeds. There is also a tendency for the adult fly to feed at the flowers of the plant used as host by its larvae, and for both sexes to occur in its close proximity, phenomena which give further clues as to the host plant's identity. In these various ways the plant host can act as a marker for the location of larvae, and the greatest remaining obstacle to finding them is the probability that they are present in the host plant for only part of the year, potentially spending an appreciable proportion of the year away from it, free in the soil as a puparium. Inspecting the correct part of the right plant at the wrong time of the year can lead to dismissing that plant as not being the larval host!

Trying to find the host plants of microphagous/saprophagous larvae of *Eumerus* species is significantly more difficult than identifying host plants of syrphids with phytophagous larvae. For one thing the adult *Eumerus*

seem neither to visit the flowers of their larval host plant nor to lurk in its vicinity. Further, they can be in flight when the larval host plant is only in evidence above the ground surface as a withered remnant, hardly discernible by the human observer and, when noticed, not easy to identify. In those circumstances does the ovipositing female recognise the above-ground parts of the plant at all, or is she seeking to detect its sub-surface tissues in decay? Whatever sensory cues trigger oviposition in female *Eumerus*, for the human observer the adult fly provides almost no hints to the identity of its larval plant host. The most useful tools in searching for the larvae of a *Eumerus* species are a good plant list for a locality at which it is known to occur and a good knowledge of which plants on the list provide a potential underground food supply. Beyond that a good spade, a coarse sieve, plenty of time, strong motivation and a fair share of good luck are also helpful.

It is well-established that the larvae of some syrphids whose larvae are predatory and soil-inhabiting live actually within the nests of aculeate Hymenoptera. But what of the others? Known larvae of *Pipizella* species suggest that the genus specialises in preying on root-collar aphids, thus inhabiting the interface between the aerial parts of the plant and its roots. Root-collar aphids are habitually tended by ants. The patchy information existing about *Chrysotoxum* larvae indicates they are in the grass-root zone of the soil, where they are predators of root aphids. With few exceptions (one being the lettuce-root aphid, *Pemphigus bursarius*) root aphids are recognised as so dependent upon the protection provided by the ants that “farm” them, that they are not found away from those ants. Finally, something has to be said of the iconic and enigmatic genus *Doros*, the puparia of which (both European species) have been found at the base of deciduous trees, but which can occur at locations where woody vegetation no more substantial than low scrub is present. The inference is that *Doros* larvae are soil-inhabiting, with some sort of root aphid associated with trees and shrubs, though this is yet to be proved.

For anyone wishing to find larvae of syrphids with predatory larvae living in the nests of ants or other Hymenoptera, the nests of the hosts act as markers. Searching for *Microdon* larvae and puparia in early spring can be more rewarding than looking for the adult flies, since the morphology of the respiratory processes of the puparia, in particular, provides the most certain basis for identifying the species. *Xanthogramma* larvae have been found with root aphids in the nests of ants (*Lasius*), but this has happened surprisingly infrequently. Is that because ants’ nests have only very rarely been searched for syrphid larvae? Or is it because *Xanthogramma* larvae are only very rarely actually within ants’ nests? If they characteristically predate root aphids tended by ants that would not necessarily entail being within ants’ nests, since ants also farm root aphids in the vicinity of their nests. The same can be said of *Chrysotoxum* larvae, which have occasionally been found in ants’ nests, but have otherwise almost never been seen. It is remarkable that the larvae of such widely distributed and easily identified syrphids as *Chrysotoxum bicinctum* and *C. cautum* have apparently never been found in the field.

The different species of root aphid are not only closely associated with particular ants but also with particular plants, and one might think that a knowledge of which plants harbour root aphids could aid in deciding where to dig, close to an ants’ nest, in searching for aphid-feeding, soil-inhabiting, syrphid larvae. But information on which plants harbour root aphids is difficult to come by, not least due to the prohibitive cost of the relevant literature. The commercial significance of aphid infestations to production of various crops makes the compendium of data on aphids and their plant hosts (Blackman & Eastop, 1994, 2006) one of the most outrageously expensive sets of volumes one might ever contemplate buying. There are few of us interested in syrphid larvae who would have a spare £1000 just to find out which plants in their vicinity harbour root aphids! If one did have the information it could perhaps be quite helpful in some instances, where the aphids are associated with easily recognisable plants. But it is apparent that various root aphids are associated with “grasses”. The thought that it might be necessary to identify grasses, in order to work out where in a patch of ground root aphids might be, is not comforting.

Perhaps aphid specialists, in pursuit of root aphids, frequently encounter syrphid larvae among their aphids? Apart from those trying to find new ways to poison aphids in commercial crops, aphid specialists seem almost as rare as the proverbial hen’s teeth. And if one has ever found syrphid larvae among commercially unimportant root aphids this does not seem to have been communicated to syrphid specialists. The closest to such an event recorded would appear to be a misquoted reference to an aphidophagous syrphid larva found with root aphids on lettuce. Reading that reference reveals that in fact the larva was not with the root aphids but among the leaves of a lettuce plant harbouring root aphids, and simply judged capable of predated those

aphids if it encountered them. Perhaps formicologists have found syrphid larvae among root aphids when studying their ants? If they have there is little evidence syrphidologists have been made aware of such occurrences. When syrphidologists have found a syrphid larva with root aphids they have not consistently named the root aphid, or said whether the root aphids were attended by ants, or necessarily named the ant involved either. It doesn't seem that aphid specialists, ant specialists and syrphid specialists are sufficiently in contact with each other to ensure that, when syrphid larvae are found with root aphids attended by ants, these occurrences are adequately recorded.

So, if you wanted to find the larva of *Chrysotoxum cautum*, how would you go about it? I guess that, did I have the answer to that question, I'd have done it already! For a syrphidologist seeking a challenge, finding soil-inhabiting syrphid larvae, especially those feeding on root aphids, would seem to be a wide open field, in more ways than one! At least the requirement to rear larvae in order to establish what species you have found is no longer quite the burden it once was. With the adults of so many syrphid species now characterised genetically, larvae can be identified by matching their genetics to the adult fly (Andrić et al, 2014; Gomez-Polo et al, 2014). Maybe that will encourage more larval hunting. No harm in hoping!

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Observations on *Caliprobola speciosa* (Rossi, 1790) in Transylvanian oak wood pastures

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Stubbs & Falk (*British Hoverflies*) state that *Caliprobola speciosa* is associated with ancient beech trees and, more rarely, oak, and that the larvae occur in rotting heartwood and can occur deep down into decaying roots. It is only known for sure in Britain from Windsor Forest and the New Forest. In contrast Speight (*Species Accounts of European Syrphidae (Diptera)*, available through Syrph-the-Net) states its associations with *Castanea*, *Fagus* and *Quercus*, and expresses no comments about any known preferences. He says that males fly around, hover between and settle close to the roots of the trees, settling on bare ground, on the sawdust of cut stumps, or on vegetation in the vicinity. Larvae have been reared from both *Fagus* and *Quercus*.

A study tour to the ancient oak wood pastures of Transylvania (Romania) in spring 2015 provided an opportunity to observe this elusive species. Many of the villages in the Sigisoara region of southern Transylvania have notably large expanses of long-established common wood pastures on the hillsides between the cultivated fields which surround the settlements and the managed forest on the higher ground above. Five of the best known examples were visited over a few days and *Caliprobola speciosa* was seen at

three, suggesting that it may be relatively widespread in the area. Large open-grown veteran oaks are the dominant presence of these wood pastures.

A few *Caliprobola speciosa* were seen at the second site visited on day 1 (18 May) at Viscri, flying rapidly around the sunny bases of veteran oaks, and occasionally landing on the trunk base or ground close by, in full sunshine. *Brachypalpus laphriformis* was also seen here. The next day, at Vanatori, there were more *Caliprobola speciosa*, another *Brachypalpus laphriformis* and a *Ferdinandea cuprea*. On the third day at Mercheasa we were treated to a particularly spectacular display of *Caliprobola speciosa*, with the hoverflies present around many of the veteran oaks in ones, twos or threes, and almost invariably alighting around us in the warm sunshine while we were examining the oak trees. One hoverfly was observed alighting on exposed wood in a damaged area at the base of an oak, on the inside of a root buttress, and its abdominal movements suggested that it was probing into the white-rotten sapwood with its ovipositor, perhaps egg-laying. The sapwood was dry and friable at the surface but sound wood – perhaps moister – could be felt below. No bracket fungi were fruiting on this tree and the exterior white-rot seen had presumably been rotted by a sapwood fungus rather than a heartwood fungus.

A wide range of bracket fungi were observed across these wood pastures including species which form white-rotten heartwood on old oaks, eg *Phellinus robustus*, *Ganoderma resinaceum* and an *Aurantioporus* sp, but no observations were made on sapwood fungi. The more typical butt-rot fungus in Britain, *Inonotus dryadeus*, was not noted – this species decays the basal dead heartwood of living veteran oaks, forming a hollow dome in the base of trees, visible between the living buttress roots. This may be a key fungus for *Caliprobola speciosa* in oak sites. *Phellinus robustus* tends to be active higher up the trunk while *Ganoderma resinaceum* breaks down the dead heartwood throughout the living tree trunk.



Caliprobola speciosa male (photo: David Iliff)

County Recorders



Scotland

- Dumfries & Galloway ERC
- Fife Nature Records Centre
- Lothian Wildlife Information Centre
- Glasgow
- Highlands & Islands
- North East Scotland
- unassigned
- Outer Hebrides
- Shetlands BRC
- Orkney BRC

Ireland

- CEDAR (Ulster Museum)

North West England

- Cumbria Biodiversity Data Centre
- Greater Manchester LRC
- Lancashire Envi. Record Network
- Merseyside BioBank
- rECORd (Cheshire)
- Isle of Man

Wales

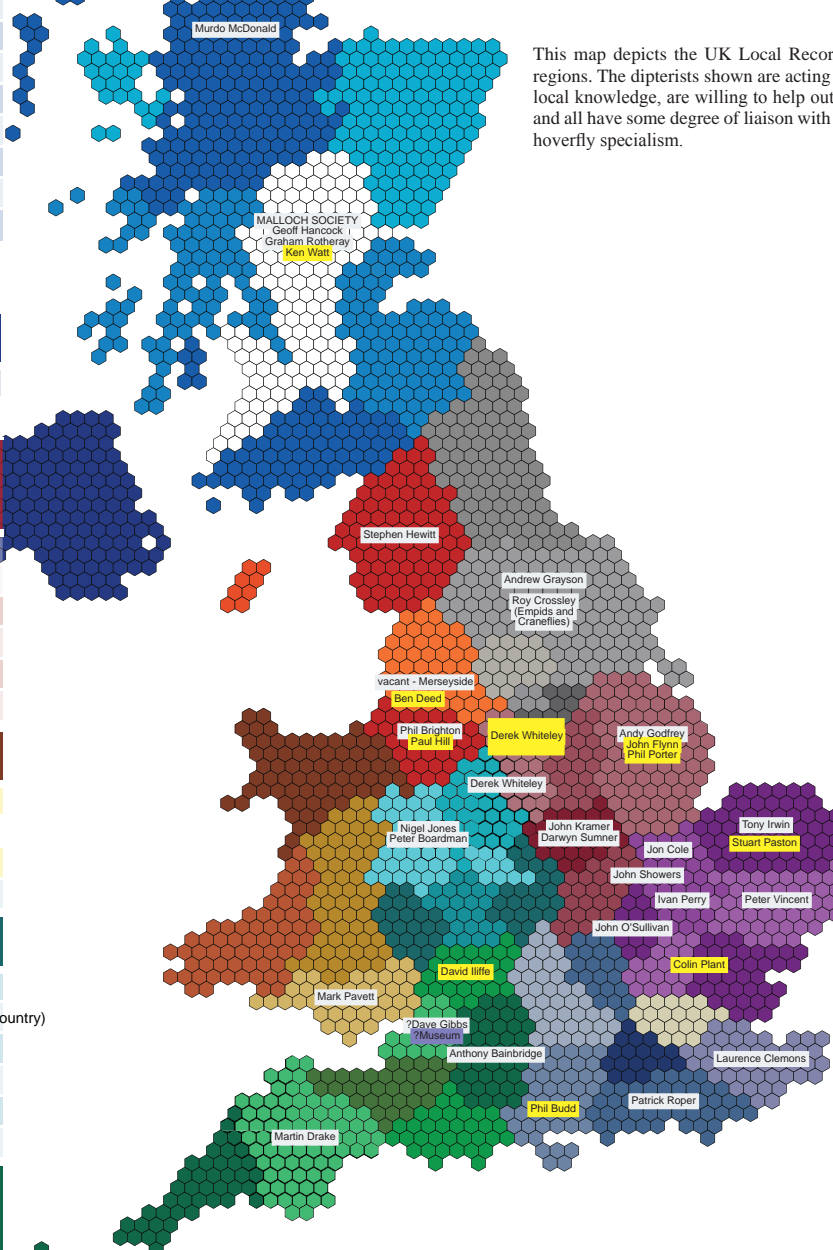
- North Wales (Cofnod)
- Powys & Brecon Beacons
- South-East Wales
- West Wales BIC

West Midlands

- Staffordshire Ecological Record
- EcoRecord (Birmingham & Black Country)
- Herefordshire BRC
- Warwickshire BRC
- Worcestershire BRC
- Shropshire

South West England

- Bristol ERC (BRERC)
- Cornwall & Isles of Scilly - ERCCIS
- Devon BRC
- Dorset ERC
- Gloucestershire Centre for ER
- Somerset ERC
- Wiltshire & Swindon (WSBRC)



This map depicts the UK Local Records Centres arranged by standard UK regions. The dipterists shown are acting as County Recorders. They have good local knowledge, are willing to help out with Diptera enquiries in their region and all have some degree of liaison with their LRCs. The yellow labels indicate hoverfly specialism.

North East England

- North & East Yorkshire EDC
- West Yorkshire
- North East
- Rotherham, Doncaster
- Sheffield
- Barnsley

East Midlands

- Leicestershire & Rutland ERC
- Lincolnshire ERC
- Northamptonshire BRC
- Nottinghamshire
- Derbyshire (closed)

East of England

- Norfolk Biodiversity Info. Service
- Bedfordshire and Luton
- Cambridgeshire & Peterborough
- Hertfordshire ERC
- Essex (closed)
- Suffolk

Greater London

- Greenspace Information for G. L.

South East England

- Hampshire BIC (HBIC)
- Thames Valley ERC
- Kent & Medway BRC (KMBRC)
- Surrey BIC (SBIC)
- Sussex BRC (SBRC)
- Buckinghamshire & Milton Keynes
- Isle of Wight

Many thanks to everyone who helped with this survey which began with an enquiry to all Local Records Centres and then led on to an investigation of Dipterists known to be working in various areas.

Treat this as a first draft, if you know of workers in areas which seem not to be covered or wish to assist in recording then please contact your LRC (list at www.ALERC.org.uk) and the Bulletin Editors.

Darwyn Sumner



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Whilst all schemes will readily accept records in written form the symbols are used to indicate some of the known (or surmised) methods by which Scheme Organisers may currently receive records electronically. All schemes will accept records in an Excel spreadsheet, add your initials to the filename. If you are sending a list of mixed Families to several schemes simultaneously please add a column with Family names.

Recorder Mapmate Excel Access and other databases & tools uploaded to NBN Gateway, faded symbol = historic dataset

iRecord