



BULLETIN OF THE
Dipterists
Forum

Bulletin No. 80

Autumn 2015



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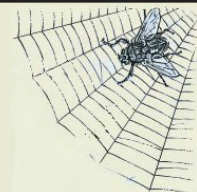
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Photographs: Front cover *Chrysotoxum cautum* **Chris Spilling**, above *Machimus cingulatus* **Darwyn Sumner**. Other photographs as supplied by the authors or the editorial panel who would be pleased to receive illustrations for general purposes - 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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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 DF website.

Hoverfly Newsletter #59



Soldierfly Newsletter #3



Empid & Dolichopodid Newsletter #20

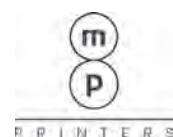


Cranefly Newsletter #30



Booking form for meetings & Membership form: now only available in previous Bulletins, downloadable from Dipterists Forum website or contact the organiser.

A number of other links and downloads referred to in this Bulletin are also to be found on our website under Web links.



Forum News

Editorial

Ray J. 1660

How wonderful to have an excuse for including that reference in a paper. The paper is **Fifty years of the Biological Records Centre** which introduces a whole bunch of articles on Biological Recording in a recent *Biological Journal of the Linnean Society*. Don't miss them, they are available online free for only 3 months (see Reviews)

Darwyn Sumner

Get Windows 10?

Windows 8 users will be seeing a little "Get Windows 10" icon on their computers just now (expect it to take ~15 hours)



Windows 10

If you are tempted to do this, be warned. We are as yet unsure as to how **Mapmate** or **Recorder 6** will work on this system. If you want to use either of these biological recording applications then please check that their developers report that they have stable versions. Latest news from Mapmate is at <http://www.mapmate.co.uk/> and Recorder at <http://forums.nbn.org.uk/> or better still, Mike Weideli's website at <http://www.lfield.co.uk/> and there's a specific thread <http://forums.nbn.org.uk/post.php?tid=6024> about **Windows 10** and **Recorder 6** where I've asked if the brave souls who try it out first would report what success they've had.

Dropping like flies I see the two sets of membership figures that John Showers reports when I put his "Membership Matters" in the Bulletin.

Last year we had 399, now it's 292! Do go see what he writes about this.

Care to visit European Museums?

There's funding available through "SYNTHESYS" for short research visits, check <http://www.synthesys.info/access/> before October 15th deadline. More information on DF Forum.

John Showers

Biological Recording awards

The NBN has established a new national award scheme in partnership with BRC and NFBR to recognise significant achievement in biological recording and information sharing. This is an annual award made to groups or individuals who are making outstanding contributions in this area. Announced on 5th August and with a closing date of 30th September the window of opportunity to make nominations is quite small for this Bulletin to inform you. For more information check the Latest News section at <http://nbn.org.uk/>

Fly times

Again a reminder to pay a visit to the website of the North American Dipterists Society (<http://www.nadsdiptera.org/>) and read their online Fly Times. I found the October 2014 issue particularly entertaining with its analyses of the 8th International Congress of Dipterology and all the photographs of dipterists from around the world. Always some stunning fly photographs and they publish a list of recent Diptera papers in each issue too, so you can keep up to date.

The Nottingham Fly



Passenger: "I say cabbie, what's our first destination today?"

Cabbie: "Erewash"

Passenger: "Pardon?"

Notice board

The future of Biological Recording systems

If you are managing records for a Recording Scheme, you have a small amount of choice in the systems available for use. You can do it longhand using a variety of tools, as Malcolm Smart does with his amazing skills at Excel but even he would be overwhelmed by the amount of data that the Hoverfly Scheme has to manipulate.

Desktop systems

There are just two of these in common use, the back page of this Bulletin indicates what the various Schemes use. Around 8 use **Recorder** as their main system and around 4 use **Mapmate** (with several others able to manipulate records in both if the case arises). All of them represent a considerable investment in time by those involved, not so much the time taken to learn the system but the data entry, formatting and validation of all the elements of the records.

Recorder 6

Backed by JNCC until recently, who were in charge of maintenance and development but have pulled away, indicating that they wished to develop an online system. There has been little sign of this development, a statement is due soon, JNCC are happy to view Recorder 6 as the industry standard for the time being.

It will work on all operating systems up to Windows 8.1 but it hasn't yet been tested on Windows 10 - so beware of upgrading just yet.

It is also the mainstay of Local Records Centres (apart from a couple, Cofnod and Bristol who developed their own but Recording Schemes are hardly in a position to do that). It's under pressure from Local Authority LRCs whose "Mordacs" don't like the older applications because they are trying to improve corporate IT standards (yes, just like the Dilbert cartoons.)

There is talk amongst LRCs of contributing to Recorder development in partnership with JNCC. It's hard to persuade key organisations of its importance within the recording community because the likes of NBN, Natural England, Defra and JNCC staff barely use it in their day to day work - but all their work depends upon ours (the community of Recording Schemes allied with Local Records Centres).

Don't forget the huge amount of work we Dipterists have put into this, Stuart Ball developed it and Chris Raper is responsible for the species dictionaries in it across all taxa, not just those obtained from Peter Chandler's work.

If you have worries about the future of this application, the NBN consider that it is an integral part of "the NBN family of people and systems".

Mapmate

Mapmate is safe up to Windows 7 but is removing support for its product on Windows 8, although **Windows 8.1 is fine**.

If you hate the interface on Windows 8 and 8.1 then you can get a free emulator which makes it look just like 7 & XP. Windows 10 will look just like 7/XP again, following popular demand but until it is released we won't be sure how either Recorder or Mapmate works on it.

Online systems

These include systems like **iRecord** and **Living Record**.

Martin Harvey wrote about iRecord in Bulletin #76 and Dipterists Forum Recording Schemes attended a presentation by BRC about it.

I was able to use Recorder 6 to produce the map in my next article plus a list of sites without the need to record a taxon against each location. Correct me if I'm wrong but I don't think online systems could perform these tasks as easily as I could in Recorder 6 - if at all.

Online systems would have been valuable whilst on our field week but many discovered that the bandwidth through WiFi at Nottingham University was inadequate for many tasks.

Records at home ...

Bjorn Beckman of BRC wrote to me recently, if you recall he and I were coordinating the conversion of Steve Falk's handwritten records into computerised format. I managed to get Warwickshire Biological Records Centre to agree to scan Steve's folders of records (actually that was really easy, they're all old chums and Steve was happy to pop by for tea and chat) and BRC paid WBRC for the labour involved.

So now BRC have scans of all Steve's folders, 13 of them with 150-200 pages each. Val Burton began to enter these onto BRC's system but retirement stopped her continuing beyond 2 folders.

Having spent some years doing this sort of thing across all taxa on all the paper records in Leicestershire Museum I can well appreciate how time-consuming this sort of job can be. Val took 60+ hours per folder so the rest of the job is estimated at 20+ weeks. Bjorn has Martin Harvey in mind for this job and Martin is keen to do it.

... and abroad

A recent questionnaire from NBN to Recording Scheme organisers included a question about NBN data exchange with GBIF.

The NBN seems quite keen on GBIF these days, this describes itself thus: "*The **Global Biodiversity Information Facility (GBIF)** is an international open data infrastructure, funded by governments.*" and the NBN tells us that *it allows anyone, anywhere to access data about all types of life on Earth, shared across national boundaries via the Internet.*

Try it but don't expect the sort of comprehensiveness you find in the UK. Frequently all you see is dots showing the records that were passed on to it by NBN - i.e. just UK records.

Exploring the mechanism for the individual wanting to contribute records outside of the UK, I spotted their "*Overview of data publishing in the GBIF Network*" hoping for clues but it is a technical pamphlet aimed at corporations with the resources to hire technical experts to upload data. If you wish to submit data you have to work through GBIF's formal contributing institutions which are singularly unresponsive to an individual wanting to contribute and you'd have no hope if you wanted to upload, for example, Hungarian records as they don't have such an institution.

If you have foreign records however, it's worth checking out the spreadsheet formats on their website (also for Fauna Europaea), maybe one day we'll figure out a way to submit them.

The mechanisms are used by certain UK institutions to upload specific datasets, the Natural History Museum and Kew for example. This isn't done in an attempt to fill holes in distribution maps but rather, as Teresa Frost (Cumbria) tells me, to allow data to reach a wider research audience, to permit detailed ecology studies and to be able to tell UK recorders that their data can be used for research in a European context.

More ticked boxes than distribution dots.

Darwyn Sumner

Records for the DF Summer Field Meeting 2015

Stuart Ball once told me that he'd attempted to record our finds on **Recorder** which he once took on a laptop to a Summer Field Meeting. He concluded that it's simply not possible to make much of a useful job of entering records whilst at the same time doing your own field work. I doubt you'd make much progress even if you found a worker dedicated to just data entry for the week.

You can squeeze a bit of usefulness out of **Recorder** on a laptop at these meeting though. For your personal use you can tap in details of sites visited, who you travelled with and record a handful of the easily identifiable species. If you have a little bit of historic data on it already, it will also help you home in on potential sites to visit.

I've volunteered to collect the records for this year's Nottinghamshire Field Meeting. I did this sort of thing professionally for 15 years at Leicestershire's LRC and also for Dipterists Forum in 1999, 2000 and 2001 (see NBN Gateway).

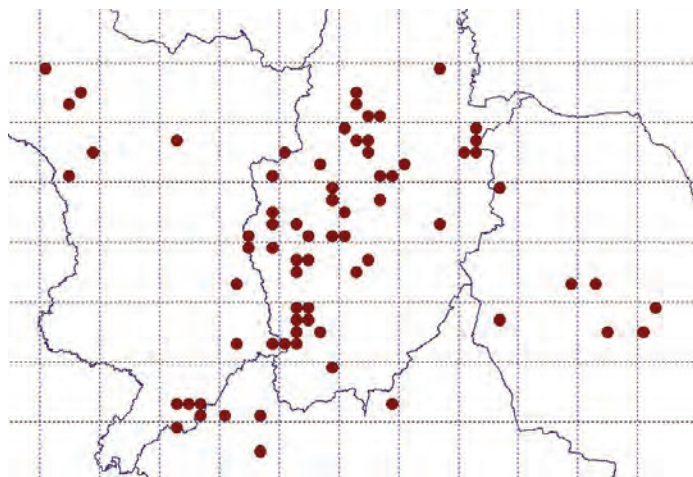
After much discussion with people who attended the Field Meeting, I've come up with an outline of principles that takes into account a number of issues (and ideals), please look upon any suggested timings as "milestones" rather than "deadlines":

1. End "product" comprises records published onto NBN Gateway
2. Agencies such as Wildlife Trusts, Natural England, National Trust, Forestry Commission etc. are all accustomed to using NBN Gateway as a source of records to assist in their "management plans", it's what the Gateway is for.
3. Records to be published annually, before the start of the following years' field season, end of March seems about right as a milestone, publishing to NBN Gateway can be done during April.
4. If recorders take longer than that then there's no need for them to worry, their records will be added to the NBN Gateway batch the following year (or the year after that).
5. Absolutely no criticism intended to anyone who sends in records late (or never), it was your holiday, hope you had a good time with us, we certainly enjoyed your company. No pressure, if you want just to take photographs, that's fine.
6. Non-Diptera records. We'll have a go, please be careful with the names you use, They have to be matched up with the species dictionary developed by NHM who then put them into the **Recorder** dictionary.
7. **Recorder 6 is being used.** If you are one of the 8 Recording Schemes that use it, or if you are a member who has a copy for personal use then you are welcome to the Survey file (one Survey file will contain everything from one Field Meeting) I'll look into popping it into the Member's only section of the DF website. Very useful if you plan to visit areas where we've previously held our Field Meetings, especially if you've got Recorder 6 on a laptop.
8. **The administrative burden.** I'm very well aware of how "extras" can create such a burden if enquiries are made prior to publication on NBN Gateway. Full-time workers in a Local Records Centre do this daily. So I'm proposing "no extras" (but see 11), even if the records are submitted in the autumn, they're not dealt with until the spring - and then they're published, after which anyone can access NBN Gateway to answer enquiries.

9. Turnaround time. Commissioned work from consultants can be very fast (one has already sent me his Notts records), they're usually getting paid. Large recording schemes have their own staff and can also be fast. Other schemes rely on volunteers and may take years. We're proposing one year, that's a pretty good compromise and puts us on a par with the big recording schemes that can afford full time staff.

10. Records of special interest. If you've got something from the Field Week that's special then you've a whole range of additional things you can do with it. Send it to whoever is doing the write-up to the Field Meeting (Alan Stubbs for the 2015 Summer Field Meeting), tell Rob Wolton if it is of conservation interest, send it to the appropriate Recording Scheme organiser (perhaps for their newsletter), upload the image to iSpot, DF Forum or diptera.info for identification. Duplication of records that might arise in this way is simply not an issue.

One thing I did think I would be able to achieve by the end of this Field Week was a map indicating all the places that people had visited, many thanks to all those who gave me their lists, here's the result obtained within a couple of days of returning home:



Survey events: Dipterists Forum field week to Nottinghamshire 2015. Grid 10K sq, borders are of Vice Counties (left to right) Derby, Notts, Lincolnshire, Leicester in the south. (Recorder 6 - screen copy)

The list of sites is posted on the DF Forum (web links)

11. Feedback to other groups

Anyone arranging these meetings will be pretty keen to ensure that they can keep landowners and permit-granters up to date on our findings. At the outset we have 2 "products" they can have: the above map and the list of sites visited, following that we've the account of the meeting in this Bulletin (Alan Stubbs). Clearly nothing useful can be conveyed to these agencies until we actually have data. Slow dribbles of information to these agencies seem important to some folk but keeping that task separate from the main task of collating the bulk of the records (see 8) is seen as a key means by which the overall job (NBN Gateway) might get done. The admin on the NBN Gateway is some work, I even get requests for better access to the 1999 DF Cornwall data from people looking for bat data in Sussex!

Fortunately we have a volunteer to do this dribble job for the Nottinghamshire meeting, **Derek Whiteley**.

So please, when you get around to sending your records to me, copy Derek in.

Darwyn Sumner (darwyn.sumner@ntlworld.com)
Derek Whiteley (thedeatree@btinternet.com)

Recording Schemes

Please send your records to the Recording Schemes

It's no good just sending them to obscure publications like this Bulletin. No-one's going to read this in a couple of years' time, or trawl through it on the offchance that there might be records of interest. Sending your records to the Scheme organisers helps ensure it's electronically published and is available for future work on conservation and biology. Scheme organisers are well placed to meet Alan Stubbs' challenge: "*The challenge is to become more attuned to the fine detail about life cycles and ecological niches*" not just Rob Wolton's "*guardians or lead contacts*" - and there is simply no problem to anyone over "duplicate records", the NBN Gateway has automatic systems for dealing with this as Helen Roy of BRC detailed to us in her presentation at the NHM.

If you are currently a *paper-only* recorder, now's the time to start thinking about keeping the Recording Scheme organisers updated.

Tephritid Flies Recording Scheme

The Tephritidae of Britain and Ireland

Laurence has prepared an atlas of the Tephritidae. Too big for this Bulletin at 81 pages, it is to be found on the DF website in the Recording Schemes section (ed)

Laurence Clemons

Stilt & Stalk Fly Recording Scheme

I've been contacted recently by Dave Heaver regarding "Assessments" for both this group and Sciomyzidae, couldn't make head nor tail of it all until I read Rob Wolton's summary. More on this in the next Bulletin.

Darwyn Sumner

Hoverfly Recording Scheme

Newsletter #59 included in this Bulletin

David Iliff

Empid & Dolichopodid Recording Scheme

Newsletter #20 included in this Bulletin

Martin Drake

Cranefly Recording Scheme

Newsletter #30 included in this Bulletin

John Kramer

Scathophagidae Recording Scheme

A reminder about this new scheme from Stuart Ball, details were included twice in the last Bulletin, some missed it, I hope your fly-spotting skills in the field are better.

Launched in 2014, website <http://scathophagidae.myspecies.info/>

(Ed.)

Soldierfly Recording Scheme

Newsletter #3 included in this Bulletin

Martin Harvey

Recording of Soldierflies & Allies in Cheshire

(Martin Harvey said it was OK to put this in the Bulletin - Ed)

Readers of Bulletin No. 77 may recall a brief item about a tranche of 59,000 diptera records residing in the Local Records Centre for Cheshire (rECOrd). These are not currently visible on the NBN

Gateway, as they still require suitable verification. I agreed to look into this in consultation with DF experts. Soldierflies and allies seemed a good place to start in view of the existence of the recording scheme, the book by Alan Stubbs and Martin Drake, and the availability of the NBN Record Cleaner verification rules for this group¹. The NBN programme does basic checks on data such as checking species names and the format of dates and grid-references, together termed validation checks. It also applies verification rules of three types: these look at the record dates in relation to known emergence times of each species; the national range as determined from the current NBN data; and finally the ease of identification on a scale of 1 to 5. The last is very similar to that originally set up by the hoverfly recording scheme.

ID Grade 1 is defined as follows:

Can be identified at sight in the field by anyone with a bit of experience. Species with which the beginner rapidly becomes familiar. Usually identifiable from a photo.

At the other end of the scale, for Grade 5:

Even the most expert of recorders would seek a second opinion. Specimen may need to be passed on to further experts for comparison with a wider range of material.

The programme flags up Grade 4 and 5 records, where at least a voucher specimen is required.

An initial run by rECOrd of the 2000 or so records from this group on the Cheshire database produced over 700 "failures" where one or more of the verification rules was not met. Rather than simply passing this problem over to Martin Harvey as the record scheme organiser, I decided to undertake an initial review of the failed data to investigate the reasons for such a large proportion of apparently invalid data. In this review, I made great use of the taxonomic and ecological information in the Stubbs and Drake book, and wrote an initial report reviewing the overall position for each species recorded in Cheshire (VC58). It soon became apparent that most of the failures represented common species such as *Haematopota pluvialis* which Record Cleaner regarded as "out of range" simply because of the absence of Cheshire records from the NBN Gateway.

The Stubbs and Drake book also led me to the discovery of the 1959 publication on the diptera of Lancashire and Cheshire² by Leonard Kidd³ and Alan Brindle. Remarkably I was able to purchase one of the last remaining copies from the original stock from the Lancashire and Cheshire Fauna Society and it has become an indispensable reference. It inspired me to stand back and take a broader look at the overall body of data from rECOrd. It came to mind that an entomological friend had mentioned the wonders of "pivot tables" in MS Excel, and sure enough I found that these could be used to do just the sort of analysis that was called for. I looked at the distribution of species by location, date and recorder to build up an overall picture.

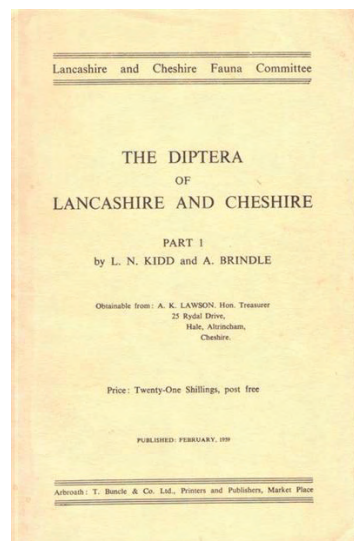
Out of a total of 1892 soldierfly and allies records in Cheshire itself, 270 date from earlier than 1970. I think of this as the "historical" period covered by Kidd and Brindle (two supplements were issued, in 1964 and 1971). There were peaks of activity in the 1940s and 1960s, with over 100 records in each decade. In the "modern" post-1969 period, recording of the soldierflies and allies built to a peak of over 700 records in the 1990s, declining thereafter, but still with 221 so far in the current decade.

There are 42 hectads (10×10km squares) of the National Grid which are fully or partially occupied by the historic county of Cheshire, though 10 or so of them contain very small portions of

the periphery. There are 5 hectads with over 100 records each, and together accounting for 1060 records, or 56% of the total.

Of course these distributions are largely accounted for by a small number of contributing recorders. In the historic period Harry Britten senior (1870-1954) was the dominant contributor, also acknowledged as the most important single source of data for Ref 2. In the modern period 66% of the records come from Bill Hardwick and Steve McWilliam, the latter being the founding manager of rECOrd in 2000. Steve was responsible for obtaining a lot of the historic diptera records from the World Museum Liverpool (WML).

The data yields a Cheshire list of 74 species, the five recorded most frequently being, in order: *Haematopota pluvialis*, *Chloromyia formosa*, *Rhagio scolopaceus*, *Beris chalybata* and *Chrysopilus cristatus*. Together these account for 29% of the total number of records. Naturally verification effort will concentrate mostly on the species recorded least frequently. My own enquiries have led to elimination of three species from the list, recorded only once in each case and suggested as unlikely by reference to Stubbs and Drake and Ref 2. A record of the hunch-back fly *Ogcodes pallipes* was traced to an index card at WML. Retrieval of the specimen from this location at WML revealed it to be actually one of Harry Britten's specimens of *Acrocera orbiculus*, labelled as such but placed into the wrong section of the drawer, and evidently not noticed as such by the compiler of the record cards. Also at WML, Richard Underwood had a specimen labelled as *Thereva valida* checked by Malcolm Smart, who revised the determination to *T. nobilitata*. A modern record of *Odontomyia hydroleon* was found to be the result of a transcription error from a survey report at rECOrd.



A rather tantalising situation is presented by *Asilus crabroniformis*. This species was listed in Ref 2 from the Wirral coast in the 19th century and from the Delamere Forest (SJ57) at an unknown date. Neither of these records are in the LRC dataset, but there is one later record at each of these locations – unfortunately both anonymous, so that little or no credence can be placed in them.

On the basis of all the above sources, I have compiled a provisional checklist of this group of diptera for VC58. It contains 75 species, from 9 of

the 11 families covered by Stubbs and Falk – Scenopinidae and Xylomyidae being unrepresented. Ten species have not been reliably recorded since 1970: *Ptiolina obscura*, *Rhagio notatus*, *Symphoromyia crassicornis*, *Zabrachia tenella*, *Stratiomys chamaeleon*, *Thereva bipunctata*, *Thereva plebeja*, *Asilus crabroniformis*, *Machimus cingulatus*, and *Choerodes marginatus*. On the other hand, this apparent loss of species has been balanced by the gain of 9 recorded only in the modern period: *Haematopota subcylindrica*, *Solva marginata*, *Chorisops tibialis*, *Nemotelus pantherinus*, *Oxycera analis*, *Pachygaster atra*, *P. leachii*, *Stratiomys potamida*, and *Dioctria linearis*.

What might explain these changes? Some fit in with recognised changes in national distributions: for example a greater frequency of *Stratiomys potamida* since 1970 is noted by Stubbs and Drake. Although not new, *Leptogaster cylindrica* has certainly become much more frequent, with 43 records, all from the 1990s or later. Kidd and Brindle knew of it only from the Delamere Forest in the 19th century. Doubtless many other interesting changes may emerge from further examination of the data, but caution may be required in some cases. The rECOrd data show 5 records of *Stratiomys singularior* from the 1980s onwards all from the “saltscapes” around Northwich and Middlewich (SJ67) in mid-Cheshire. There are generally far fewer records from this area in the historic period, perhaps then more industrial and less attractive to dipterists on their outings from Manchester. It was however added to the Cheshire list in the 1964 addendum to Ref 2 on the basis of a 1945 record from Nantwich (SJ65), so perhaps the species escaped observation for 40 years or so. Such elusiveness also characterises the Cheshire horsefly, *Atylotus plebeius*, of which the most recent two records seems to be from 1995 and 1969.

As a further check on the data, I downloaded data for Cheshire from the NBN dataset provided by the Biological Records Centre. While I have not made a detailed comparison, there were some noteworthy features: the erroneous record of *Ogcodes pallipes* is reproduced; there is an anonymous record of *Bombylius canescens* from 1900 in the Delamere Forest, a species not otherwise known in Cheshire; and there are four records of *Hybomitra muehlfeldi* which correspond to records of *H. bimaculata* in the Cheshire dataset.

These and other issues have been included in a detailed report which I have forwarded to Martin Harvey as organiser of the soldierflies recording scheme. Hopefully, following his further review and appropriate corrections, it will be possible to resolve remaining issues and load the Cheshire data onto the NBN Gateway thus filling a significant hole in the national distribution maps. I also harbour the further ambition of working towards an update and completion of Kidd and Brindle's review of the diptera of Lancashire and Cheshire – a part 2 to cover acalyptrates and calyptrates never appeared. The collection of record cards at Manchester Museum started by Harry Britten and continued by Alan Brindle, on which Ref 2 was based, is still preserved there⁴. Although some of this data does seem to have found its way onto the NBN in one form or another, there do appear to be significant omissions and distortions, as well as a need to make the sources of the data more transparent.

- 1 H. Dean, *Verification Rules for NBN Record Cleaner*, Rev 2, National Biodiversity Network, July 2013
- 2 L. N. Kidd & A. Brindle, *The Diptera of Lancashire and Cheshire*, Part 1, Lancashire and Cheshire Fauna Committee, 1959
- 3 Peter Chandler, “Obituary, Leonard Nixon Kidd (1920-2013)”, *Bull. Dipt. Forum*, No. 77, Spring 2014, pp16-18
- 4 Dmitri Logunov, “British entomology collections of the Manchester Museum”, *J. Lancs. & Chesh. Ent. Soc.*, 133 & 134 (2009 & 2010)

Phil Brighton

News from the regional groups

Northants and Peterborough Diptera Group 2014

The group met for field meetings every Sunday morning from the end of April to early September. In addition, we held a number of identification workshops and indoor self-help workshops during the winter. In particular John Kramer's crane-fly workshop was very well received. Apart from the group field meetings, individuals carried out their own work and in total 2544 records were submitted for the county. This is only slightly fewer than the total held at the Northants Biodiversity Records Centre before the group was formed.

The families with the largest number of species recorded were:

Syrphidae 113 species, including *Criorhina ranunculus* and *Epistrophe diaphana*

Limoniidae 24 species

Tipulidae 20 species including *Ctenophora pectinicornis* and *Dictenidia bimaculata*

Dolichopodidae 19 species including *Chrysotus gramineus*

Sciomyzidae 15 species including *Sciomyza simplex*

Tachinidae 15 species

Tephritidae 14 species including *Orellia falcata*

Scathophagidae 13 species.

Several records of *Tabanus autumnalis*, including voucher specimens and photographs were made during the Summer months. This species had had only two records in the county before 2014.

If anyone is staying in Northants or the surrounding area and wishes to join the group just let me know via e-mail and I'll send you the programme. There is no charge, although we prefer regular attendees to be members of Dipterists Forum.

John Showers

Devon Fly Group

Winter aside, our monthly programme of field meetings has continued since we last wrote a year ago. In August the group visited Bicton Common on the East Devon Pebblebed Heaths, looking for the tiny and scarce hoverfly *Pelecocera tricincta*. By sweeping the edges of paths through the heath, we succeeded in this, and besides were able to make many new fly records for the site. John Walters showed us potter wasps *Eumenes coarctatus* at work, a species he has been featured with on the One Show.

September took us to the south Devon coast near Start Point, where we were hoping to find the hornet robber fly *Asilus crabroniformis*, but no luck. It's a while since any of us have heard of this spectacular fly in Devon, although several of its favourite haunts have been searched. However, we were blessed with fine weather and spectacular scenery, and found many other flies, including some eight nationally scarce or rarer species. Among these were the picture-winged fly *Campiglossa producta* and the tachinid *Policheta unicolor*. A shore-fly *Ilythea nebulosa* may be just the second British record for this species, although comparative material is needed to confirm the identification.

A gloomy and dank day in October found us searching woodland alongside the River Exe just south of Tiverton. Despite the weather and time of year, we still managed to find and record 76 species!

That was our first full year, now into our second. It started with a February indoor meeting, a workshop on field techniques, led by Martin, although others contributed useful and often innovative ideas. We also shared photos and Rob gave a short presentation on the flies and other life of a spectacular sap-run tree on his farm.



Devon Fly Group visit to Dendles Wood, 20 June 2015 (Rob Wolton)

April saw us in the field once more, looking for the dotted bee-fly *Bombylius discolor*, which we had dipped out on last year. This time we visited the east Devon coast near Sidmouth, and were delighted to have excellent views of the flies feeding on primrose and self-heal. A soft cliff seepage produced some good crane-flies, namely *Gonomyia conoviensis*, *Dicranomyia goritiensis* and *D. sericata*, the last not being recorded before in Devon.



Pelecocera tricincta, Bicton Common, 16 Aug 2014 (Rob Wolton)

A month later we were sweeping exposed riverine sediments along the lower reaches of the River Teign near Newton Abbot. Sifting through sand with our fingers in the hope of stiletto fly larvae, we found several puparia which we took home and to our delight produced the large horsefly *Tabanus cordiger*, a nationally scarce species with very few records in Devon. Other good finds included the hoverfly *Parasyrphus nigratarsis*, the doli *Dolichopus argyrotarsis*, several shore flies including *Hecamedoides unispinosus* and *Polytrichophora duplosetosa*, and the crane-flies *Molophilus propinquus* and *Tipula montium*, together with no less than four species of *Nephrotoma*!

Our last field meeting before writing this was to Dendles and

Hawns Woods, remote woodlands on the southern edge of Dartmoor. The former is a National Nature Reserve and the latter owned by the national park authority. Out targets were the deadwood awl fly *Xylophagus ater* and the S41 (UKBAP) crane fly *Lipsothrix nervosa*. Literally within seconds of stepping outside the landrover, Andrew Cunningham found the former species, and examination of our catches later revealed the second. Other goodies included the anthomyiid *Chirosia griseifrons* whose larvae eat lady ferns and two crane flies, *Phylidorea bicolor* for which there are as yet very few national records, and *Dicranota simulans*. A mire on the open moorland above Hawns Wood produced two rather nice hoverflies, *Microdon myrmicae* and *Platycheirus ramsarensis*, even if they are not particularly rare. So, altogether another successful foray!

We are always delighted to welcome new members to the Devon Fly Group – all you have to do is join our email network - please contact Andrew Cunningham at ajc321@hotmail.com

Rob Wolton and Martin Drake

Dipterists Digest – urgent need for papers and notes

At the time of writing (31 July), it has not yet been possible this year to send a part of Dipterists Digest to the printers. This is because insufficient material has been submitted to produce a complete issue. It is hoped that this will have been remedied by the time this Bulletin appears, but more contributions are urgently required if the two parts of volume 22 are to be produced in 2015.

As predicted at the past two AGMs, I have written an account of the lives of Colonel J.W. Yerbury and Dr J.H. Wood, which will be published as a supplement to Volume 21. This will be an addition to the 2014 volume to acknowledge the centenary of Wood's death in 1914, which was also the last year in which Yerbury was an active field dipterist. It was decided to publish this as a separate part, additional to the regular appearance of two parts each year, so as not to interrupt the flow of articles or to delay publication of those received. This position is unchanged.

The above mentioned supplementary issue will be sent to all subscribers to Dipterists Digest in 2014, and to anyone newly subscribing in 2015. The first part of volume 22 will only be sent those who have paid a subscription for 2015. If you receive the first of these, but do not receive any part of volume 22 by the end of this year, this will indicate that your 2015 subscription has yet to be received.

The second part of volume 21, published on 1 December 2014, included everything that was ready for publication at the time. My apologies to those authors who have submitted articles and notes since that date for any delay in publication. It is hoped that we will soon catch up with the regular schedule.

Please consider offering accounts of all your interesting finds and observations to the Digest. New contributors are particularly welcome.

Peter Chandler

Conservation News from the Conservation officer

Species Status Reviews & Assessments

The Joint Nature Conservation Committee (JNCC), Natural England (NE) and Natural Resources Wales (NRW) have over the last three decades commissioned a series of reviews covering the status of invertebrates, to identify threatened species (frequently referred to as Red Listed species). This has been a rolling programme, much complicated by the fact that the assessment criteria themselves have undergone progressive change. I am grateful to David Heaver for letting me know what the current state of play is. But, be warned, it's a complicated picture!

The most recent Reviews (with a capital R) use the IUCN criteria (Regionally Extinct, Critically Endangered, Endangered and Vulnerable), as published in 2012. They also identify species which are Near Threatened (i.e. known from 10-15 hectads and which need to be kept under review to ensure they have not become Threatened). This information must be supported by a data table which assesses how the number of records has changed between two time periods. Where family datasets are not large or comprehensive enough to enable this to be done, reviews can be published as Assessments (see below), although the status ascribed to any species within such Assessments can only be regarded as provisional.

All reviews, whether old or new, make separate analyses to identify species which are Nationally Scarce (16-100 hectads from a defined time period) and some reviews also identify those that are Nationally Rare (species recorded in 1-15 hectads). There is a case to be made to adjust the upper threshold of Nationally Scarce, and this is being explored.

Before the introduction of the IUCN criteria (2012), three Diptera reviews had been published:

A review of the scarce and threatened flies of Great Britain (part 1). 1992. Steven Falk.

A review of the scarce and threatened flies of Great Britain: Empidoidea. 2005. Steven Falk and Roy Crossley.

A review of the scarce and threatened flies of Great Britain: Nematocera and Aschiza. 2005. Steven Falk and Peter Chandler.

Subsequently, using the new IUCN criteria, the following Review has been published:

A review of the scarce and threatened flies of Great Britain. Part 6. Hoverflies family Syrphidae. 2014. Stuart Ball and Roger Morris.

The last three can be downloaded from jncc.defra.gov.uk/page-3352.

I'm pleased to say that a fifth Review, also using the full criteria and with a data table, is now in press:

A review of the status of "Larger Brachycera" flies of Great Britain. Martin Drake.

And a sixth, that of dolichopodids, also by Martin Drake, is very near publication.

I can recommend all these documents as a source of a huge amount of information about our rare and threatened flies.

Meanwhile David Heaver is updating the calypterate and acalypterate texts which were drafted between 2005 and 2010, with a view to publishing them soon as **Assessments** (these do not require JNCC sign off and do not need to follow the strict layout demanded by IUCN reviews). The calypterate assessment was written by Steven Falk, Adrian Pont and Peter Chandler, and the acalypterate one by Steven Falk, John Ismay and Peter Chandler.

Soon after the IUCN criteria (2012) were introduced, John Kramer compiled a Review of crane flies, but this now needs updating to

account for changes and improvements in how the review process is handled and the criteria are applied: this will hopefully start soon. Editing work is well underway on draft Reviews prepared by Peter Chandler on fungus gnats and allies, and on pipunculids and their allies. David is also exploring the possibility of commissioning a sciomyzid Review or Assessment. Other families, such as the Conopidae and Tephritidae which were covered in the 1992 review (see above) but not subsequently, may also be worked up into Reviews.

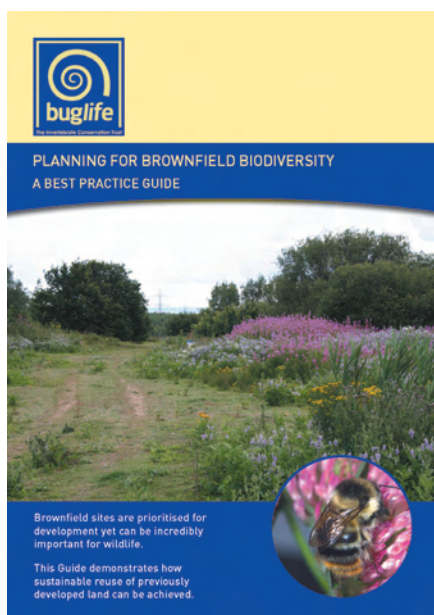
All these status reviews demonstrate the great value for conservation in recording distribution. In particular, they highlight the value of recording changes in distribution and hence of both square bashing and repeat visits to sites. A higher proportion of the butterflies that occur in Britain are red listed than of flies, because much better data are available to assess changes in distribution. It will be very good to have the complete set of Diptera Reviews or Assessments available before too long.

Meanwhile, if you wish to find out the published status on any species, this can be found on a master spreadsheet which can be downloaded at jncc.defra.gov.uk/page-3408.

Brownfield sites

In England, our new Government has plans to make building on brownfield (previously developed) land very easy: refusal of planning permission will be the exception. There are, it is said, 66,000 ha of brownfield in the country. The difficulty with this policy is, as many readers will be aware, that brownfield sites are often far more valuable for nature conservation than many greenfield ones such as intensive arable or grassland. Brownfield sites provide opportunities that are now rare elsewhere for early successional plants and animals, those dependent on bare soil and often on hot surfaces, to thrive. Many threatened invertebrates are associated with them.

To assist the Dipterists Forum add weight to the arguments against brownfield development being put forward by more powerful voices such as those of Buglife and the Wildlife Trusts, it would be helpful for me to have specific examples of Diptera that will be adversely affected by brownfield development. Could you please let me have examples?



UK BAP & Adopt a species

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

I am grateful to Ellie Rotheray, Judy Webb and Adrian Plant for providing the accounts inserted below, and also to Steven Falk, David Heaver, Mark Winder, Helen Reed and Chris Spilling for providing information on the species for which they are guardians or lead contacts.

Asilus crabroniformis, the Hornet Robberfly (Rob Wolton).

I would welcome reports of recent sightings and any observations on behaviour of this spectacular BAP species for the next edition of the Bulletin. It appears to be a number of years since any have been seen in Devon where I live.

Blera fallax, the Pine Hoverfly, by Ellie Rotheray

By May this year, captive breeding facilities at Edinburgh Zoo, Royal Zoological Society, were completed in preparation for a Finnish population of *Blera fallax*. With the assistance of a colleague at the University of Helsinki, Gunilla Stahls, on 15th May a successful expedition to Finland by the Malloch Society took place, and a total of 30 larvae were collected from 3 sites outside Helsinki and transported back to the facilities in Edinburgh (see footage and photos at: www.mallochsociety.org.uk/blera-fallax). These actions will allow husbandry staff at the zoo to practice techniques for captive rearing *B. fallax* in preparation for a Scottish population, but also promote interest in the species and the importance of its deadwood habitat.



Blera fallax larva (Ellen Rotheray)

Habitat creation is continuing at all Scottish sites for *B. fallax*: this year 43 new holes have been bored at the last known site for the species, and these will be surveyed in autumn.

Dorylomorpha clavifemora, the Clubbed Big-headed Fly (David Heaver)

A Natural England contract with Buglife has enabled the DNA bar coding of 20 extracted pipunculid fly larvae. These will be matched against reference samples with the aim of identifying the species. Samples gathered in 2015 are already with UCLAN lab. There may be a dependency here on UCLAN getting a Master's student to work on this, to keep the costs manageable. It is likely the larvae are not *Dorylomorpha*, but we shall see.

***Empis limata*, the Borders Dance-Fly, by Adrian Plant**

After spending a couple of days in early July looking for more sites for this species on the River Usk but to no avail, on 15 July I visited Blackhouse Wood, in the Suckley Hills, Worcestershire, with Mick Blyth, who had found the species there on 7 June last year. We found two males and a female, but only in a very restricted area despite searching elsewhere. The colony thus appears to be of small size (as is typical for the species I think), occupying a habitat patch that matches reasonably well the ecological criteria presented in my previous analysis for Buglife.

While the site fits the habitat criteria, the same criteria are widespread at many sites across (and beyond) the species' known range and it remains unclear why some sites have the species while others do not. I suspect that detailed searches would likely find that it is more frequent than we currently think in the Worcestershire, Shropshire, Herefordshire and Monmouth areas and maybe also in Gloucestershire. However, colonies are likely to be of small size and very scattered, so hard to find.

To my mind the best hope for the future is to find ways to link sites in a larger mosaic to encourage dispersal and expansion. Probably the only place where this might be feasible would be Moccas Park which is already the stronghold of the species and has scope for further development.

Blackhouse Wood is about to become a reserve of the Worcestershire Wildlife Trust and I will be making management recommendations to them. Basically Blackhouse Wood is a conifer plantation on a limestone ridge but the rides running through it are good and show evidence of former ancient woodland. The *E. limata* colony is confined to around 100m of a fairly wide ride in the plantation on the ridge-top and is centred on a slightly damper area (*Juncus* etc present), perhaps the result of groundwater seepage. My main concern would be that conifer removal could (a) remove shelter from around the colony and (b) lead to drying out of the seepage area, so any such removal would have to be done sensitively allowing sheltered ride and glade conditions to be sustained. We know that this species nectars at white umbels which were absent at the site so some measure to increase nectar sources could be useful.

For further information on this species, see Adrian's report for Buglife: Survey of *Empis limata* (Diptera:Empididae) July 2013.

***Gnophomyia elsneri*, the Royal Splinter Crane-fly (David Heaver and Steven Falk)**

Natural England has contracted Buglife to resurvey Windsor Forest and to conduct a 3D survey using GPR (ultrasound to establish extent, volume and character of heart rot) to characterize known host beech trees and to establish and map the extent of suitable habitat resource. The aim is to provide management recommendations to enhance heart rot habitat, linked to a Cardiff University fungi inoculation program at Windsor. Under this contract, this summer Steven Falk and Alan Stubbs managed to see and photograph two *G. elsneri* beside one of its known trees, and also to assess the number and location of suitable trees and potentially suitable trees. Steven notes there is a gradual decline in old beech as they are collapsing and dying much more rapidly than new trees are maturing (a bit like parts of the New Forest).

***Hammerschmidtia ferruginea*, the Aspen Hoverfly, by Ellie Rotheray**

An influx of fallen aspen trees and branches in winter 2012/2013 has now provided this hoverfly with a good supply of suitable habitat, decaying cambium under the bark. The Royal Society for the

Protection of Birds has designated volunteer hours to survey and monitor aspen deadwood, so that action can be taken if required in years to come. A British Wildlife publication on the conservation of *H. ferruginea* is expected in the autumn.

***Idiocera sexguttata*, the Six-spotted Crane-fly (Mark Winder)**

Early last summer Mark surveyed three sites that have fairly recent records of this crane-fly for Buglife to see if he could establish if they were still there. He found a specimen on the Gower site but could not find any either in the New Forest or at the Dorset site. As far as he could see the New Forest site still looks promising and wonders if he simply missed the emergence time. The Dorset site is on soft eroding blue lias sea cliffs and has changed significantly over the last few years - there is much more bare clay present and the whole site is not looking as promising. Mark intends to revisit all the sites to have another look.

***Milichia ludens*, an alypterid, by Judy Webb**

Despite visits to a couple of likely Jet Ant *Lasius fuliginosus* nest trees in April and May, the ant with which this fly is associated, no individuals were seen even on trees the fly is known to frequent. Weather conditions (too warm and dry) meant it was unlikely the flies would have been sitting on the tree bark just above the ants' entrance hole in the tree. Past experience shows this is where one can spot them, but only on cooler or overcast days just after emergence. When it is hot they are on the wing. This just illustrates the importance of being there at just the right time in just the right weather conditions!

***Phortica (Amiota) variegata*, the Spotty Sap Fly (Steven Falk)**

During the Buglife visit to Windsor Forest reported under the royal splinter crane-fly account above, Steven tells me that this otherwise rare and elusive fruit fly was common in almost every part of the Forest swarming around his head and trying to land in his eyes - let's hope it's not given him eye fluke! Despite many encounters with this fly, Steven still has no idea where it breeds and is not sure it has anything to do with goat moth (*Cossus*) trees (which may not in any event occur at Windsor).

***Rainieria calceata*, a stiltfly (Helen Reed and Steven Falk).** This summer, Steven Falk and Alan Stubbs have recorded this fly from a few sites in Windsor Forest and were able to photograph it ovipositing on a recently fallen large beech. At Burnham Beeches, however, Mart was unable to find the fly on the two occasions he looked. He noted that the fungal bodies with which he associates the fly had not yet emerged, perhaps because of the dry conditions.

***Sphaerophoria potentillae*, a hoverfly (Rob Wolton)**

Please see the article and photos in Hoverfly News on this endangered hoverfly. The Devon Wildlife Trust is planning a naming competition for it. Any ideas? Alan Stubbs tells me that he has dubbed the genus tottem flies. *Sphaerophoria*, I'm told, means round eyes, and *potentillae* refers, appropriately, to the main plant on which it appears to nectar, *Potentilla erecta*, the heath tormentil. Personally, I favour an English name linked to the striking blue and yellow colouration of the female.

***Stratiomys chamaeleon*, the Clubbed General Soldierfly, and *Odontomyia angulata*, the Orange-horned Green Colonel, by Judy Webb**

The August edition of British Wildlife featured an article on the identification of soldierflies. This will hopefully encouraged people to go out and find them, and to find out more about their life cycles. Progress on that task for the two rare species of Cothill Fen Special Area of Conservation (SAC) is going slowly. I am focused on the

rearing of *Stratiomys chamaeleon* and *Odontomyia angulata* to elucidate precise larval habitat requirements. I have lots of observations of larval feeding and other behaviour noted from larvae of all ages in my windowsill aquarium filled with marly mud, *Chara* algae and shallow water.

My aim this year was to collect more mature larvae/puparia from the end of June and to rear them to investigate exactly which ponds at Cothill Fen SAC are most favoured. In particular I was keen to see if the new shallow pool and scrapes created by the local wildlife trust (BBOWT) over the last 3 years are successful in producing more breeding habitat for these species. At Parsonage Moor SSSI a dry and hot April meant low water levels in the older shallow pools I already know they favour. Visits in late June and early July revealed a fair number of *O. angulata* on the wing and a few *S. chamaeleon* females were seen flying slowly around the shallow pools and settling on the vegetation just above the water surface. I never actually saw egg-laying but did find clumps of eggs on reed leaves on the edge of pools. From comparison to published photographs on the internet, it seems these are definitely *Stratiomys* egg clusters (see photo). However it had been so hot and dry in July that the ponds they use were drying up. Dipping with a net or sieve proved impossible, and a nil return could be anyway be meaningless because the drying might mean larvae retreating to wetter mud depths out of reach of my net.

A downpour of rain on 24th July followed by a visit on 25th July showed that the shallow pools had filled up with 20cm of rain water on top of the dead, bleached *Chara* algae coating the bottom of each pool. Sitting quietly by the pool, I was able to spot 3 *Odontomyia* type medium-sized larvae and one *Stratiomys* type larva which had floated up to the surface for breathing. In addition I found one *Stratiomys* type empty pupal case floating. Whilst specific identifications of these larvae and the shed skin are not possible, initial indications are that the pools are being used. Management of the site had started with significant reed cutting and raking. It will be important to have the reed already advancing into these new pools cut and raked off now to keep them open and thus warm and full of the light-loving *Chara* algae with which both species seem associated here.



Odontomyia sp larva 25/7/15 Parsonage Moor (Judy Webb)

In the last newsletter I reported that *S. chamaeleon* adults had been seen nectaring on wild parsnip flowers in an old sand quarry near Cothill Fen SAC. This quarry (Cothill Pitt) had been subject to a planning application from the owner for a series of holiday lodges which would have been situated directly over the large wild parsnip patch used by *S. chamaeleon* as well as many other fly species. A group of concerned locals had set up the 'Save Cothill Pitt' campaign with a very good website (www.savecothillpitt.uk). The hot, dry, sandy site had a number of visits and surveys from entomologists last summer which showed that there were many other interesting local, notable or rare invertebrates and all the plant and insect information has informed its provisional designation as a Local Wildlife Site. Thanks are due to all who visited and sent in identifications. The most recent news is that the owner has withdrawn his planning application. I and the other members of the campaign group await any new application being lodged.



Stratiomys egg cluster on reed next to pond, Parsonage Moor (Judy Webb)

***Thyridanthrax fenestralis*, the Mottled Bee-fly, and *Bombylius minor*, the Heath Bee-fly (Chris Spilling)**

Thyridanthrax fenestralis has been having a good year in Dorset with plenty of its *Ammophila* host species around. Chris came across 6 of the bee-flies in the space of a few hours down on Studland. He reports that *Bombylius minor* promises to have a good season too, seeing several at Studland on 28 June.

***Triogma trisulcata*, the Dimple-cheeked Damselfly (suggested name), by Judy Webb**

In a dry and sunny spring, this damselfly flew at the end of April in good numbers at Lye Valley north fen unit of the SSSI in Oxford City. A couple of individuals were also swept over the same period in Cothill fen, part of Parsonage Moor and Cothill NNR fens, flying in the typical habitat situation of waterlogged mossy vegetation mat with sparse reed.

Rob Wolton

Flies as pollinators

Hive bees are having a tough time: colony collapse, mite carried disease and other problems have helped focus attention on their economic role in pollination of crops. It has been possible to persuade Defra and others that hive bees are not the only significant pollinators: wild bees, hoverflies and other insects are also major pollinators of crops, wildflowers and horticultural plants.

The article below is available online. The key question is where do all these extra flies come from, more specifically the habitat and niche for larvae? Some breed in dung, were that possible now that cattle are no longer present in large hunks of the countryside, and veterinary products make the dung toxic. Over the last 70 years the priority has been to drain land, yet many flies breed in moist or wet soil. Ponds are now rare in most parts of Britain, and stream courses are often ditched. For the majority of flies, we can only guess where they might breed but an over-simplified and over dry (drought prone) countryside reduces the options for nature to help. The challenge is to become more attuned to the fine detail about life cycles and ecological niches.

The forgotten flies: the importance of non-syrphid Diptera as pollinators

Katherine A. Orford, Ian P. Vaughan, Jane Memmott. Royal Society Proceedings B
DOI: 10.1098/rspb.2014.2934 Published 25 March 2015

Abstract

Bees, hoverflies and butterflies are taxa frequently studied as pollinators in agricultural and conservation contexts. Although there are many records of non-syrphid Diptera visiting flowers, they are generally not regarded as important pollinators. We use data from 30 pollen-transport networks and 71 pollinator-visitation networks to compare the importance of various flower-visiting taxa as pollen-vectors. We specifically compare non-syrphid Diptera and Syrphidae to determine whether neglect of the former in the literature is justified. We found no significant difference in pollen-loads between the syrphid and non-syrphid Diptera. Moreover, there was no significant difference in the level of specialization between the two groups in the pollen-transport networks, though the Syrphidae had significantly greater visitation evenness. Flower visitation data from 33 farms showed that non-syrphid Diptera made up the majority of the flower-visiting Diptera in the agricultural studies (on average 82% abundance and 73% species richness), and we estimate that non-syrphid Diptera carry 84% of total pollen carried by farmland Diptera. As important pollinators, such as bees, have suffered serious declines, it would be prudent to improve our understanding of the role of non-syrphid Diptera as pollinators.

Alan Stubbs

On the same topic, Rob Wolton sent me a link to an interesting blog on the issue of flies as pollinators

He also sent me the actual Orford, Vaughan & Memmott article that Alan mentions.

Links to the above are to be found in the Web Links section of the DF Forum.

Thrashing about after small-fry-flies – and bashing trees

The recent Dipterists Forum workshop led by Alan Stubbs, John Ismay and Barbara Ismay introduced us to some smaller families of acalypterate Diptera. Some of these small families happen to contain some pretty small flies as well as being small families, so I attended the workshop and took the opportunity to corner John, Barbara and Alan, with some tiny acalypterates, for their help in confirming my tentative determinations. Most I had gratifyingly got right, and others I was not too far out with, at least getting the right families for all of them.

I have to say that the small acalypterate families workshop was probably the most important one I have attended in respect of advancing my fly recognition skills – although all the other eight have been tremendously helpful too. I shared in the agonising over costal wing breaks, but have learnt that if in doubt about the number of breaks, just try both options and then look at images of the candidate families on the internet – mainly on the brilliant and fabulously useful diptera.info website (thank you Paul Beuk – a dipterological knighthood should be yours for services to Dipterology). Following internet consultation it is usually easy enough to decide what family your specimen belongs to, but if doubt remains, just upload an image to our own DF website forums or the diptera.info website and an answer, or at the very least, helpful comments are always forthcoming.

So, with my new found tiny acalypterate confidence, I have been pootling up small fry, nay, tiny tiny fry, lurking in the net following avid sweeping through vegetation. In particular, I remembered a hint that Ivan Perry gave me some years ago for finding Lonchaeids, involving sweeping trees at height. So I invested in a long handled net and have been sweeping away at tree foliage at height – more like bashing at times, as I have broken a net frame already in my quest. But, the results have been great! I have regularly found flies acalypterates I had previously rarely, or never encountered before. I've also found an increased range of Lonchaeid species, and of course lots of small flies from non acalypterate families have also been discovered.

Highlights from tree sweeping include the rather scarce Lonchaeid *Lonchaea ultima*, swept at height from oak, and a spectacular day when I collected ten species of Lonchaeid off ash and cherry leaves (previously, a day yielding four Lonchaeid species would have rated as pretty impressive). From my own garden ash tree I have taken numbers of the Chyromyid *Gymnochyromyia inermis*, which I had never seen before; the Heleomyzid *Trixoscelis frontalis*; The Lauxaniid *Cnema cantha muscaria* (around Shropshire this seems to be a widespread species); and hordes of small Empididae – many awaiting determination this winter, but including plenty of *Hemerodromia unilineata* and *Phyllodromia melanocephala*. Much less frequently, but none-the-less gratifyingly, the high tree foliage has yielded a few Milichiidae and Piophilidae – families that had mostly escaped me for years. Oh the list goes on and on! But other notables include the rather scarce Tachinid *Anthomyia nigrisquamata*, swept from poplar, where its host munches on the foliage, and the infrequently recorded *Acartophthalmus bicolor* – one of only two species in this very small UK fly family. It's always a good feeling to find a representative of a fly family that one has never seen before – a bit like finding gold when sieving!

Sweeping high tree foliage – I am sweeping at up to about five metres with outstretched arms – is part of the technique for finding small and unfamiliar flies. The other part is undoubtedly finding

said quarry in the net, and this requires some practise. On DF field trips I have occasionally witnessed stalwart Dipterists such as Peter Chandler and Alan Stubbs staring patiently into an open net. This, I have discovered, is stage three of the process for finding small-fry-flies. The first stage, following sweepnetting, is, with head in net, to carry out the standard pooting up of any obvious larger flies in the net (you know, all that huge 4mm plus stuff). The second stage is to keep one's head in the net and concentrate hard on small, moving targets. Once the distraction of larger flies is removed, the smaller stuff gets noticed. The third and important stage, after clearing out the net of faster moving flies – with one's head blocking the exit, is to stand the net at about head height and stare down into it for any plodding individuals making their way towards the rim of the net (hold the net between yourself and the direction of sunlight). It is now that some of the really difficult to spot things like Chyromyidae and Hemerodrominae hove into view, and a calm demeanour is required to get them in the pooter before they realise they are almost free and can fly off.

For anyone wondering where all those small-fry live, part of the answer appears to be that they live at some height above the average entomologists "radar" in higher tree foliage. I heartily recommend the purchase of a long landing net handle from any angling shop. Go for the extending type, so you can collapse it down to a reasonable length when not in use. Another advantage of these handles for the Dipterist is that they make very handy walking sticks to steady one's progress up and down steep slopes, at the bottom of which there always seems to be some very tempting habitat.

Nigel Jones

Free BM(NH) Bulletins

Offered free, a number of BM(NH) Bulletins of Entomology mostly dealing with oriental coleopteran and diptera. Please email me for the list at Robert.aquilina@btopenworld.com . You are asked to pay for the postage and packing.

The Filter Pipette

You will need 2 plastic pipettes; a small piece of fine net and a pair of scissors.

Cut a small circle of net (about 25mm diameter) and place it over the end of one of the pipettes. From the other pipette, cut a 20mm piece off the tip, and then trim a few mm off the end of this. Use the resulting tube to secure the net to the end of the first pipette.

This gives you a pipette which can be used to pick up alcohol or other liquids without picking up flies, legs, anthers, etc. I use it when recovering alcohol from messy sorting dishes (quicker than a filter funnel and tidier than a sieve), and it's especially useful when transferring small flies (mites, springtails) to a tube using a standard pipette. Often the tube becomes too full before I've finished adding flies – but the filter pipette enables me to siphon off the excess alcohol, creating more space in the tube.

Tony Irwin (dr.tony.irwin@gmail.com)

Using glycerine jelly to hold dissections on a microscope slide

Introduction

A problem when trying to retain a dissection (such as fly genitalia) so that it does not move when drawing or photographing it, is probably well known to entomologists. If the dissection is permanently mounted in a medium such as Canadian Balsam or Euparal one has only a single view available. For many years during which I only drew dissections with a camera lucida, I used to hold them in a solid watch-glass with several micropins, as one only had to omit drawing the pins. Unfortunately with photographs one cannot leave them out! As glycerine is increasingly used to day, with the dissection eventually stored in glycerine in a micro-tube attached to the staging pin carrying the insect, it would be useful to use a glycerine based mountant.

Glycerine jelly, which can be purchased or even made quite easily, is a suitable mountant which has the advantage of being a jelly at room temperature, or liquid if slightly warmed. This enables one to temporarily mount the genitalia on a cavity slide in warmed jelly without a coverslip, leave it to cool for 10-30 seconds when it will solidify sufficiently to hold it in a fixed position, photograph it, re-warm it until it is liquid and re-arrange it into a different position. This can be repeated for as many positions as required. The genitalia can then be removed to warm water to make sure all the jelly is removed, and eventually to glycerine and a micro-tube.

If the genitalia has been dissected into several small pieces (for example the gonites are removed from the aedeagal complex, or the aedeagus removed from a Nematoceros fly for a separate photo, then I often use DMHF water soluble mountant plaed on a slip of card and mount this with the specimen. In this way tiny structures do not get lost. One can mount from water to DMHF, or I often use glacial acetic acid which tends not to dilute the DMHF.

To make your own glycerine jelly the recipe is simple, the ingredients easily obtained from a chemist or the supermarket. The following will give approximately 140 ml of jelly. Just keep the proportions if you want less.

Glycerine jelly- Water mountant medium.

Gelatin	10gms
Distilled water	60 ml

Heat with gentle the water in a glass beaker in a water bath with the gelatine and stir until dissolved. Add:

Glycerine	70 ml.
Listerine or similar	1 ml.

Again, stir with gentle heat until dissolved. Most published recipes add phenol to the mixture, but this is dangerous, and any suitable mouthwash will work to prevent fungal growth.

This recipe will produce a jelly which is too strong for our purpose, and I reduce the strength by adding roughly equal proportions of water and glycerine mixed until the jelly just solidifies at room temperature, but will liquify when warmed to around 40-50 degrees C. Best to do this a bit at a time, testing it on a slide between dilutions.

The four figures are of the genitalia of the crane fly *Erioptera lutea* Mg., and show:

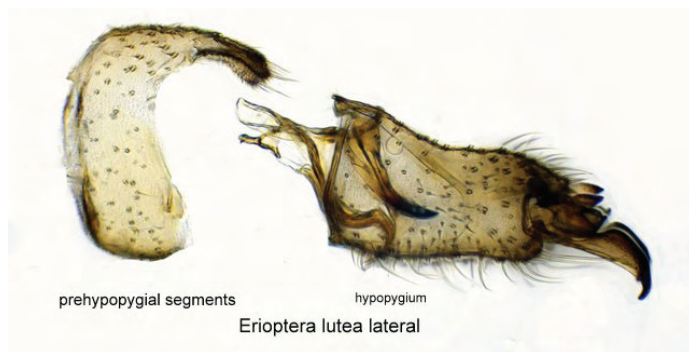


Fig 1. Lateral view of the prehypopygial segments and the hypopygium, separated from each other.

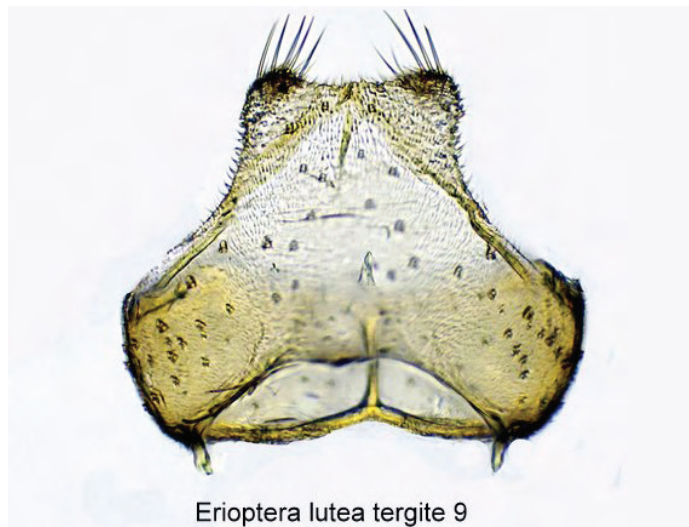


Fig. 2. Dorsal view of tergite 9, showing the dorsal extension of the tergite which normally covers part of the aedeagus.



Fig. 3. Dorsal view of the hypopygium with tergite 9 removed.

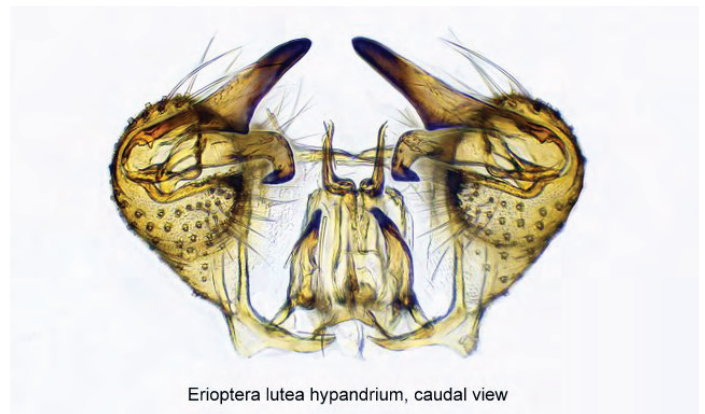


Fig. 4. Caudal view of the hypopygium, showing a different view of the lower gonostylus. This was taken after altering the position of the hypopygium from the view in Fig 3. It would be difficult to hold this, balanced on end, in any other liquid media.

Detailed procedure

1. Place jar of jelly, with lid not screwed down, in a vessel of hot water (60-70 degrees C) up to the level of the jelly.
2. After the jelly has liquefied (about 10 minutes), remove from water, remove lid and stir gently with a glass rod until all the jelly is liquid.
3. With a glass rod (best with a rounded end) pick up a small amount of jelly and transfer to the depression on a cavity slide, keeping it central. Only use enough jelly to produce sufficient depth to cover the dissection.
4. Place slide under cover until ready to use. I prepare 12 cavity slides at a time, as I don't use each one more than a few times as it picks up minute specks of dust. I store mine in small plastic boxes as used for supplying entomological pins. Any dust that settles is almost invisible to the naked eye, but under X100 looks like boulders!

5. Make the preparation in the usual way. Boil genitalia in a test tube of KOH. I use a travelling kettle with 4 test-tubes suspended over the side each with a strip of cut rubber vacuum cleaner drive belt wrapped around below the rim and held together with a small paper spring clip. When sufficiently clean, transfer to water, then glacial acetic acid, then glycerine. If the chitin is too dark after boiling in KOH, a second heating followed by leaving overnight in KOH will often be enough to make it sufficiently transparent. Otherwise transfer from glacial acetic to Hydrogen peroxide, and watch carefully under a binocular as it may only take a couple of minutes. Wash in water and transfer to glycerine.

6. Warm a prepared slide over a source of heat. Ideally a controlled hot-plate. I use an upturned halogen bedside lamp, which has conveniently a glass plate over the bulb and will turn back until the plate is horizontal to the table surface. If the jelly is of the right consistency (just molten after a short warming but solid when cooled for about 20-30 seconds) then the transition between solid and liquid is very short).

7. When the jelly is ready, remove from heat source and place on a moveable white surface (I use rectangles of plastazote). Remove the genitalia from the glycerine, transfer it to the jelly on the slide, and immediately place under a binocular and arrange the genitalia as desired. I use a very small micro-pin pushed into a cocktail stick, straight pin for manipulation, with a tiny bend apically (crotchet) in a pin for lifting. You can achieve this by pushing the pin against a sheet of glass

Members

Membership Matters

By Mid July 2015 we had 292 paid-up members. This is about 100 less than we had at the end of 2014. This number also includes 21 new members in 2015.

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

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

8. When exact position is obtained, place slide under cover, allow to solidify and check if it is still in the required position. If not re-heat and repeat the procedure. Do not add a cover-slip.

9. When photo(s) have been successfully made, return to slide to the heating system, remove when liquid, pick up genitalia with a bent pin, and place in a watch-glass of water to remove all jelly.

This may take several hours, Then depending on the method of permanently storing the genitalia, leave in water (aqueous mountant), glycerine (micro-tube of glycerine), or glacial acetic acid (my preferred choice for mounting in DMHF as it tends to avoid crazing of the surface). I put the DMHF on a small slip of card mounted on the staging pin with the specimen

Michael Ackland July 2015

Photography

A box question

Has anyone discovered a better means of storing whole dried unmounted specimens in an insect drawer than the traditional gelatine capsule? I find them very fiddly to open as the supporting pin has to be driven through both halves and other methods like the tubing and plug are too small. The purpose I have in mind for this is to store quantities of material alongside mounted specimens in a collection for the purposes of photography at a later date.

The tiny box like the one that for your camera's Micro SD card comes close to fulfilling this purpose (size is 30 x 30mm, a tad large) as does the AMAC M-511 box (20 x 20mm) used to mount microminerals. There seem to be items that come close in the professions of histology and electron microscopy. If you come up with any ideas, do let me know.

Darwyn Sumner

Insect Digital Photography Workstation

Mike Taylor published an article entitled "Insect Digital Photography Workstation" on the BENHS website in 2013.

He's since developed modifications to the system entitled "*Digital Insect Specimen Photography with Computer Stacking Software and Rotating Specimen Stages*".

Mike is achieving some terrific photographs using his system, the article is well worth a read (see Bulletin #80 on Web links section of DFF)

Photographs for the Bulletin

"Twelve significant photographs in any one year is a good crop"

Ansel Adams

In a bad year, which 2015 was for many of us, that's too few for this Bulletin to rely upon just one or two photographers.

We don't have the resources to buy suitable pictures from agencies in the way that magazine publishers do. The Bulletin is totally reliant on the generosity of its readership to help illustrate articles,

Please send photographs to the editor. They don't have to be competition-winners and I may not use them all (or may pass them to Newsletter editors) but the Bulletin needs to have a bit of a library to draw from to make these pages more interesting to you.

Accounts 2014

Income & Expenditure Account to 31st December 2014

	2014	2013
Income	£	£
Subscriptions:	7661	
Forum		2358
Digest		3031
	7661	5389
Dipterists Digest back issues	103	175
Wildguide sales	318	3071
Hoverfly Atlas sales	28	49
Donations	500	1270
Receipts from training courses	330	1226
Transfer from Santander account	406	
Pooter sales	85	197
Bangor field meeting	6740	4997
Nottingham field meeting deposits	150	200
Bristol course expenses (for John Kramer)		80
	8660	11265
Total Income	16321	16654

	2014	2013
Expenditure	£	£
Dipterists Digest		
20.2	1507	
21.1	1723	
19.2		1628
20.1		1892
20.2		469
	3230	3989
Bulletin		
75		792
76		859
77	594	
78	672	
	1266	1651
Bangor meeting	6747	
Lancaster meeting		5170
Deposit for Bangor		288

Training courses	462	
AGM refreshments	320	100
Buglife subscription	10	10
Publicity	220	186
Exhibit prize	30	30
Digest postage etc.	1080	
Refund overpaid subscriptions		15
Membership Secretary's expenses		173
Book illustrations		2050
Wildguide costs	323	3030
Dipterists Forum banner		214
Swanage meeting expenses		288
J Kramer expenses (Bristol course)		80
Internet hosting fees		64
Committee expenses	189	
Insurance	255	
Beginners' equipment	320	
Digital microscope	166	
Muscid recording scheme	115	
Software	119	
Envelopes for Bulletin	195	
Dishonoured cheque		30
	10551	11728
Total expenditure	15047	17368
SURPLUS (DEFICIT) FOR THE YEAR	1274	-714

Balance Sheet as at 31st December 2014

	<u>2014</u>	<u>2013</u>
	£	£
CASH DEPOSITS		
Santander Bank deposit account		
Santander Bank current account		4034
Natwest current account	<u>27950</u>	<u>22642</u>
	<u>27950</u>	<u>26676</u>
GENERAL FUND		
Balance at 1 st January 2014	26676	27390
Surplus(Deficit) for the year	1274	-714
	27950	26676

Review

Communications

Electronic communications are the backbone of lots of the stuff that we do, as Bulletin editor I receive lots of articles via email. Following a recent demise of my PC's power supply (loud pop and flash of light) I recently had cause to chase up methods of receiving emails on my laptop and investigated all sorts of clients. My ISP messed up so when my PC was repaired it took me a long time to get back to the one I'm most comfortable with: Mozilla's Thunderbird, after trying Opera, Inky & Outlook. The latter is the default client that comes with your Windows, it might have improved since the days I used it at work but once I moved to Thunderbird I heaved a sigh of relief at having left it behind. The filter system in Thunderbird is so easy to set up, for example I have all incoming emails with "ALERC" in the title immediately redirected from the inbox into an ALERC folder, same sort of idea with incoming articles for the Bulletin, Recording Schemes and online purchases. Junk controls are very effective too. So there's my suggestion, give Thunderbird a go and set up a few filters.

Mapping

Grid references

For anyone checking that they wrote down the precise Grid Reference of the places they visited (especially on the Nottinghamshire Field Meeting) try this useful **Grid Reference Finder** at <http://gridreferencefinder.com/>

It works both ways around, you can find roughly where you were from what you wrote down then click on the the exact spot on the Google Earth picture to determine the exact grid reference of that spot. The information returned in this way includes the Post Code - helping you to drive close to the spot using your SatNav.

It will take Lat and Long, so if your camera geotags your pictures (Barbara & John have one of these) you can convert the Lat/Long to an OSG (see below)

If you then want to then work out what **Vice County** you were in, BSBI have a VC finder at <http://herbariaunited.org/gridrefVC/>

If you have a lot of spreadsheet coordinates to convert then the **Batch Convert Tool** at <http://gridreferencefinder.com/batchConvert/batchConvert.php> is invaluable. It looks a little unfriendly but it works superbly. All you have to do is highlight your column of coordinates in your spreadsheet, copy and paste it to the box in BCT, follow a few basic choice steps and up pops another column of data that you can then paste back into an adjacent column in your spreadsheet.

Worth putting those 3 links into your web browser's bookmarks.

Retrieving grid references from picture metadata

Picture metadata prefers to store Lat/Long in degrees, minutes and seconds (DMS), sometimes in odd formats: 52 deg 34' 7.04" N 0 deg 26' 46.05" W. Web applications that allow you to simply copy and paste those values from the picture metadata to get a grid reference just aren't around as it's hard to parse every conceivable way of writing "degrees". Metadata formats for pictures (e.g. Exif) have inconsistent standards, subject to the whims of camera manufacturers so there are no rules to obey.

One application which has an inbuilt parser that seems up to the task is **iMatch** (Bulletin #76, p11). Select your image with its GPS Latitude and GPS Longitude displayed in the metadata (just so's you can ensure it actually is geotagged), select View | Panels

| Map and you have a small OpenStreetView map with a flag on it. Select the flag and up pops an information box about that location, the second line of that information is Lat/Long in Decimal format, select and copy this line and paste it into the Lat box of the **Grid Reference Finder** (<http://gridreferencefinder.com/>), click that flag and up pops the Grid Reference. I daresay you could make that work in the opposite direction.

Dirt flies

"The masses of flies over the dirt do not state their unity; it is the dirt that brings them together"
(M.F. Moonzajer - Love, hatred & madness)

2015
International
Year of Soils



Q: "If it's found on freely draining soils, do the occurrences for [insert name of fly] indicate that it might be found on limestone as well as sandy soils?"

You can answer that question using the **Soilscapes** mapping tool online at <http://www.landis.org.uk/soilscapes/> I think it's intended for the agricultural community but it turns out to be pretty useful to anyone trying to figure out where flies live. The data is proper UK government stuff acquired by Defra and the website is maintained by Cranfield University.

This is just the sort of map you want hanging on the wall when Alan Stubbs explains the geology of the region at the start of one of our field weeks.



"The challenge is to become more attuned to the fine detail about life cycles and ecological niches" *ibid* Stubbs

Citations & guidelines

I had occasion to go hunting for citation styles recently. **Mendeley** has a few default styles built in but they all tend to be related to medicine, you can add others if you can find them, I was looking for ones best suited for Diptera publications, specifically the style Peter Chandler uses in *Dipterists Digest*.

The *Journal of Applied Ecology* was close but the year is bracketed, *Nature* likes their references numbered, a real pain for backtracking through the text of an article you are writing and adding little superscripted numbers, especially when you have to keep adding

references (in alphabetical order) as you write and research at the same time and the number sequence consequently changes - I think that's a system for authors who can afford sophisticated software. Both these journals have "author guidelines" which are incredibly detailed. The medical ones are even worse as there are loads of rules about ethics.

Thank goodness the humble guidelines I produced for this Bulletin are a lot simpler, designed to reduce unnecessary labour for our small team, so please keep up the system of putting "DF Bulletin" in the titles of your Bulletin submission emails please, our not losing stuff is the first important step.

Online

Biological Records Centre

BRC have a rather nice website at <http://www.brc.ac.uk/home> and now's the time to visit it because of two important items there:

1. BRC 50th Anniversary Brochure



Roy, D.B., Harding, P.T., Preston, C.D., and Roy, H.E. 2014. Celebrating 50 years of the Biological Records Centre

Packed with an immense amount of useful information, this is a "must-have" document, just the sort of thing you'd like to hand out at one of the exhibitions we attend. An interesting fact revealed by this brochure is that the Dipterists Forum Recording Schemes comprise about a quarter of all the UK's recording schemes, so if you ever have to speak on behalf of Dipterists Forum (which I do occasionally to ALERC) then you carry a lot of weight.

2. Special issue of *Biological Journal of the Linnean Society* on biological recording

This consists of a bunch of papers arising from a recent BRC conference, they are hosted at [see Web links on Dipterists Forum Forum]. They are free to download but only for the first 3 months after publications, so get them soon.

BIOLOGICAL Journal of the Linnean Society



This is what I got free:

- August, T.O.M., Harvey, M., Lightfoot, P., Kilbey, D., Papadopoulos, T., and Jepson, P. 2015. Emerging technologies for biological recording. *Biol. J. Linn. Soc.* **115**: 731–749
- Chapman, D.S., Bell, S., Helfer, S., Roy, D.B., Gardens, R.B., and Tw, S. 2015. Unbiased inference of plant flowering phenology from biological recording data. *Biol. J. Linn. Soc.* **115**: 543–554
- Foster, G.N. 2015. Taking the oldest insect recording scheme into the 21st Century. *Biol. J. Linn. Soc.* **115**: 494–504
- Gillingham, P.K., Bradbury, R.B., Roy, D.B., Anderson, B.J., Baxter, J.M., Bourn, N.A.D., Crick, H.Q.P., Findon, R.A., Fox, R., Franco, A., Hill, J.K., Hodgson, J.A., Holt, A.R., Morecroft, M.D., Hanlon, N.J.O., Oliver, T.O.M.H., Pearce-higgins, J.W., Procter, D.A., Thomas, J.A., and Thomas, C.D. 2015. The effectiveness of protected areas in the conservation of species with changing geographical ranges. *Biol. J. Linn. Soc.* **115**: 707–717
- Gurney, M. 2015. Gains and losses : extinctions and colonisations in Britain since 1900. *Biol. J. Linn. Soc.* **115**: 573–585
- Handley, L.L. 2015. How will the " molecular revolution " contribute to biological recording ? *Biol. J. Linn. Soc.* **115**: 750–766
- Hill, M.O., and Preston, C.D. 2015. Disappearance of boreal plants in southern Britain : habitat loss or climate change ? *Biol. J. Linn. Soc.* **115**: 598–610
- Isaac, N.J.B., and Pocock, M.J.O. 2015. Bias and information in biological records. *Biol. J. Linn. Soc.* **115**: 522–531
- Maes, D., Isaac, N.J.B., Harrower, C.A., Collen, B.E.N., Strien, A.J.V.A.N., and Roy, D.B. 2015. The use of opportunistic data for IUCN Red List assessments. *Biol. J. Linn. Soc.* **115**: 690–706
- Mason, S.C., Palmer, G., Fox, R., Gillings, S., Hill, J.K., Thomas, C.D., and Oliver, T.O.M.H. 2015. Geographical range margins of many taxonomic groups continue to shift polewards. *Biol. J. Linn. Soc.* **115**: 586–597
- Oliver, T.O.M.H., and Roy, D.B. 2015. The pitfalls of ecological forecasting. *Biol. J. Linn. Soc.* **115**: 767–778
- Pescott, O.L., Simkin, J.M., August, T.O.M.A., Randle, Z.O.E., Dore, A.J., and Botham, M.S. 2015a. Air pollution and its effects on lichens , bryophytes , and lichen-feeding Lepidoptera : review and evidence from biological records. *Biol. J. Linn. Soc.* **115**: 611–635
- Pescott, O.L., Walker, K.J., Pocock, M.J.O., Jitlal, M., Outhwaite, C.L., Cheffings, C.M., Harris, F., and Roy, D.B. 2015b. Ecological monitoring with citizen science : the design and implementation of schemes for recording plants in Britain and Ireland. *Biol. J. Linn. Soc.* **115**: 505–521
- Pocock, M.J.O., Roy, H.E., Preston, C.D., and Roy, D.B. 2015. The Biological Records Centre : a pioneer of citizen science. *Biol. J. Linn. Soc.* **115**: 475–493
- Powney, G.D., and Isaac, N.J.B. 2015. Beyond maps : a review of the applications of biological records. *Biol. J. Linn. Soc.* **115**: 532–542
- Preston, C.D., and Pearman, D.A. 2015. Plant hybrids in the wild : evidence from biological recording. *Biol. J. Linn. Soc.* **115**: 555–572
- Purse, B. V., and Golding, N. 2015. Tracking the distribution and impacts of diseases with biological records and distribution modelling. *Biol. J. Linn. Soc.* **115**: 664–677
- Roy, H.E., Preston, C.D., and Roy, D.B. 2015a. Fifty years of the Biological Records Centre. *Biol. J. Linn. Soc.* **115**: 469–474
- Roy, H.E., Rorke, S.L., Beckmann, B., Booy, O., Botham, M.S., Brown, P.M.J., Harrower, C., Noble, D., Sewell, J., and Walker, K. 2015b. The contribution of volunteer recorders to our understanding of biological invasions. *Biol. J. Linn. Soc.* **115**: 678–689

Stewart, A.J.A., Bantock, T.M., Beckmann, B.C., Botham, M.S., Hubble, D., Roy, D.B., Hill, C., and London, N. 2015. The role of ecological interactions in determining species ranges and range changes. *Biol. J. Linn. Soc.* **115**: 647–663

Sutherland, W.J., Roy, D.B., and Amano, T. 2015. An agenda for the future of biological recording for ecological monitoring and citizen science. *Biol. J. Linn. Soc.* **115**: 779–784

Thomas, C.D., and Gillingham, P.K. 2015. The performance of protected areas for biodiversity under climate change. *Biol. J. Linn. Soc.* **115**: 718–730

Thomas, J.A., Edwards, M., Simcox, D.J., Powney, G.D., August, T.O.M.A., Isaac, N.J.B., Lane, C., and Gu, M. 2015. Recent trends in UK insects that inhabit early successional stages of ecosystems. *Biol. J. Linn. Soc.* **115**: 636–646

(not sure I like that citation style either, the automatic abbreviating of the journal's name isn't quite right)

Too much to review, even briefly, all in one go, but try the Roy et al 2015a first as it introduces all the other papers, follow this up with Garth Foster's paper (Foster 2015) then browse.

If your pdf collection is in a mess then now's the time to try out **Mendeley** to get your collection organised. Mendeley just sucked all the above information directly out of the pdfs, no typing involved, and it's got a pdf reader built in that returns to the place you stopped reading next time you open it up.

BRC kindly sent me hard copies of the above too, just as I was finalising this Bulletin.

Accommodation

An odd topic but members and potential DF field trip organisers may be on the lookout for somewhere cheap to stay. One suggestion that has been made is to look at the AirBnB website where people with property let their own places out - so you can perhaps find a large secure place with home comforts in your chosen area (self-catering of course but perfect for a small group).

Just test this site out for yourself, enter an approximate location & number of guests and up pops a map tagged with prices, sometimes a lot lower than you'd normally pay for a self-catering cottage, especially if you efficiently use all the bedrooms in a large farmhouse.

Meetings

Reports

Acalyprate workshop

Preston Montford

20-22 February 2015

The acalyprates present an unusual challenge where identifying specimens to family can be more difficult than taking them to species. As nearly half the Diptera families found in Britain are acalyprates (49 out of 107) we sometimes find ourselves in an awkward situation, not helped by the fact that many of these flies are small to tiny with characters that can be hard to distinguish. The aim of this workshop was twofold: firstly to tackle family identification and iron out some of the recurring problem areas, and secondly to look in detail at a number of families that are less well studied and not covered by other workshops. John and Barbara Ismay and Alan Stubbs pooled their considerable expertise to tutor this course, redrafting Stuart Ball's Key to Families and preparing handouts for twelve selected families.



Alan Stubbs & Daniel at Preston Montford (Duncan Sivell)

Alan opened the workshop on Friday evening with an overview of the acalyprates, their characteristics and ecology. This included some novel suggestions for common family names; "noem flies" for Carnidae as the M vein can be very faint or absent (!), and "ruler flies" for Psilidae as R_1 runs long and parallel with the costa. The "dead donkey fly" (*Centrophlebomyia furcata*) was given a posthumous mention; although this species has been presumed extinct in Britain for some time, this large and distinctive Piophilid would be hard to miss if it ever rose from the dead.

On Saturday morning we looked at family level identification. John and Barbara presented their modified version of Stuart's 2008 key, to which they had added nine extra families to accommodate taxonomic revisions of recent years. These changes expanded the acalyprate section of the key from 47 to 55 couplets (with the odd triplet thrown in). What was intended (possibly optimistically?) as a morning session extended into much of the afternoon, and

justifiably so, as attendees worked through the new key and got to grips with difficult characters. Even the building seemed to feel the strain when the power cut out a number of times (too many lamps and microscopes running off a single wall socket), but the session generated a lot of good discussion on family identification and tricky characters. Some fine-tuning of the key is probably still required, but a lot of progress has been made and we can tackle acalyprates with much more confidence than before.



Tethina grisea habitus



Xanthocanace ranula head

After identifying acalyprates to family level we took a selection of families to species level. These were families not normally covered elsewhere, and were chosen specifically for this reason. Handouts were provided for the Acartophthalmidae, Asteiidae, Camillidae, Campichoetidae, Canacidae, Chyromyidae, Coelopidae, Braulidae, Dryomyzidae, Periscelididae, Stenomicrodidae and Piophilidae. In addition a further ten acalyprate families are represented by single

Meetings

species in Britain so are currently identified to species level by default. In total the workshop tackled 76 acalyprate species from 22 different families.



Olga and Duncan at Preston Montford

On Sunday Barbara rounded off the workshop with a presentation on habitat associations with advice on where and how to catch your acalyprate specimens. The modified key and extra handouts provided at this workshop have certainly made acalyprates more accessible, and I expect a few of us will be paying more attention to the small black dots in the bottom of the net!



Peter and Judy confer (Barbara Ismay)

Thanks go to Martin Ebejer for writing a special draft key to Chyromidae for this workshop and to Bjorn Beckmann and the BRC for printing off the handouts for this workshop. Thanks also to Richard Underwood who as usual arranged for Liverpool Museum specimens to be made available, and for transporting these to and from Preston Montford himself. Specimen images were provided by the Oxford Museum and the Natural History Museum, and Steve Marshall allowed us to use some of his live acalyprate images.

Duncan Sivell

Spring 2015

Norfolk Coast

15-17 May 2015



Sweeping the soft cliffs at Overstrand (Barbara Ismay)

Natural History Museum

Big Nature Day

23 May 2015



John, Erica and Chris entertain (note our DF banner in the background)

Summer 2015 Field Meeting

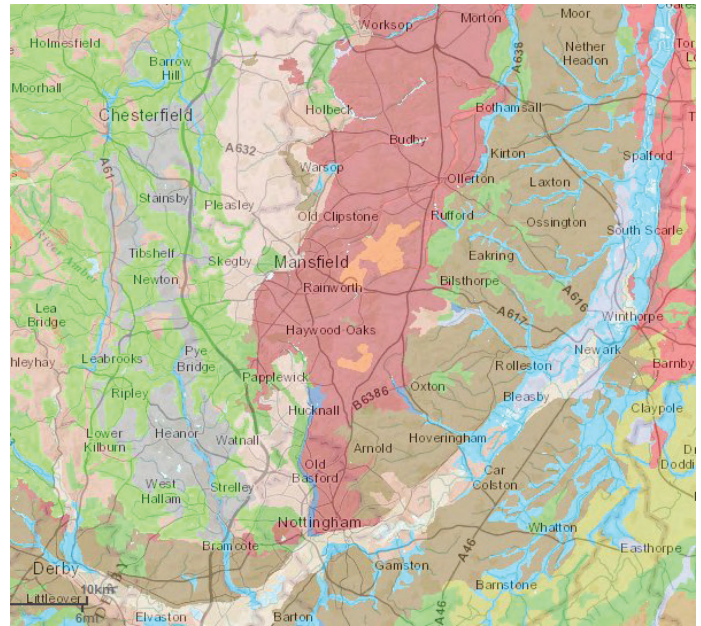
Nottingham 11-18 July 2015

Arguably Nottingham, and Nottinghamshire, was one of the least attractive locations. University base in a city, far inland so no coastal habitats in range, no site of any fame (except Sherwood Forest - for Robin Hood rather than flies). The choice was precisely because it is an extremely under-recorded part of Britain, hence a target for parachuting in a recording gang. We had taken the precaution of running the previous autumn meeting in Nottinghamshire to confirm that there was a range of interesting sites and the meeting did not disappoint, indeed the only disappointment was not having longer there to see all the sites receiving good reviews.



We found the accommodation ideal and the food excellent. I doubt that we can blame the Mayor of Nottingham for providing us with 2 wet days in a drought year! We had 17 members fully resident, plus a few for shorter duration. Derek Whitely joined us for part of the time as a co-leader: he lives in the White Peak and knew some of the Nottinghamshire sites as part of the Sorby area = Sorbyshire since it includes parts of several counties. The Sorby Natural History Society, Sheffield based, has generated quite good coverage for hoverfly data in the north-east of Nottinghamshire but little has been done of the rest of the flies since the published county list by Carr (1914 & 1935). North Leicestershire, the south Peak District, and for that matter most of Lincolnshire, are similarly under-recorded.

Nottingham is at the south end of an elongate county with a strip of Magnesian Limestone on the west side, a central strip of Permian Sandstone, and Permian mudstones on the east: the River Trent floodplain, with gravel pits, runs in an arc from the south to the east side of the county. Further East we entered the fringe of Lincolnshire (including inland sand dunes). To the south, Leicestershire includes Jurassic Limestone escarpments and the PreCambrian upland of Charwood Forest. To the west, the Carboniferous of Derbyshire provides outcrops of Coal Measures extending within the Peak District National Park down through the Millstone Grit sequence into The Carboniferous Limestone of the White Peak.



Soilscape map of part of Nottinghamshire (Nottingham to Worksop). The central red band is type 15 described as "Naturally wet very acid sandy and loamy soils", the pink stuff at the left is type 5 "Freely draining lime-rich loamy soils" and the brown strip to the right is type 8 "Slightly acid loamy and clayey soils with impeded drainage". I thought that informative - see <http://www.landis.org.uk/soilscape/> (Darwyn Sumner)

Summary results in so far:-

- 62+ Sites visited in 4 counties (Derbyshire, Leicestershire, Lincolnshire (south) & Nottinghamshire)
- 70+ Cranefly species
- 72 Fungus gnat species
- 68 Dolichopodid species so far (so expect perhaps 80 spp)
- 8 Aquatic soldierfly species
- 15 Sepsid species in 637 specimens examined during the field meeting.
- 70 Heteropteran species (terrestrial)
- 71 Sawfly species.

Even with only partial stop press data*, there are far too many to report here.



Keith Alexander ponders where to go next

Nottingham has plenty of Nature Reserves within and on the fringe, some of which were very interesting and most were rich in flowers.

Meetings

Wilford Claypit produced 5 species of aquatic stratiomyiids (*Vanoyia tenuicornis*, *Stratiomys potamida*, *Oxycera nigricornis*, *Oplodontha viridula*, *Nemotelus pantherinus*) – and that was just on the way to the University.



I hope no DF members tipped any of their flies there !!!!! (Malcolm Smart)

Some other ‘brownfield’ sites were equally full of flowers. This site was among those with *Tephritis neesii* associated with its host plant, ox-eye daisy. Wilwell Farm Cutting NR even had the tephritid *Acanthiophilus helianthi*, a scarce species on knapweed this far north. Forb’s Hole produced the rarely recorded sepsid *Themira biloba*. On the Trent flood plain at Nottingham lies the Attenborough Reserve, laying claim to premier status, mainly for its visitor centre and the birds. Much of the reserve comprises flooded gravel pits but between us we did surprising well for interesting finds, including the restricted access Delta Wood. But for the wet days we should have visited more gravel pits since some of those visited were very flowery and had interesting fly faunas. Besthorpe NR for instance (near Newark) had *Tipula pierrei* and *T. couckeii* at the water’s edge of a lake, and *Micropeza corrigiolata* on semi-bare areas with bird’s foot trefoil (larvae live in root nodules) and the crane fly *Nephrotoma cornicina* in young woodland scrub. The Trent flood plain has other habitats, such as Sawley Oxbow had the dolichopodids *Lamprochromus bifasciatus* and *Herocostomus chalybeus*. Farndon Willow Holt NR (near Newark) has willow carr, with the dolichopodid *Teuchophorus calcaratus*, and a very nice meadow unnecessarily spoilt by partial planting up as a willow arboretum.

The eastern mudstones belt has a number of woodland reserves. Treswell Wood, in NE Nottinghamshire was said to be especially nice, with high commendation from the DF Conservation Officers for its habitat management.



Rob Wolton & Peter Chandler at Treswell Wood (D Summer)

The Ordnance Survey map labels Sherwood Forest as a 30 km belt running up through the middle of the county. There are various semi-isolated blocks of woodland and heathland on Permian sands, much now with conifer plantations but with some decent semi-natural areas remaining.



The most famous part is where large numbers of ancient oak survive (+ visitors centre), with adjacent heathland. We found this core area unproductive, the conditions too dry: the robberflies *Neoitamus cyanurus* and *Dioctria baumhaueri* were easy to find on scrub oak but sweeping herbage yielded very little. We did much better in other parts of the ‘Forest’.

Rainworth Heath NR was much nicer, noteworthy for the presence of the stilt-fly *Micropeza lateralis* associated with broom and the miltogramine calliophid *Metopia tshernovae* at an ideal aculeate nesting sand exposure (an associated lane had plenty of flowers). There are wetter areas and streams: Spa Ponds NR is a small valley with dammed ponds and, though drought limited, it yielded 18 species of crane flies including *Dicranophragma minuscula* (sensu Stubbs 1997, NBN dictionary has *Dicranophragma nemorale* but see note on DF website - eds) and *Ptychoptera scutellaris*; the dry woodland path had *Leptogaster guttiventris*. The party which reached as far north as Clumber Park NT found their visit well

worthwhile, especially in a wetter area where subsidence from underlying coal mining had occurred: lots of goodies here.



Clumber Park, Hardwick End. Darwyn, Rob and the NT warden (Peter Chandler)

Spalford Warren NR lies north of Newark. The inland dunes are now stabilised, though most of the plantation pines have been removed, leaving open hummocked and ridged sand covered in sand sedge and a scatter of scrub oak. It was good to find the heathland craneflies *Tipula cava* and *Nephrotoma scurra* so close to the Lincolnshire border, in the scrub fringes, but surprisingly *Tipula helvola* was absent (sand too loose?). The scrub oak provided shade for the robberfly *Leptogaster guttiventris* (*L. cylindrica* was not found even in the open areas). A single *Seioptera vibrans* (Uliidae) was swept from scrub oak, a rarely encountered species looking like a giant *Sepsis*.



Derek Whiteley & Darwyn Sumner at Spalford Warren (B. Ismay)

The Magnesian Limestone belt has various interesting woodland springs and wet patches. There are also disused railway line NRs and public trails, remarkable for the abundance of flowers on this limestone (and also on the calcareous stretches on the mudstone belt). A fair number of goodies from this belt.

To the south-east of Nottingham, the Jurassic limestones form escarpments. Two woodland sites had seepages which were only moist. At Old Dalby the cranefly *Lipsothrix nervosa* was found, the only site for this species during the week and at Bunny Old Wood NR the doli *Teucrophorus nigricostata*.



Machimus cingulatus at Spalford Warren (D. Sumner)

To the SW of Nottingham there is a cluster of sites about the Derbyshire/Leicestershire border. At Calke Park NT the margins of Betty Pools was the most productive rather than the drought affected woodland. Carvers Rock is a habitat mosaic and opinions varied according to which parts of the complex were visited. The wetter areas at the valley bottom yielded the craneflies *Dicranophagma minuscula*, *Dicranomyia lucida* and *Neolimnomyia batava* whilst one of the meadows had *Sphaerophoria interrupta*; though the drier woodland did not appear to be special, a disused quarry was reported to be very nice. Cloud Wood deserved a return visit after the discovery of a female strat that keyed to *Oxycera morrisii/varipes* but the abdomen pattern was not typical. It had been taken either in a woodland ride or by a seasonal large puddle on the adjacent quarry spoil area. A male was sought in order to confirm identification, without success but *Xanthogramma pedisequum* was found in the quarry spoil area and the main woodland ride was enjoyable as a place to search.

One party spent a day in the **White Peak**, the Carboniferous Limestone part of the Peak District, led by Derek. Lathkill Dale NNR looked super but curiously low on flies. The very steep south facing limestone grasslands had the robberfly *Leptartrus brevisrostris* and the conopid *Thecophora atra*, whilst the river banks had the strat *Oxycera pardalina* (presumably breeding in the moss on the water margins and small weir-like waterfalls). A single *Xylota xanthocnema* was found, a great rarity in the Peak. The highlight was a visit to Priestcliffe NR in Millersdale, on the north facing side of the valley and hence less affected by the drought. Here, calcareous seepages have formed tufa, partly moss covered with the cranefly *Dicranomyia aquosa*: sweeping in close proximity produced *Pedicia straminea* and *Molophilus variispinus*, as well as the terrestrial *Atypophthalmus inusta*. The associated meadow glade was flower rich and long waylaid the party before sweeping by the river. The day ended with a visit to a disused limestone quarry NR, with flowery grasslands, wetland and pools: a fortnight previously the snipe fly *Symphoromyia immaculata* had been plentiful though that peak was over since we found none. *Urophora quadrifasciata* (plus *U. jaceana*) was on knapweed (the only site that I came across this species).

Among the recording scheme families, overall hoverflies were rather scarce, a common experience more generally this year. It was a late season due to the prolonged cold weather well into most of June. This should have been of advantage for the timing of the meeting but the hot weather of the previous couple of weeks had speeded the season fast forward: the biggest limitation was the drought as from March. Many groups of flies were affected, including Chloropidae which probably were most disadvantaged by the cold spring weather. A bit over 70 species of craneflies is well down on the expected 100+ because habitats were so dry, apparently not affecting *Diogma glabrata* since it was easily found in a good, proportion of woodlands (the larvae live in terrestrial moss that shrivels up in drought conditions). Fungus gnats were inevitably scarce unless by good fortune damp dark nooks are found where these flies congregate. Aquatic soldierflies are always very localised and a total of 8 species is a good result. Asilids were not as ubiquitous as hoped though the discovery of *Leptogaster guttiventris* at several sites was satisfying, and pleasing to see *Neoitamus cyanurus* frequently in Sherwood Forest plus some other sites. Dolichopodids were past their peak but some interesting species were found. Tephritids should have been plentiful in July, possibly delayed, though dipterists from tephritid-sparse home districts were impressed. Sepsids were sparse, with 5 species dominating, a common experience in recent years (a problem in part with use of avermectins ?).

Perhaps most of the dipterists have wider invertebrate interests and very often about a third of the species recorded at these summer meetings are other than flies. Andrew Halstead proclaimed his usual Honeypot Challenge for bringing him the most sawflies (one point per species per site: a pot of home produced honey as the prize): that yielded 58 species identified by the dead-line. Roger Hawkins was receiving Heteroptera bugs and ladybirds and Chris Spilling was recording spiders: both these groups are in the sweep net. Keith Alexander was recording beetles and has already produced an impressive list of finds even before examining all of his material. I have brought back solitary bees and wasps, and caddis. Though none of us set out to record Lepidoptera, we could not but be impressed by the quantity of butterflies on some sites, mainly the browns but including the silver-washed fritillary which has made a come-back. Sweeping is not a standard recording method for adult moths so it is dipterists that more easily locate the 6-belted clearwing – on this trip we found it on 3 brownfield habitat sites associated with its foodplant, bird's-foot trefoil. It was a rare experience that the Forester moth was at sheep's sorrel on one site..

Sawflies: The Honeypot Challenge. Although flies are the main target for the DF Summer Meeting, sawflies (Hymenoptera: Symphyta) come a close second. This is helped by Andrew Halstead awarding points for each sawfly species collected at a site, with the person with the greatest number of points at the end of the week being awarded a jar of honey. This year's winner was Alan Stubbs (35 points), with Rob Wolton second (25 points) and Andrew Cunningham third (22 points). The total number of sawfly species recorded during the week was 71, which compares with 49 at Bangor 2014 and 62 at Lancaster 2013. Without the assistance of the other 15 honey potters, the tally would have been just 42 species.

Andrew Halstead

Heteroptera. It was nice to see the predatory shieldbugs *Zicrona caerulea*, *Rhacognathus punctatus* and *Picromerus bidens*, but the undoubted highlight was the abundance of a predatory mirid bug, *Deraeocoris flavilinea*. This was first found in Britain in 1996, in

east London, but now we recorded it at many sites, in ten different 10-km squares. I also had my first encounter with the small black mirid *Orthonotus rufifrons* that lives on nettles in damp woodland, a good description of the Delta sanctuary area at Attenborough.

Roger Hawkins

There are perhaps 3 main criteria for defining a successful meeting. Firstly, did everyone enjoy themselves? - and that includes someone new and something of a novice being fully part of the gang. Secondly, were there enough sites of ecological variety to keep people happy and feeling they could have done with longer? Thirdly, not only that the recording effort has proved well worthwhile but that at least those on a learning curve have gone away the wiser, with named voucher specimens. On those criteria, this was a very successful meeting and we have all departed with appreciation that the area covered has a considerable range of interesting sites, not least the many places full of flowers and plenty of potential yet to be realised. Personally, I regret not having paid more attention to this area previously.

Alan Stubbs

(site and species names checked by Judy Webb, Peter Chandler & Darwyn Sumner)

A map of the sites visited is on page 6 of this Bulletin, an Excel spreadsheet of those sites, obtained during or shortly after the meeting is to be found on the DF Forum (web links)

Darwyn Sumner

Forthcoming 2015

Annual General Meeting Dipterists Forum annual meeting and AGM 2015



Friday 20th to Saturday 21st November

This year our Dipterists' Day and AGM will be held in Birmingham on Saturday 21 November.

In a departure from normal procedure we will be viewing the museum's Diptera collection on the Friday before Dipterists' Day, rather than the Sunday afterwards, as the museum's Collections Centre is closed at weekends. This change of plan means we won't be organising our usual Dipterists' Supper on Saturday, but we hope that a less formal social event will take place on the Friday for the Dipterists who are in town that evening.

Museum Collections Centre

Friday 20 November 2015

25 Dolman Street, Nechells, Birmingham, B7 4RQ

Birmingham's Diptera collection is housed in Museum Collections Centre, north east of the city centre, a 30 minute walk from New Street or a 5 minute walk from Duddleston Station. The centre will be open from 10 am to 4 pm. There is no canteen or café on site so we advise people who want to view the collection to bring a packed lunch with them. Anyone intending to study the Diptera collection should contact Duncan Sivell beforehand, as we need to provide the centre with list of visitors before the event.

Birmingham Museum and Art Gallery

Saturday 21 November 2015

Chamberlain Square, Birmingham, B3 3DH

The Dipterists' Day and AGM will be held in the Birmingham Museum and Art Gallery on Chamberlain Square, just a short walk from New Street station. The venue will open at 10 am with talks beginning at 10:30. The meeting schedule will be posted on the Dipterists Forum website in due course, so please check online

for further details. There is an Edwardian Tearooms within the museum where delegates can buy lunch, and there are several other places around the city centre where food can be bought.

Pemberley Books will be in attendance on Saturday

These events are free and non-members are especially welcome, but this year we are obliged to provide a list of attendees in advance.

If you are planning to attend the Dipterists Day and/or visit the Museum collection please contact Duncan Sivell prior to the event. Duncan Sivell (d.sivell@nhm.ac.uk)

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

Our next spring workshop covers three calyptrate families that are common and widespread but not always considered "accessible" as the published keys may be out-of-date, incomplete or a little too expensive. Female identification can be problematic, and genitalia examination is often required for males, though this is generally more a help than a hindrance if they are teased out when the specimen is set.



Eurychaeta: a Calliphorid that looks like a Sarcophagid

The Calliphoridae are familiar to all of us whether we study them or not. Bluebottles and greenbottles are ever-present, and I suspect most of us know someone who has had an infestation of cluster flies. Collectively known as the blowflies, Britain plays host to 38 species. For obvious reasons the forensic and medically important Calliphorids have received a lot of attention, but these species are actually in the minority. There is still much to learn about the biology and distribution of the wider British fauna.

The Sarcophagidae, boasting 61 species, is the largest family being tackled at the workshop. We probably all recognise the stereotypical form and colour pattern of a large flesh fly, but how many of us catch specimens to work out which of the 35 *Sarcophaga* species we encounter? Despite their common name, flesh flies are not all about carrion, but many are parasites or predators of other inver-

tebrates. The behaviour and ecology of these flies will be looked at, with tips on how to study and collect them in the field.

Last but not least, the Rhinophoridae are a small family with only 8 species in Britain. These flies are commonly known as woodlouse flies because they parasitize terrestrial isopods, and this family offers great potential for some back garden science projects. There is still more to be discovered about the host-parasite relationships of British species.

Calliphoridae, Sarcophagidae and Rhinophoridae are all calyptrates with hypopleural bristles, which makes them a natural group to study together. (Tachinids and Oestrids are the only other families with these characters.) Handouts to identify species from all three families will be provided at the workshop.

People wishing to attend the course should check the FSC website or contact Preston Montford directly. Bookings typically open in October. The cost of the course will be £258 (DF members £163) for a single room and £236 (DF members £141) for a shared room. Microscopes are provided for people who do not take their own, but please contact Preston Montford in advance to book a microscope if you need one.

Field meetings 2015 - 2016

I am looking for views on the most favoured place for a spring field meeting next year.

One thought I have is to look for accommodation in Lowestoft to give access to The Broads and the Suffolk coast. Alternatively, we might aim to the SW - maybe the Somerset Levels - there is an adequate Travelodge in Glastonbury. Other thoughts might be around Cirencester or perhaps parts of north Gloucestershire/Oxfordshire.

Roger Morris

Roger Morris has resigned from organising the Summer field meetings, but will continue to organise meetings in the Spring and the Autumn, of the kind where people book their own accommodation (as in the Cromer meeting this year). For many years now Roger has undertaken the entire organisation of the Summer meetings: finding and booking accommodation including rooms and a common workroom, for a whole week and at an affordable price; liaising with local dipterists to identify good collecting sites and obtaining permission to access them; and collecting payments from attenders and paying invoices from the venues. This entails a very large commitment of time, and it is this from which Roger has now retired. We do not expect to find anyone to replace Roger in this role. Two matters are currently under discussion: first, we have come to realise that meetings along the lines outlined above have now become almost impossible to organise, and we are actively considering a number of ways in which the format of the meetings can be modified to make this easier; second, we intend to divide up the tasks formerly undertaken by Roger alone among several people, so that for example the booking of accommodation, the research into collecting sites and the organisation of the finances need not be undertaken by the same person. We have booked a Summer meeting for 2016 along the traditional lines outlined above. It may be the last one in this format. Any decisions taken by the committee about this matter will be publicised in future Bulletins.

Howard Bentley

(There's a little item about accommodation in the Review section that might be of use. (ed))

Autumn Field Meeting

New Forest and Isle of Purbeck

10-17 October 2015

This will be a two-centre trip, based partly in Bournemouth and

partly in Swanage. It is intended to use this opportunity to make a serious effort to record the New Forest, which has not been intensively visited for many years. The Swanage base will allow us to explore the Isle of Purbeck - which potentially holds many interesting records.

Summer Field Meeting

Canterbury

2-9 July 2016

Canterbury Christ Church University. Details in the next Bulletin. Initial booking is for 20 people but the organisers need to know if you intend to go as DF have already paid a non-returnable deposit (20%) and the full sum will be paid by DF 12 weeks before arrival - so that gives you until about the end of March. Approximate cost £400.

Howard Bentley & Amanda Morgan

A booking form for Dipterists Forum events can now be downloaded from the DF website in the "Dipterists Forum information" section at <http://www.dipteristsforum.org.uk/viewtopic.php?pid=15522#p15522>

Where would you like to go?

Dipterists Forum Forum - Meeting reports

There seems to be no shortage of ideas about places to go, I'm sure you've all read about the stunning finds reported in the Bulletin and Newsletters and wished you'd had a chance to get to those spots at that time of year.

To help realise this I've begun what I hope turns into a series of proposals by various DF members on the **DF Forum** in the "**Meeting reports**" section. Posting in this section may help considerably in achieving the *dividing up of tasks* that Howard Bentley refers to.

One possible emphasis might be on **photography** with a focus on a limited range of diptera and their peak seasons in known locations (Summer Field trip tends more towards exploration of unknown sites); since missing the 2010 trip I've been trying to get to Windsor Great Park in order to photograph *Rainieria*. There's *Pamponerus*, *Microdon*, *Criorhina* spp. and *Doros* in North Lancashire in the spring, *Salicella* on the Norfolk/Lincolnshire coast in September/October, nice spring hoverflies in the New Forest (Paul Brock and Chris Palmer know precisely where to go). We must have identified a huge range of similar hotspots during our DF Field Weeks.

If you've any ideas, want to arrange a meeting, are able to offer support regarding site access (LRCs should be able to advise), got somewhere planned, have good knowledge of an area or simply fancy going somewhere with a few other dipterists then please put a message or add to existing ones on the Dipterists Forum Forum (Meeting reports).

Remember that a key stumbling block is locating suitable accommodation, but small places would suffice for short trips.

Darwyn Sumner

Events Calendar 2015/6

Dipterists Forum & selected meetings

27 September 2015, 10-4pm. The natural history of soldierflies and allies. How to recognise the families and key out the species with the help of specimens from the OUMNH. You will find out about the soldierflies and allies recording scheme, and where to go for further help and identification advice. Tutor Martin Harvey, Oxford University Museum of Natural History. 10 places available. Cost £15, tea and coffee included, bookable via the museum website or contact Zoë Simmons on 01865 272994

3 October 2015, 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.

10-17 October 2015, DF Autumn Field Meeting to New Forest and Isle of Purbeck. A two-centre trip, based partly in Bournemouth and partly in Swanage. It is intended to use this opportunity to make a serious effort to record the New Forest, which has not been intensively visited for many years. The Swanage base allows access to Isle of Purbeck. Contact Roger Morris for details (7 Vine Street, Stamford, Lincolnshire, email: roger.morris@dsl.pipex.com).

14 November 2015, BENHS Annual Exhibition and Dinner, Conway Hall, 25 Red Lion Square, Holborn, London WC1R 4RL. See <http://www.benhs.org.uk/>. Please come and bring your best pinned flies to swell the Diptera section.

20-21 November 2015, Dipterists Day and AGM, Birmingham Museum and Art Gallery Chamberlain Square, B3 3DH. The Museum collection will be open to DF members on Friday 20 November; the AGM being held the following day. For Friday, the meeting is in the Museum Collection Centre at 25 Dolman Street, B7 4RQ. As a result of this change to the normal sequence of events, there will be no Dipterists' dinner, rather any social activities will have to be informal, arranged by attending members at the time.

12 & 13 December 2015, 10am-6pm daily, DF Beginners Workshop 'Introduction to Fly Families' – John & Barbara Ismay and Oxford University Museum of Natural History, South Parks Road, Oxford (www.oum.ox.ac.uk). Please contact John and Barbara Ismay, 67 Giffard Way, Long Crendon, Aylesbury, Bucks, HP18 9DN (E-mail: schultmay@insectsrus.co.uk) in advance to book your place at the workshop. Places are limited to 12 participants, so early booking recommended.

2016

30 January 2016, Tachinidae Identification Workshop. Tutors: Matt Smith and Chris Raper. Dinton Pastures, Pelham-Clinton Building, Hurst, Reading RG10 0TH. See: <http://www.benhs.org.uk/>.

19-21 February 2016, DF Advanced Workshop on Flies in the Sarcophagidae, Calliphoridae & Rhinophoridae. Tutors: Steven Falk and Daniel Whitmore. Preston Montford Field Studies Centre, Shrewsbury. Details posted in this issue and will be on FSC website: <http://www.field-studies-council.org/prestonmontford/>

19 March 2016, BENHS Annual General Meeting and Presidential Address. University Museum of Natural History, Parks Road, Oxford OX1 3PW.

? May 2016, DF Spring Field Meeting ???

2-9 July 2016, DF Summer Field Meeting provisionally to Kent, Canterbury area.

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.

November 2016, BENHS Annual Exhibition and Dinner Conway Hall, 25 Red Lion Square, Holborn, London WC1R 4RL

2017

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

Throughout the Year:

The Northants and Peterborough Diptera Group hold meetings every weekend from end of April until sometime in September/October. Contact John Showers on: showersjohn@gmail.com

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

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

Soldierfly identification course Oxford University Museum of Natural History 27 September 2015

Soldierflies and allies (including robberflies, bee-flies, horseflies and others) include some of our largest and most colourful insects. Some are easy to find whereas others require dedicated searching, but these flies are within reach of anyone with an interest in insects. Along with the hoverflies they provide an ideal starting point for the study of Diptera (the True Flies), with good identification keys available in well-illustrated books.

Using a mix of presentations and workshop exercises we will explore the natural history of soldierflies and allies. With the help of specimens from the OUMNH collections the course will take you through how to recognise the families and key out the species. You will find out how to take part in the soldierflies and allies recording scheme, and where to go for further help and identification advice.

This course is suitable for beginners with an interest in insects, as well as more experienced entomologists who wish to develop their knowledge of this group.

Course costs £15 and tickets are bookable via the museum website: <http://www.oum.ox.ac.uk/visiting/whatson.htm>

Tea and coffee included.

Any queries please contact Zoë Simmons on 01865 272994 or zoe.simmons@oum.ox.ac.uk

Dipterists Forum and Oxford University Museum of Natural History Workshop Saturday 12 and Sunday 13 December 2015 Introduction to Fly families (Diptera)

John Ismay and Barbara Ismay (both Long Crendon).

This workshop is held jointly with Dipterists Forum and Oxford University Museum of Natural History. The True Flies (Diptera) is a large and diverse order, with some families that are relatively easy to identify and others that need more experience. They are an important part of our ecosystem, provide many ecosystem services and have fascinating behaviour. This workshop introduces the order to beginners and we will place emphasis on the families for which Recording Schemes exist. Dipterists Forum has produced a draft key, which will be printed for each participant (copying costs might occur if a sponsor cannot be found), while the Oxford University Museum of Natural History kindly hosts the workshop for free. The workshop includes tutorials throughout the two days, mostly on identification, but also on habitat preferences. Collection techniques and basic advice on how to store specimens will be covered. At the end of the two days you will be able to identify many flies to family level and we hope you will be curious to learn more. Further information on flies can be found under www.dipteristsforum.org.uk, further information on the Oxford University Museum of Natural History can be found under www.oum.ox.ac.uk. There will be a small charge to cover tea / coffee and some biscuits.

Please contact John and Barbara Ismay, 67 Giffard Way, Long Crendon, Aylesbury, Bucks, HP18 9DN (E-mail: schultmay@insectsrus.co.uk) in advance to book your place at the workshop.

Please note that places are limited to 12 participants, so please book early to avoid disappointment. The workshop runs from 10am to 6pm on both days.



Xylota sylvarum - Felmersham Gravel Pits, Beds, 18 Jun 2014 (Alan Outen)

Contributing Bulletin items

Text

- 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.
- 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.
- 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.
- Do not** use "all capitals", underlining, blank lines between paragraphs, carriage returns in the middle of a sentence or double spaces.
- 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>
- Scientific names should be italicised throughout and emboldened only at the start of a paragraph.
- Place names should have a grid reference.

Illustrations

- 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.
- 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. .
- 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). All group pictures should identify all the individuals portrayed.
- Powerpoint** files may be submitted, they are a useful means of showing your layout and pictures are easily extracted.
- Pictures contained within Word files are of too low quality and cannot be extracted for use in the Bulletin.

- Line artworks are also encouraged - especially cartoons
- 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.
- 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.
- 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

- Tables should be submitted in their original spreadsheet format (e.g. Excel)
- 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