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Forum

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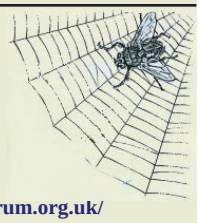

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Dipterists Forum Forum www.dipteristsforum.org.uk/index.php

Photographs: Front cover *Phasia hemiptera* & *Empis livida* **John Showers**, above *Hybomitra bimaculata* **John Showers.** 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)

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Contents

Dipterists Forum Events

Fly Sheets

Contents

Dipterists Forum Events

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 #58
Fungus Gnats Newsletter #8
Cranefly Newsletter #29

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

Desktop publishing: Darwyn Sumner

Editorial

Thrifty shades of grey

Coloured covers were first introduced for the Dipterists Forum Bulletin in 2009. We're indebted to the efforts of Barbara and John Ismay for making this possible. Since then the whole Bulletin has been produced in colour but printed in B&W. Lately there has been an increasing amount of colour used in Dipterists Digest so I attempted to get the whole Bulletin similarly printed in colour but the costs are just too high. I'm not giving up though, we're testing an online system that will allow you to see previous editions of the Bulletin in glorious colour.

Online publishing

There are numerous means of making Document files (such as pdfs) available:

1. as a **downloadable file** that you then have to read using a reader (Adobe) that resides on your own PC (examples being the various **Dipterists Digest** obtainable from the DF website)
2. as a file that resides on the internet, read using a reader that integrates with your browser - this is **online publishing**, you'll be familiar with forms of it if you've ever opened an online pdf, I guess the BRISC newsletter (below) and NFBR newsletters are examples
3. as **collaborative documents** (e.g. Mendeley - Bulletin # 76)

Where to find Dipterists Forum publications as files:

- **Dipterists Digest**: Dipterists Forum website (downloadable files)
- **Scheme Newsletters**: Contact the Scheme organisers. A couple of us have had a go at popping them onto Mendeley, this is a private group limited to 5 members with just one space left. Recording Scheme newsletter pdfs are pretty small in terms of file size and the organisers like to circulate nice coloured versions, especially to their contributors.
- **Dipterists Forum Bulletins**: Online publishing via Google Docs (free.) Postings are on Dipterists Forum Forum (News) where links are provided so you can open them in your browser. Very recent Bulletins won't be included to begin with. Thanks to Howard Bentley & Paul Beuk for checking links.

Printed spares aka loft insulation

These are mostly stored in Martin Drake's groaning loft, Roger Morris has kindly offerred to distribute as much as he can at the training events he runs with Stuart Ball. Also available at the John and Barbara Ismay training events, one of which got reported in the Leighton Buzzard Observer, Alan Outen tells us.

Darwyn Sumner

Scottish stuff from BRISC

Latest Newsletter at http://brisc.org.uk/newsletters/Pending/BRISCRecorderNews96.pdf Nothing on Diptera this time but it's an enjoyable read.

Green space map: England & Wales

To be created by Ordnance Survey, this is a planned online map of all publicly-accessible green space. You can find a full report by the Telegraph's Christopher Hope at http://www.telegraph.co.uk/news/politics/11271314/George-Osborne-unveils-new-green-space-map-of-England-and-Wales-for-walkers.html You'll be able to access their first section in April.

Darwyn Sumner

Bulletin illustrations

One of the suggestions I made to a small group of regular contributors to the Bulletin, was that some superb photographs were being posted in the identification section of our website. Take a good photograph or two that are linked to an interesting tale of identification problems and that would make a nice feature in the Bulletin. This would be a good opportunity to feature some of the more unusual species. Those identification postings soon disappear into the depths of the website because the section is so heavily used and hunting through them all would be a huge task. Can the regular contributors to the identification section keep an eye open for such stories as they occur please and contact the Bulletin editors with story and pictures at the appropriate times (a couple of weeks before the deadlines would be ideal).

In the meantime, our call for photographs got a response from Alan Outen who came up with a large interesting batch of photographs, some of which I've used for general illustration (as I've done with my own - see John Showers' Northants & Peterborough Diptera group report.) He also emailed Judy with comments about photography and identification so he's now got himself a full page in this Bulletin, hopefully that will be the first of a regular section.

I've got a little stock of photographs for general use now but I can't guarantee to use everything in one or two Bulletins, I need to find some context so apologies to contributors who sent in images, I'll find an excuse to use them at some point.

Thanks this time to Martin Drake, Chris Spilling, Alan Outen and John Showers, keep them coming in as the usable stock is still very small and our readers do like to see pictures, especially now that we can show them in colour via online publishing. Paul Beuk is showing an interest in those online Bulletins so images we use here will get a much wider audience via Diptera.info - I hope Paul's regular contributors there will respond to this request too, it would be nice to see a couple of their photo stories.

More snaps from events too, most of them from last year have finished up on Spotify or Flickr. Sometimes just a handful of photographs is all that's needed to report on one of our events, such as the AES or our field meetings.

Leucozona laternaria ♀ - Felmersham Gravel Pits, Beds 18 Jun 2014 [Alan Outen]

If you've any trouble at all in locating, categorising or sorting through your digital phoographs to help you choose what to send me, I highly recommend **iMatch5**; treat yourself this year, it's ten times better than the default one that came with your camera, how many of those will let you build your own customised taxonomic tree?

Notice board

Exctinctions & biodiversity data

There have been a couple of recent reports regarding world-wide extinctions. The Guardian's "Observer" (14 Dec 2014) reports on a **Nature** article[1] which discusses the shifts in the distributions and abundances of species and suggests that by 2050 between 15 and 37% of the species in their study will be committed to extinction. This follows a **World Wide Fund for Nature** survey which gave similar predictions telling us that the number of wild animals on Earth has halved in the past 40 years[3]. The drivers for all this are, of course, habitat loss, pollution and others, with a final blow being delivered by global warming. The Lima talks about global emissions seem to be sending us backwards (lots of articles about this on the **Friends of the Earth** website,) although Pope Francis is stepping in to influence the UN climate meeting in Paris in 2015. In the Guardian article, Robin McKie reports that the extinction problem is exacerbated by "*huge gaps in knowledge about the planet's biodiversity*"

The UK's biodiversity knowledge is sizable, though inadequate. All of us recorders and our supporters have amassed huge amounts of biodiversity data from these shores and put it online (NBN Gateway.) It amounts to 20% of the world's online data. We're losing that support though, what with flimsy legislation and sudden loss of government financial support: Natural England had Defra funding for biodiversity services withdrawn part way through the year so Leics, Notts, Surrey & Herts were told they wouldn't get paid for work they'd already done. An ALERC letter to the Secretary of State was needed in order to fix this.

Big Business

New Scientist published an article about new secret trade agreements (Transatlantic Trade and Investment Partnership = TTIP) between US and EU. Apparently the "rules" that they have to adhere to when they want to cross-trade are tricky and expensive to negotiate so this TTIP is some sort of arrangement in which pressure is brought to bear on legislators to "waive" the rules a bit. Naturally New Scientist only expressed concern about "Big" science like pharmaceuticals etc. but our weak environmental protection "rules" will be more at risk. I found this issue discussed on Friends of the Earth website - they have a petition at http://www.foe.co.uk/news/act-now-stop-these-trojan-horse-trade-treaties

We should be concerned about threats to our legislation, for the built environment there are "mandatory" controls but for the natural environment all we've got is our Planning "guidance" which permits the destruction of our only Nightingale stronghold SSSI (Lodge Hill in Kent) or the rare spiders at Radford Quarry.

Big Ideas: Half Earth

E.O.Wilson has a plan to save Earth from cataclysmic extinctions. He proposes setting aside half the planet as permanently protected areas for species other than man - hence the "Half Earth" tag. For more information try BBC Radio 4's **Listen Again** facility (*Shared Planet: Half and Half* from 13/1/15), a Smithsonian article at http://www.smithsonianmag.com/science-nature/can-world-really-set-aside-half-planet-wildlife-180952379/?no-ist or read his books. Interview in New Scientist 24th January 2015.

We're on track to protect much less than humanity needs.

Darwyn Sumner

1. Dickinson, M. G., Orme, C. D. L., Suttle, K. B. & Mace, G. M. Separating sensitivity from exposure in assessing extinction risk from climate change. Sci. Rep. 4, 6898 (2014). **N.B. free download**
2. Thomas, C. D. et al. Extinction risk from climate change. Nature 427, 145–8 (2004).
3. Carrington, D. Earth has lost half of its wildlife in the past 40 years, says WWF. Guard. (2014). at <http://www.theguardian.com/environment/2014/sep/29/earth-lost-50-wildlife-in-40-years-wwf>

Charles Roper is leaving Sussex BRC at the end of February to join the IT team at the **Field Studies Council**. He's been so helpful to us and his dad's Recording Scheme in the past - good luck with the new job Charles.

Recording Schemes

One topic that's been flagged as an issue recently is the increasing number of datasets submitted by Consultants. By and large these are sent to LRCs who have helped brokered this deal with the Consultant's professional organisation IEEM. This is a considerable step forward in mobilising records that might otherwise have sat unused (except by survey commissioners) in filing cabinets forever. From LRCs these records then get passed to County Recorders and/or Recording Schemes for verification. Alan Stubbs has expressed worry over the quality of this data but I hope we can reassure him and others that it all passes through the hands of Diptera experts before it goes public. I've recently posted a request on the ALERC forum (supposedly read by all LRCs receiving such Consultant data) asking them to reassure us that verification procedures are adequate. Reassuring replies were received in pretty short order from Cumbria (Teresa Frost), Lincolnshire (Charlie Barnes), Bristol (Tim Corner) and Sussex (Charles Roper).

Consultants have, of course, been submitting data for ever, they are dipterists that we know The picture as a whole is more complex than that though, with other consultants using **iRecord**, data from which should reach Schemes for verification as we saw in our BRC talk. Anything that goes directly to an LRC gets vetted through the Schemes via a network of local experts (see inside back cover of this Bulletin for some of that network).

Teresa asked what would happen to diptera records entered onto **iRecord** which don't have a Scheme.

Charles Roper stated "*We've been working closely with all of the [VC Recorders] or other appropriate experts willing to use **iRecord** in Sussex, offering training and advice, and we continue to closely monitor and support the effort. Overall it's a collaboration between the experts and us. So we're very much involved in the whole process: gathering, verification and end-use.*"

Stilt & Stalk Fly Recording Scheme

2014 was not a particularly good year, I've seen only a handful. Bear in mind I try to photograph them so my success rate is low, perhaps 1/20th of the "netters". Even the good netters report only a couple of records though. I've evidence from Malaise trapping in previous years to suggest that at least some species exhibit mass emergence so if they're allowed just a short time to do the necessary before the weather turns bad then hunting down the few survivors becomes difficult.

Records are flowing in nicely, many thanks to all those contributing, don't be shy if you've only found 2. I get mixed lists containing **Sciomyzidae** (many more records of those) and I pass them along to Ian McLean.

Darwyn Sumner

Fungus Gnats Recording Scheme

Newsletter #8 included in this Bulletin

Peter Chandler

Hoverfly Recording Scheme

Newsletter #58 included in this Bulletin

David Iliff

NEW Scathophagidae Recording Scheme

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

(*Do visit this website, it's packed with keys and photos, a superb resource - Ed.*)

Stuart Ball

Sepsidae Recording Scheme

2014 proved to be a productive one for the scheme. Records were received from a number of recorders, including Howard Bentley, Ian Andrews, Martin Drake twice, Stuart Warrington (National Trust), Phil Brighton, John Coldwell, and Rob Wolton. Martin's two sets of records totalled just short of a thousand records which is a sizeable addition to a scheme of this size.

A further large infusion of records were the records I extracted from a set of recording cards and printed lists that reached me from Adrian Pont. They covered the period following the completion of the provisional atlas in 1986 to my taking over the scheme. In total, I extracted 1,100 odd records from a number of contributors.

As reported in the last bulletin, I led the sepsid part of the FSC course held at Preston Montford FSC last February. Hopefully, those who were on the receiving end of my section found it helpful and I was particularly pleased to see the photograph of myself in the bulletin described as apparently instructing John Ismay. As it happens, John was double checking one of my determinations.

It was through John and Barbara Ismay that Yuchen Ang, who is studying at the National University of Singapore, contacted me. Yuchen is the man behind the very useful Sepsidnet website and he has offered to create a cut-down version of this site featuring just the British species. Up to now, Sepsidnet has lacked three of our species but, following his recent trip to Europe, he has managed to get photographs of *Nemopoda pectinulata, Sepsis luteipes and Sepsis nigripes* to fill in the gap. I hope to augment the site with distribution maps from the scheme and maybe a few other additions. I don't have a timetable for this work yet so watch out for news on the Dipterists Forum website. If anyone can spare me some images of sepsids in action, rather than pinned ones, to add the website please let me know — my email address can be found at the back of the bulletin with details of all the recording schemes.

Unspecified Sepsid (D Sumner)

Via Adrian, I was contacted by Patrick Rohner of the University of Zurich. Patrick has been studying the distributions of sepsids in Switzerland and, in particular, looking for any altitudinal trends that might be present. I've seen a draft of the paper he's prepared on this work and very interesting it looks too, even if some of the statistics are beyond me. I have given Patrick a cut down version of the British records from the scheme in the hope that he can do something similar with the larger British dataset and highlight any trends in the more altitudinally challenged Great Britain.

Patrick has suggested doing a new version of the provisional atlas. It makes me feel very old knowing that it is twenty nine years since the publication of Adrian's atlas. In terms of the data accumulated since 1986 it is certainly tempting to think of doing a new atlas as the two tables below might indicate, but the data has drawbacks too. In Adrian's atlas he produced a table summarising the records he used. I've used this table to generate two tables comparing the data in the first atlas with what has been recorded since.

Table 1 shows that with 7,779 records added since the atlas was published, there would be more than double the records if a new atlas was produced. The order of the species follows the order shown in the table in the atlas and this is based on the number of 10km squares the species was recorded from. I've ranked the species from commonest to rarest and some interesting changes have appeared. *Sepsis violacea, Themira putris and Orygma luctuosum* have all dropped five ranking places. I suppose that less recording from seaweed covered beaches might account for the change in respect of *Orygma*, but the other two? The species with the largest positive move is *Themira minor* which has jumped nine places.

The drawbacks appear in Table 2 as the 7,779 records have come from 725 fewer 10km squares than shown in the atlas, a coverage drop of 26%. I feared this might be the case with only a handful of regular recorders usually recording from their home patch. I suspect this might make before and after comparisons more difficult. I haven't done any comparisons to see which 10km squares have lost coverage. However, it is unlikely that the coverage shrinkage can be resolved in the near future. I'd be grateful for any advice on what to do in this situation.

Table 1

Comparison between the records reported in the Provisional Atlas (1986) and those records compiled since (those submitted to the scheme as at 31/12/14).

	In Atlas			Reported Since			
	Records						
	Number	% total	Ranking	Number	% total	Ranking	Ranking change
Sepsis cynipsea	946	15.4	1	1185	15.2	1	0
Sepsis fulgens	876	14.3	3	1171	15.1	2	1
Nemopoda nitidula	885	14.4	2	588	7.6	5	-3
Sepsis punctum	532	8.7	4	833	10.7	3	1
Sepsis orthocnemis	478	7.8	5	513	6.6	8	-3
Sepsis violacea	364	5.9	6	298	3.8	11	-5
Sepsis flavimana	333	5.4	7	515	6.6	7	0
Themira putris	289	4.7	8	112	1.4	13	-5
Themira annulipes	221	3.6	9	565	7.3	6	3
Themira lucida	205	3.3	10	436	5.6	9	1
Saltella sphondylii	131	2.1	12	177	2.3	12	0
Themira superba	144	2.3	11	406	5.2	10	1
Themira minor	114	1.9	13	607	7.8	4	9
Orygma luctuosum	114	1.9	13	22	0.3	18	-5
Sepsis duplicata	80	1.3	16	86	1.1	15	1
Themira pusilla	103	1.7	15	94	1.2	14	1
Themira leachi	79	1.3	17	30	0.4	17	0
Sepsis neocynipsea	51	0.8	18	18	0.2	19	
Sepsis thoracica	48	0.8	19	66	0.8	16	3
Meroplius minutus	46	0.7	20	7	0.1	22	-2
Nemopoda pectinulata	20	0.3	22	3	0.0	24	-2
Themira germanica	26	0.4	21	7	0.1	22	
Sepsis biflexuosa	11	0.2	24	2	0.0	27	-3
Sepsis nigripes	7	0.1	26	1	0.0	28	-2
Themira nigricornis	10	0.2	25	3	0.0	24	1
Themira gracilis	12	0.2	23	14	0.2	21	2
Themira biloba	2	<0.1	27	16	0.2	20	7
Meroplius fukuharai	-	-		3	-	24	-
Sepsis luteipes	-	-		1	-	28	-
All species	**6127**			**7779**		**27%**	

Table 2

Comparison between the records reported in the Provisional Atlas (1986) and those records compiled since (those submitted to the scheme as at 31/12/14).

	In Atlas		Reported Since			
	10 km squares					
	Number	% total coverage	Number	% total coverage	Ranking	Ranking change
Sepsis cynipsea	470	47.8	413	57.0	1	0
Sepsis fulgens	392	39.8	376	51.9	2	0
Nemopoda nitidula	348	35.4	254	35.0	4	
Sepsis punctum	281	28.5	289	39.9	3	1
Sepsis orthocnemis	279	28.3	240	33.1	5	0
Sepsis violacea	209	21.3	179	24.7	8	-2
Sepsis flavimana	186	18.9	207	28.6	7	0
Themira putris	159	16.2	65	9.0	13	-5
Themira annulipes	143	14.5	225	31.0	6	3
Themira lucida	130	13.2	158	21.8	10	0
Saltella sphondylii	88	8.9	88	12.1	12	
Themira superba	87	8.8	147	20.3	11	1
Themira minor	85	8.6	167	23.0	9	4
Orygma luctuosum	74	7.5	14	1.9	19	-5
Sepsis duplicata	67	6.8	52	7.2	14	1
Themira pusilla	60	6.1	49	6.7	15	1
Themira leachi	49	5.0	22	3.0	17	0
Sepsis neocynipsea	36	3.7	17	2.3	18	0
Sepsis thoracica	31	3.1	23	3.2	16	3
Meroplius minutus	23	2.3	7	1.0	22	-2
Nemopoda pectinulata	17	1.7	3	0.4	24	-3
Themira germanica	13	1.3	7	1.0	22	0
Sepsis biflexuosa	8	0.8	2	0.3	25	-2
Sepsis nigripes	6	0.6	1	0.1	28	-4
Themira nigricornis	6	0.6	2	0.3	25	
Themira gracilis	5	0.5	11	1.5	20	6
Themira biloba	2	0.2	11	1.5	20	7
Meroplius fukuharai	-	-	2	0.3	25	-
Sepsis luteipes	-	-	1	0.1	28	-
All species	**983**		**725**		**-26%**	

Steve Crellin

Northants and Peterborough Diptera Group 2014

Field meetings of the group took place on virtually every Sunday from 27th April to 7th September in Northants. However for the Dipterists Forum Spring Field meeting, several members decamped to Dorset. By no means all records are in yet but here are one or two highlights.

The April meeting took place at a wetland nature reserve in the River Nene valley (Ditchford Lakes and Meadows). The reserve consists of an ex-gravel pit with extensive wet meadows. Seven species of Scathophagidae were swept from the grasslands.

In May we visited Pitsford Reservoir with John Kramer leading a workshop on craneflies (reported in Autumn Cranefly News No. 28). Irthlingborough Lakes and Meadows nature reserve was our second visit to the Nene Valley and produced several craneflies, empids, sciomyzids and scathophagids. Amongst the hoverflies were *Anasimyia interpuncta* and *Playcheirus fulviventris*.

Xylota sylvarum - Felmersham Gravel Pits, Beds, 18 Jun 2014 [Alan Outen]

June started with a visit to the Kelmarsh Estate, a charitable trust managed estate with a commitment to conservation. The woodland produced the hoverflies *Brachypalpoides lentus, Ferdinandia cuprea* and *Xylota sylvarum.* The next weekend we visited another estate woodland near Yardley Hastings in very warm weather. *Platycheirus europaeus, P. occultus, Sphaerophoria taeniata* and *Volucella inflata* were recorded amongst 14 species of hoverfly. Our third meeting of the month took place at Bradlaugh Fields in Northampton where old quarry workings are now covered in open grassland with scrub patches. We failed to find *Dorycera graminum* again at its only known Northants site but were rewarded with *Chelosia antiqua, C. vernalis, Pipizella virens* and the tachinid *Exorista rustica*. The last two Sundays of the month consisted of visits to a new Wildlife Trust nature reserve near Kettering and a village pocket park at Long Buckby. The latter site produced the hoverflies *Chrysotoxum verralli, Orthonerva splendens* and *Lejogaster metallina* and the soldierflies *Beris vallata* and *Oxycera rara.*

July started with High Wood and Meadows nature reserve near Daventry where *Sphegina elegans* was found. The following week we moved a little further south-west to Fawsley Park where only common species were recorded before heavy rain brought the proceedings to an early close. The third Sunday took us to the Rockinghan Forest area of Northants to a local nature reserve, Southwick Wood, where *Volucella inanis, Xylota sylvarum* and *Dasysyrphus albostriatus* were recorded. Our final visit of July was to Twywell Hills and Dales, a former limestone quarry with good grassland. This produced *Chrysotoxum festivum, Paragus haemorrhous* and *Sphaerophoria taeniata.*

Volucella inanis (D Sumner)

The first August meeting was a return to the Nene Valley at Barnes Meadow in Northampton. *Eristalinus sepulchralis, Volucella inanis* and *V. zonaria* were present. The next meeting was cancelled and we remained in the Nene Valley at Northampton for the last two meetings of August. At Abington Meadows several Sciomyzids were found, including *Sciomyza simplex*. At Storton's Gravel Pits the hoverflies *Tropidia scita* and *Sphaerophoria rueppellii* and the Muscid *Spanochaeta dorsalis* were the most interesting species.

Oxycera rara (D Sumner)

Our final visit of the season was to Farthinghoe Nature Reserve, a former landfill site in an abandoned railway cutting, where a good range of common hoverflies, including *Ferdinandia cuprea* were found.

Our visits are planned to try to cover a range of habitats and locations across Northamptonshire with return visits at different times of the year in each season to try to gain a representative sample of the county's diptera. Anyone wishing to join us on any meeting is welcome, just email me for details.

My thanks go to Brian Harding, Kev Rowley, Graham Warnes and James McGill for supplying records used in this report. All records eventually find their way to the various Diptera recording schemes and the Northants Biodiversity Records Centre.

John Showers

County Recorders

Just a couple of notes this time, Derek Whiteley appears on the map - one I forgot (sorry Derek) and Murdo McDonald (HBRG, Ross and Cromarty) tells me "*HBRG is the nearest we have to an LRC in Highland, covering the whole of Highland admin area (including Skye and the Small Isles, which are differently coloured for historical reasons in your map). OHBR covers the Western Isles in a similar way to HBRG. So, as far as the HBRG area is concerned, you could include us, and if you want, name me. I would welcome records of Diptera from any sources (holiday collecting could be very useful), subject to their upload to NBNG with recorder and determiner named and at full resolution, though we can accommodate requests for confidentiality.*" Murdo has been pretty good at sending me batches of records over the years and he's quite active on the recording scheme overall, you'll find him via the HBRG website at www.hbrg.org.uk

Darwyn Sumner

Records for schemes - update

Progress is being made on the BRC digitisation of Steve Falk's records. It slowed a little during the summer and autumn months, well done Agni-Louiza Arampoglou at Warwickshire LRC for working with Steve and forging ahead with all that scanning of his folders. Bjorn Beckmann at BRC has now picked up the project again so these photocopies/scans of Steve's folders should soon be in their hands and Val Burton at BRC will begin the task of data entry. Steve himself recently commented that he'd be glad of the assistance of the national experts (noting his bad handwriting and the nomenclatural changes). I guess that will all come after Val has given it her best shot. All us scheme organisers have become accustomed to large batches of data recently so be on the lookout for the juicy Steve Falk data next year. I'm liaising with the parties involved so I'll try to keep you appraised of progress.

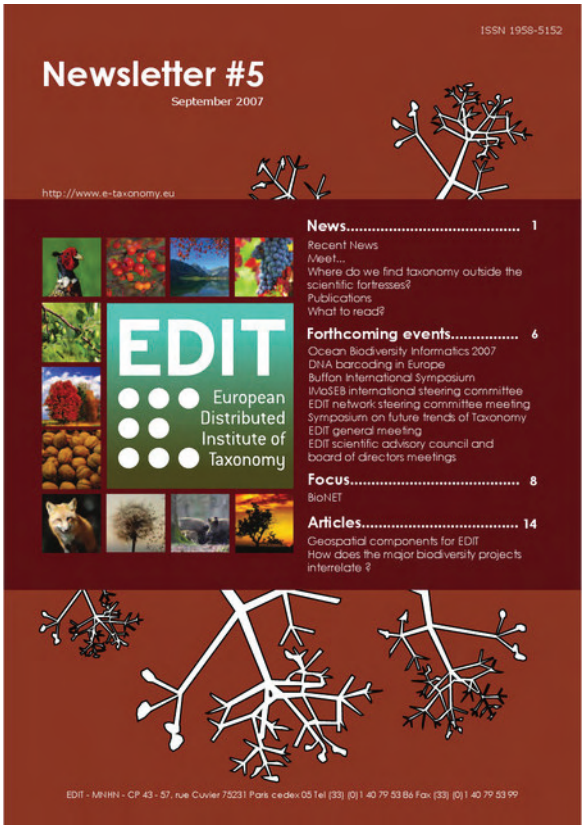
Darwyn Sumner

Beyond Worldwide Biogeography

... well, more about **Taxonomy** actually

I worried that the Worldwide Biogeography item in the last Bulletin might be a little to far from mainstream Diptera issues but I'm pleased at the couple of responses I've had. One from Peter Chandler who questioned my brief summary of Fauna Europaea, I might have been rather too dismissive of that, Peter himself was involved in it and Alan Stubbs dropped me a line - I got the impression he wasn't impressed with it, so at some stage it warrants a proper write-up. I am rather getting the impression of good, well thought out projects that have fizzled out due to under-resourcing (Alan also commented about the duplication of effort he'd come across e.g. multiple sets of people compiling world checklists).

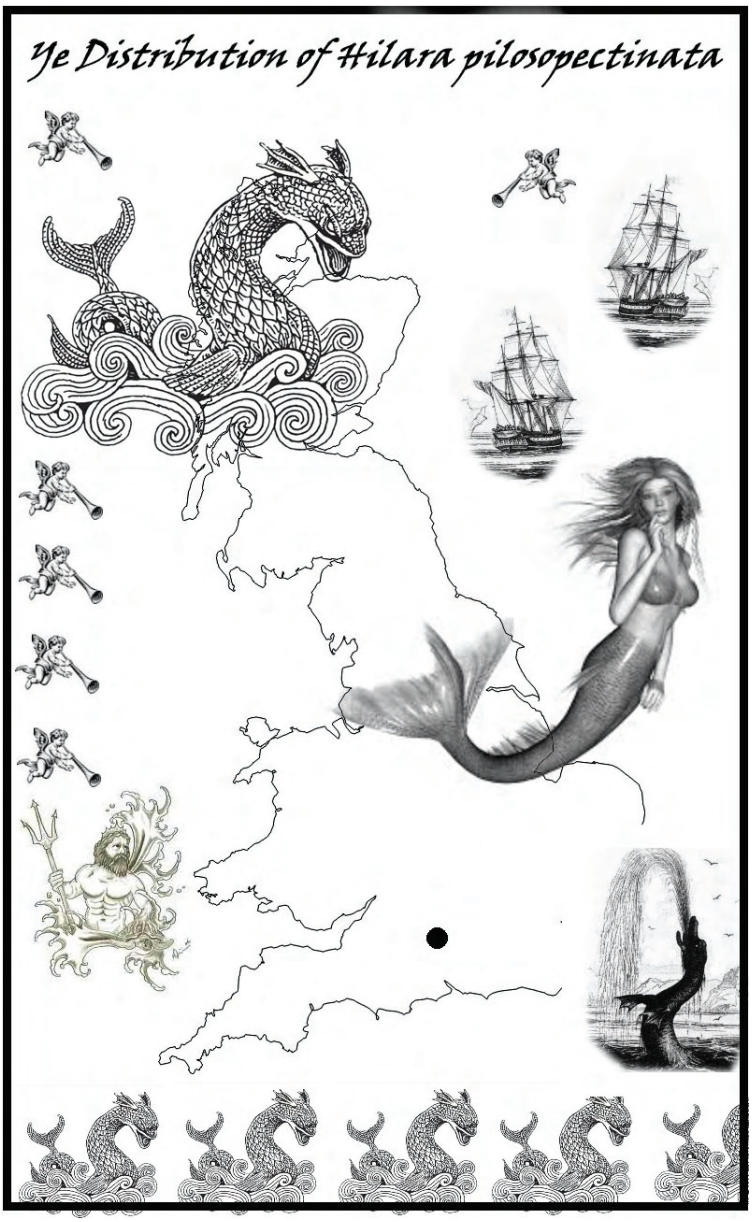
There's a taxonomy "project"/"application" that a few museums (here, mainly Scottish) supported for a while, comprising a well-structured database that one could populate with every synonym, reference, author etc. Titled "EDIT" (European Distributed Institute of Taxonomy) begun in 2001 you can find out all about it on the GBIF website. I tried it for a little while but found the requirement to laboriously fill out details of papers etc. before one could move forward far too onerous. and, like Alan (whilst trying out the Fauna Europaea site), I had misgivings about having to install various Java bits and pieces.



Investigate yourself, I found a newsletter at https://www..e-taxonomy.eu/files/Newsletter5web.pdf Given a user-friendly interface and able to suck in data from other sources (e.g. Mendeley) it would be fantastically useful if placed properly into a multiple-user/contributor context. Which is all to say that I hadn't neglected thoughts about the most undersourced and arguably the least glamorous of the sciences; here's Adrian Plant's response:

Worldwide Biogeography.- Carts, Horses and the Taxonomic Impediment

I found Darwyn's recent article entitled Worldwide Biogeography (Forum News, Autumn 2014) concerning where to place records made overseas very interesting but worthy of further comment, especially as I was one of those specifically named as recording in 'exotic places'.



Firstly, I must take some slight issue with the title, which as Darwyn himself confessed, was rather ambitious. Biogeography is far more than recording dots on maps. Certainly the locations where species are found (or have been found historically) are the basic stuff that biogeography uses, but it then goes on to interpret distribution patterns making use of a very wide range of topics such as systematics, ecology, physiology, geology, physical geography, climate science and even social science. As recorders, we provide the raw data but it needs to be compiled, sorted, correlated and analysed before it gains much value. The interpretations we concoct enable distribution maps (and their associated 'meta-data'… the also-recorded bits about date, habitat etc.) to be used for example, to provide conservation management guidance, or to understand something of how and where species evolved and factors influencing how they are evolving now, or to understand why particular species are found in particular places etc. The physician John Snow's famous map of the distribution of homes of cholera victims in London only lead him to the conclusion that the disease was water-borne once he overlaid on it the distribution of wells. My point here is that our distribution maps need to be mined for correlations if they are to be useful and my plea is that we all take up a shovel and get digging. Only then can we can claim to be biogeographers.

Darwyn is certainly correct that outside the UK, people identifying flies are faced with a relative lack of recording tools to help them deposit records in a place where they will be safe, accessible to other interested parties and perhaps even used to good effect. Signatories to CBD are supposed to establish National biodiversity databases (that's where NBN originated) which provide foci of biodiversity data for use by Government and other stakeholders. Where they exist, they may be dogged by inaccurate data, but more often, they have not been successfully developed in the face of retreating political will in a post-Rio, depression-blighted, increasingly anti-environmentalist world; and even if the will exists, there may have been a lack of funding and/or infrastructure to support their development.

GBIF *is* a gallant attempt to hold together a worldwide database of all life but there are many other net-based 'tools' seeking to be globally or nationally comprehensive synopses of taxa or of museum or collector data. Sadly, the fate of many (perhaps most) is to become inactive or moribund and the reason for this is simple.- they lack sustainable funding, being generally set up on the back of limited-duration research projects. When the funding for those running them runs out, so does their enthusiasm for maintaining the web data. Without sustainable long-term funding (e.g. from the UN) such initiatives will surely fail.

One of the 'exotic' places I work in is Thailand. The Thais have tried to get something akin to NBN operative but I hope they will forgive me when I say that much has yet to be done. If you visit Thailand and want to record your findings, it is really up to you to find out who (if anyone) is recording the group that interests you and submit your records to them (not too difficult in the internet age and many 'exotic' countries have museums, universities of National collection centres staffed by people who tend to keep tabs on who is recording what in their country and sometimes even try to collate the data. Most are highly committed, if under-resourced). There are people who collect data on some insect groups such as butterflies, Sphingidae and Simuliidae for example and I myself maintain a database of Empididae and Hybotidae. If you go to Thailand and want to record, contact them and they will enthusiastically encourage your contributions. If there isn't anybody, then just do it yourself, taking care to publish so that should there be anyone out there who is actually interested in your findings, they can find out about them.

In countries like Thailand that lack the strength of cultural history of natural history we have in the UK not to mention several

centuries of homeland biodiversity exploration, it is absolutely not the lack of recording tools that hinder making records. Rather it is the fact that most of the fauna is undescribed. If you go there to collect flies you will most likely not have much of a clue what you have collected and will find a need for 'recording tools' to be well down your list of requirements. Should you actually be fortunate enough to find an already described species and manage to identify it, what would be the point of putting a dot on a map? Perhaps to recall at some future time a pleasant memory of where you went on holiday? To quote the delightfully poetic, if rather harsh assessment of the subject by John Deeming.-

… simple distribution maps compiled from scanty records are to scientific papers as much a piece of useless decoration as the sea serpents, mermaids, King Neptunes and galleons which cartographers of the past delighted in fitting into any empty sea space on their maps. Such may have been aesthetically pleasing to small boys, but were small solace to professional mariners aground on uncharted reefs. [Antenna 3: 9-11 (1979)]

What is needed is not recording tools but *taxonomic tools*. Some species descriptions and a few good keys will surely come out top of the list! Here we dive headlong into the central problem, the so-called *taxonomic impediment*, namely that species descriptions and keys are the product of taxonomists; there are too few taxonomists; there are too many undescribed species; *ergo*, there are too few taxonomic tools to handle the overwhelming diversity. Sadly we live in a world where it is much easier to source funding for recording tools (especially if they are of the inevitably ephemeral web-based type such as those mentioned above) than it is to fund taxonomy and the design of far more useful taxonomic tools. Recording tools are desirable, taxonomic tools are *essential*. There are exceptions to this cart before horse situation, Brazil being a shining example, but they are rare. There are no easy solutions to the taxonomic impediment but part of the answer has to be setting the horse in front of the cart again and realising that all the data-recording tools we can ever wish for will not help us one iota if we don't have any data to record.

Adrian Plant

Conservation

News from the Conservation officer

National Pollinator Strategy

Pollination remains very much flavour of the day in political and nature conservation circles. In November, following the consultation which I covered in the autumn issue, Government launched its *National Pollinator Strategy: for bees and other pollinators in England*. This is a 36 page document which can readily be found on the web.

The strategy contains a wealth of actions to support pollinators, all good stuff. Not unexpectedly, there will be few additional government resources available for delivery – it's largely about encouraging a wide range of organisations and individuals to work together for the good of pollinators. I am, perhaps, a little disappointed to see that the focus seems to have reverted somewhat to bees, including the establishment of a "Bees' Needs" website to let members of the public know how they can help. There are also a lot of references to the need to provide nesting sites for pollinators, apparently completely overlooking the fact that most pollinators don't have nests.

The 10 year strategy aims to deliver across five key areas. Probably the most important in terms of overall impact on pollinator numbers and health is that which aims to support pollinators on farmland. Here the Government hopes, rather wishfully to my mind, that arable farmers will voluntarily select pollinator-friendly landscape features to make up the 5% of their land they have to designate as Ecological Focus Areas under CAP greening measures. The only ray of hope here is that the Campaign for the Farmed Environment, an industry-led partnership, will have some success in persuading farmers to "do the right thing". Previously, this Campaign has largely been focussed on in-field actions to benefit wildlife, but is now broadening its activities to consider uncropped land such as field margins and hedges.

Government also wishes to reduce the amount of pesticides (especially neonicotinoids) used by farmers through promoting Integrated Pest Management. This concept has been around for a long time, and involves farmers using all available techniques to control pests, not just chemicals, but when these are necessary, to use the minimal amount necessary through careful targeting. Experience suggests that where IPM makes economic sense, farmers will use it, but otherwise there's little incentive for them to do so.

The third real plank to the supporting pollinators on farmland theme is to target Countryside Stewardship (see below) towards pollinators. In particular, there will be a "Wild Pollinator and Farm Wildlife Package" available for uptake by aspiring agreement holders. This will be a bundle of management options which farmers can select – if they do so, they will have better chance of securing an agreement. Government is making available an extra £350,000 to fund such agreements over the next three years, which is laudable.

The second key area within the strategy is supporting pollinators across towns, cities and countryside. (One assumes countryside is somehow different from farmland.) Here the focus is very much about providing more advice about pollinator needs to local authorities, developers, planners and so forth. Much expectation is placed upon large-scale land managers like the Forestry Commission, National Trust, Ministry of Defence, and the Highways Agency to take positive action. There will even be an annual Pollinator (Bees' Needs) Champions award ceremony!

The third key area is about better management of the diseases associated with commercial pollinators (hive bees and some bumblebees) and is of less relevance to us dipterists. The fourth is very largely a "Call to Action" for gardeners, window-box owners, councils and businesses to grow more flowers shrubs and trees that are good for pollinators, to leave patches of land to grow wild, to cut grass less often, to avoid disturbing or destroying nesting or hibernating insects, and to think carefully before using pesticides. None of this is new, but for all that, any encouragement to do more of such things is to be welcomed.

The fifth and final area is concerned with improving the evidence. Of particular interest to us is the funding of research to develop and implement a new long-term monitoring programme for pollinators. The idea is that this will be implemented both by professionals and by volunteers through "citizen-science". The plan is for monitoring to start in 2016, and the development work is already underway, being led by the Centre for Ecology and Hydrology. Alongside this, work will continue to improve volunteer recording schemes, to expand the pool of taxonomic expertise (people capable of identifying pollinators), and to support long-term storage of insect specimens (in anticipation of improved identification technology). Research will also continue into the effects of neonicotinoids on wild and management pollinators, especially in field conditions.

Overall, there's much to be applauded in this new strategy. Let us hope that political will to see it through survives the coming general election. The key opportunity, as I see it, for the Dipterists Forum is to help ensure that advice offered, whether through the Campaign for the Farmed Environment, Countryside Stewardship, the Bees' Needs website or the Call to Action takes into account the importance of flies as pollinators, and their particular needs. Hopefully, we will also be able to ensure the pollinator monitoring programme covers flies as well as bees, and that its development draws on experience from the Hoverfly Recording Scheme.

Countryside Stewardship

After an online poll to select a name for the successor scheme to Environmental Stewardship in England, the Environment Minister made a unilateral decision to call it Countryside Stewardship (which was not an option in the poll). Still, it's as good a name as any other, and short enough. It will also encompass the former England Woodland Grant Scheme. Overall, the focus will be on biodiversity, followed by water quality. Most agreements will be for just five years, and the first ones will start on 1 January 2016.

Countryside Stewardship will differ fundamentally from Environmental Stewardship in that there will be no equivalent of Entry Level Stewardship – there will be no right to a basic agreement should a farmer be able to pass a points' threshold. Instead, all agreements will be competitive, only those applications which are likely to deliver predetermined priorities for specified areas being accepted.

Countryside Stewardship will have two tiers of agreements – Higher Tier ones on our most important sites such as SSSIs, and Mid Tier ones on less important sites. In the former, applicants will be offered face-to-face advice, and agreements (or contracts) will be carefully designed to meet the particular needs of the site. For the latter, however, advice will largely be generic, and applications made and assessed online. Experience from previous schemes has repeatedly shown that good outcomes and value for money are only achieved in agreements where there is some level of one-to-one contact between the land manager and a competent advisor. We must hope, therefore, that some mechanisms are found through which non-government bodies such as the Wildlife Trusts can provide bespoke advice to Mid Tier applicants.

Under Countryside Stewardship a range of capital grants will also be available, outside agreements, for improving water quality and for woodland creation and management. Of particular interest to me is a new Hedgerows and Boundaries Capital Grant. Here, grants of up to £5,000 a year will be available to farmers for small-scale boundary restoration works like hedge laying or repairing stone walls. I understand that the budget for this will be £25 million (out of the total pot of £900 million), which equates to about 1,000 agreements per year over a five year period. So, it will not change the face of the countryside, and many farmers will be disappointed, but at least it offers some hope of financial support for hedge works to those many farmers who will not be in areas targeted for Higher or Mid Tier agreements.

Keeping on the subject of hedges, all Higher Tier and Mid Tier agreement holders will be required not to cut more than half of their hedges in any one year as a basic condition of the scheme. At the same time, under Cross Compliance, farmers will no longer be able to cut their hedges in August if they are to receive their full Basic Support Payments. Both these are positive measures for hedges, and indeed for pollinators.

Ash dieback disease

In October I attended a Hedgelink meeting in Suffolk, near Diss, where the focus was on ash dieback

Hymenoscyphus pseudoalbidus (anamorph *Chalara fraxinea*). It was depressing. We heard that 90% of ash trees in this part of the country are already either dead or dying, and in a tour around nearby farmland we did not see a single healthy tree. Mature trees, veterans, coppice re-growth, trimmed ash "bushes" in hedges, all were dying. We came across a farmer who was felling mature ash trees beside a road which were dead from the disease or nearly so. Examining the tree rings, it was clear that the disease has been present for some 8 years, certainly far longer than we've known about its presence in Britain. We discussed the implications of the disease for farmers, for highways authorities, and in particular for the landscape. Ash dieback look set to have a bigger impact than Dutch elm disease: it's going to be devastating, the more so in our open farmed landscapes than in closed woodlands.

The big question is, how do we repair the countryside following the ravages of the disease? Should we be planting replacement trees in our hedges now, and if so, what species should we use? The emerging consensus appears to be that we should be starting to plant now, and that some new grand initiative is needed to kick start the process. If, by 1918, farmers have planted (or allowed to grow) one new hedgerow tree for each of the 880,000 military personnel who were killed in WWI, that would be a good start. I know that the Tree Council and Woodland Trust are actively exploring options.

On the question of what species to plant as a replacement for ash, Natural England has commissioned a report on this (Assessing and addressing the impacts of ash dieback on UK woodlands and trees of conservation importance (Phase 2), April 2014). This considers alternatives in terms of their ecological functions, the number of ash-associated species they support, and their traits. Ecologically, ash produces nutrient-rich highly degradable leaf litter which maintains high soil pH. Alder and lime are most similar in this respect, followed by sycamore, field maple and aspen. However, a different set of trees are good alternatives in terms of the numbers of ash-associated species they support, namely: oak, beech, elm, hazel, birch and sycamore. In terms of ash-associated

species which are most vulnerable to ash dieback, elm scores highest, followed by hazel, oak, aspen and sycamore. Looking at traits, including floral reward, length of flowering time, fruit type and tree height, elm had the most similar traits to ash, followed by silver birch and rowan. From all this, it's clear that there is no one tree, or even a set of two or three trees, that can be planted on their own as good substitutes for ash. Rather, we need to encourage a wide range of replacements. My personal favourite would be aspen, a much overlooked trees, but one which supports a wide range of wildlife and is very beautiful. Alan Stubbs has written eloquently about this tree in the latest edition of British Wildlife (Aspen: the disappearances, BW 26(2), 87-95). I would welcome views from readers on which trees may be best alternatives to ash from a Diptera perspective.

UK BAP & **Adopt a species**

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

Judy Webb has suggested that we use the term fly guardian for those who volunteer to take a lead on rare or threatened flies, rather than fly adopter, and this idea has met with broad approval from those involved. As Judy says, guardian is a term more easily understood by people than adopter. So, I propose we use it from now on – simply as a change of name, not of role.

If you would like to become a fly guardian, please do let me know. The species need not be a UK Biodiversity Action Plan species – a great many of our rare or declining species would benefit from guardians. There is no "job description" nor are there any expectations – you are free to do as little or as much as you like. Please do give the matter some thought. Perhaps you have a site or two near you for a favoured fly whose future might be more secure if we knew more about its ecology and behaviour, or if its habitats were better protected?

I am grateful to Martin Drake, Iain MacGowan, Steven Falk and Judy Webb for the information they've let me have for this Bulletin issue, as reported below.

Dolichopus laticola and *Dolicopus nigripes* Broads and Black-footed Dolly-Flies

Martin Drake gave a presentation on his work on habitat preferences of these two flies at the 8th International Congress of Dipterology at Potsdam in August, entitled 'Habitat associations of the rare flies *Dolichopus laticola* and *D. nigripes* (Diptera: Dolichopodidae) in the fens of Norfolk, England'. So, a wide audience of dipterists is now aware of this work, which is of considerable conservation significance. A conference abstract has been published.

Hammerschmidtia ferruginea Aspen Hoverfly and *Blera fallax* Pine Hoverfly

A meeting of the Hoverfly Steering Group for these two species was held in November at the Scottish Natural Heritage offices in Aviemore. The report of the meeting, forwarded to me by Iain MacGowan, mentions that after a dangerous aspen tree in a garden at Newtonmore was felled, several tonnes of large aspen logs were moved by RSPB staff to the Invertromie aspen site, to provide more larval habitat for the aspen hoverfly. The RSPB has also planted around 7,000 aspen trees between Abernethy and Glenmore, a tremendous achievement. Also, work is being carried out to map aspen stands in flood plains, to identify those trees that may be risk from beavers!

On the pine hoverfly, the report says that all reintroduction sites look in good condition, although 2014 was a disappointing year for larvae. An RSPB student and a long-term volunteer will be carrying out "housekeeping" work on cut stumps (the larval habitat), including mapping, before the coming flight season in June. Meanwhile, the Royal Zoological Society of Scotland, at Edinburgh Zoo, are constructing a free-standing captive breeding facility, and are on track to accept larvae in April.

Phortica (Amiota) variegata Variegated Fruit-fly

As mentioned in the last newsletter, Steven Falk, Paul Brock and David Heaver have been investigating the status of this fruit fly in the New Forest, lower Wye gorge and at a wood near Canterbury. Although in 2014 the fly was seen on several sap runs, mainly associated with goat moth trees, bottle traps baited with banana did not catch any, even though placed near sap runs known to be visited by the fly. It appears that these traps, at least of the design used, are not an effective way of monitoring the presence of the fly. Steven and Paul have found the fly at six sites in the New Forest over the last year or two, while in 2014 Peter Chandler recorded it at two sites in Windsor Forest and one at Bushy Park (these sites were not near known sap runs). Steven suspects that the fly peaks later in the year than previously thought, from late August to late September. He notes that the life cycle of *Phortica* is poorly understood, even though abroad it a vector of a nematode *Thalazia callipaeda* which can infect the eyes of a variety of mammals. However, they have been reared on decaying fruit in the laboratory and it is possible that fallen fruit of trees like crab apple *Malus sylvestris* could be important in the wild. Do please look out for this distinctive species at sap runs, particularly those associated with goat moth, next year.

Stratiomys chamaeleon, Clubbed General Soldierfly

Judy Webb continues to work hard to try and ensure that this rare and spectacular fly persists at a few fens around Oxford, the last places where it still occurs in England. (If we ever have the chance to recommend further species to be added to Section 41 of the NERC Act, then this must be a prime candidate.) Part of Judy's struggle, as a member of an action group, is to prevent an old sandpit called Cothill Pit, which is near the main breeding sites, being used for housing. As reported in the last issue of the Bulletin, this sandpit is very flower-rich, including tall umbellifers (Apiaciae) such as wild parsnip upon which the soldierfly has been seen feeding. Such umbellifers, which may be essential for the flies, are scarce or absent on the fens themselves. For information on the campaign to save Cothill Pit, see www.savecothillpitt.uk. As Judy points out in her well-argued objection to the planning application, not only is the site is of considerable importance for wildlife - indeed, it is a candidate Local Wildlife Site - but the development, if approved, would be contrary to Green Belt policies and the housing design is unsustainable in terms of energy efficiency. Depressingly, the ecological consultants employed by the developers failed to identify the important wildlife on the site, and so significantly underestimated the site's importance. Judy has called for a formal Environmental Impact Assessment. I wish her and the local action group success in fighting this ill-advised application.

Judy continues to plan towards the reintroduction of *S. chamaeleon* to an historic fen now in Oxford City, Lye Valley SSSI (known in the past as Hogley Bog, Ogley bog or Hockley in ye hole). The Oxford University Museum has specimens collected in the 1900s from the site. The fen is hemmed in on all sides by urban development, leading to spring flow issues, erosion, pollution and damaging public pressure (vandalism/arson). Even now Judy is battling yet another development of ten affordable homes slap

bang next to the site. Meanwhile, The Friends of the Lye Valley (www.headington.org.uk/lyevalley), which Judy chairs, are seeding in appropriate umbellifers to drier non-SSSI parts of the site to increase the nectar sources available.

Stratiomys chamaeleon [D Sumner]

The pressure from housing applications in Oxfordshire is, Judy reports, currently relentless, and misery-making for those trying to protect wildlife sites.

Rob Wolton

You varmint fly-catchers

I came across this while researching into bygone dipterists.

Robert McLachlan (1837-1904) was initially a lepidopterist, but went on to become an authority on Neuroptera and Trichoptera. Although he had wide entomological interests, his obituary (EMM 40: 145-148) specifies that Diptera were not among them. However, an anecdote included there suggests that the reputation of dipterists had gone before him. One of the authors of the obituary was a dipterist, the Rev. Alfred Eaton (1845-1929), who pioneered the study of Psychodidae in Britain.

The story is related as follows [introducing it, the obituary suggests that his style of collecting was "more vigorous than was absolutely necessary for the capture of Neuroptera"]:

He and a friend, trespassing in West Wickham Wood in quest of *Endromis versicolor*, were surprised by a gamekeeper and promptly turned out. "*What, Sir!*" said the keeper, in reply to some mild remark, "*Not a doing of no harm? Now, then, I tell you Sir, I won't be denying as how cats is bad; aye, and stoats is proper bad: but to my mind, Sir, of all the varmints you fly-catchers be a long sight the worsest !*"

West Wickham Wood was then in Kent (it's now in the London Borough of Bromley) and *Endromis versicolora* (slight spelling change) is the Kentish Glory moth, which is no longer found in that site or county, and not in England since the 1970s. It isn't reported whether McLachlan (an Essex man by origin) had success in finding it, but he lived at nearby Lewisham so may have been there looking for it more than once. The incident, though undated, occurred when dipterology was in its infancy. We hope the perception of fly-catchers has changed since then!

Peter Chandler

Photography

From the Identification section on the Dipterists Forum website:

Amongst the batch of photographs sent to the editors from Alan Outen were a couple which had been processed in the identification section. He noted that a few comments there suggested that "*it was a waste of time ... ...to be photographing flies!*" adding that "*There are many who are fantastically helpful, supportive and encouraging so I suppose it is a case of ignoring the families for which the responses are negative!*"

Here's a selection of Alan's photographs posted there which clearly elicited identifications:

Cerodontha sp. ? capitata det John Coldwell (from images) - swept Juncus, Flitwick Moor, Beds 28 Jun 2014 [Alan Outen]

Procecidochares utilis conf. Valery Korneyev (Kiev), between Quebradas & Ponta Delgada, MADEIRA, 25 Nov 2014 [Alan Outen]

Meiosimyza decempunctata det Howard Bentley - Barton Hills, Beds, 10 Jun 2014 [Alan Outen]

Just a good photograph of *Palloptera*, I don't know if Alan posted it on the website:

Palloptera muliebris - Ashwell Springs, Herts, 26 May 2014 [Alan Outen]

Members

Membership Matters

By Mid December 2014 we had 399 paid-up members. This is about 20 less than we had at the end of 2013. Of these 356 take the Dipterists Digest.

We have had to chase a lot of late payers and people who did not alter their banker's order mandates and this is still on-going. This has cost the Forum over £250 and taken a lot of work by several committee members in administration and postage and packing. I do urge all members to keep up to date with subscriptions, which fall due on 1st January each year.

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

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Tel.: 01536 710831
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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

Correspondence

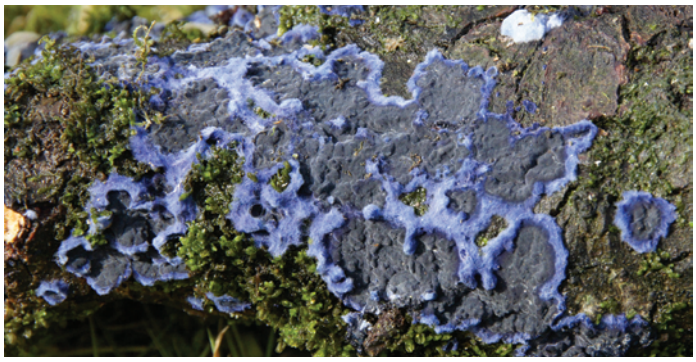
Rob Wolton submitted the following to the National Hedge Laying Society Newsletter:

Leave that dead wood?

Removal of all dead and decaying wood is considered an essential part of good hedge laying. But I wonder why? What harm does it do? I do realise, and accept, that in competitions, the overall neatness of a hedge is considered important, and the presence of any deadwood can make a laid hedge look scruffy. But otherwise, can I make a plea for a substantial amount of dead wood, large and small, to be left in hedges?

So called dead wood is actually heaving with life – it's absolutely vital for a very large number of the fungi, insects and other invertebrates that live in hedges. Indeed, probably two thirds of all the life in a hedge is in some way dependent on dead wood and other non-living plant tissue, just as it is in woodlands. Literally, thousands of organisms are likely to be dependent on fallen branches, twigs and so forth. In a hedge here on our Devon farm, I've found 163 different flies known to be dependent on deadwood, and this is certainly considerably less than the true number. You may not care much for flies, but it's those flies, together with fungi, beetles and so forth, that keep the natural world, and ultimately us, going. They also provide food for birds, bats, etc.

Indeed, the natural decay community of wood is an essential part of a healthy scrub or woodland ecosystem. Left in the hedge, once broken down, fallen branches and twigs helps to ensure that the soil remains healthy, and their nutrients are recycled to fertilise the living shrubs, trees and other plants. Furthermore, half of wood is carbon, and some of this will be retained in the soil, locked away and helping to reduce the rate of climate change.



Pulcherricium caeruleum, cobalt blue fungus, Locks Park, 3 Feb 2010 [Rob Woloton]

I suspect that many people fear that somehow leaving deadwood in hedges encourages disease and infection in healthy shrubs and trees. But there's no evidence at all of this. With only rare exceptions, pathogenic fungi and micro-organisms are quite different from those that cause the decay of already dead wood. The problems with pathogens experienced in many gardens are thought often to be the result of the zealous removal of dead plant material, and the use of chemicals, both of which disrupt the natural balance of nature.

When I see pieces of deadwood, especially those already in an advanced stage of decay, being taken out of hedges and chucked on bonfires, I almost weep as the unnecessary destruction of life and impoverishment of the environment. Please, please, keep at least some deadwood, whether large or small, in the hedge when you lay it, hidden out of sight if you must.

Robert Wolton

Review

New books on Diptera are very scarce and so, over the years, I've expanded this review section a little, simply to draw items of possible interest to the attention of readers. I've yet to meet a Dipterist who isn't also general naturalist in some form or other so I do hope I've been doing the right thing. The Bulletin is the only place where we can provide serious reviews of important books, several writers have stepped up to the mark here, Peter Chandler with many, Rob Wolton in this edition and even I've had a go once or twice. At the other end of the scale all I'm doing is offerring pointers which readers might like to chase up.

My appeal to regular contributors a few weeks before the deadline date for this issue included suggestions for reviews (the example I quoted was the new New Naturalist book on Rivers) which led to a little debate. If you've got ideas for this section in the next Bulletin then do get in touch.

Periodicals

Alan Stubbs
Aspen: The Disappearances
British Wildlife, December 2014, 26(2), p87-95

Books

Dave Goulson
A Buzz in the Meadow
ISBN: 9780224101745
Jonathon Cape, 2014, hardback, no illustrations, 266 pages, £16.99

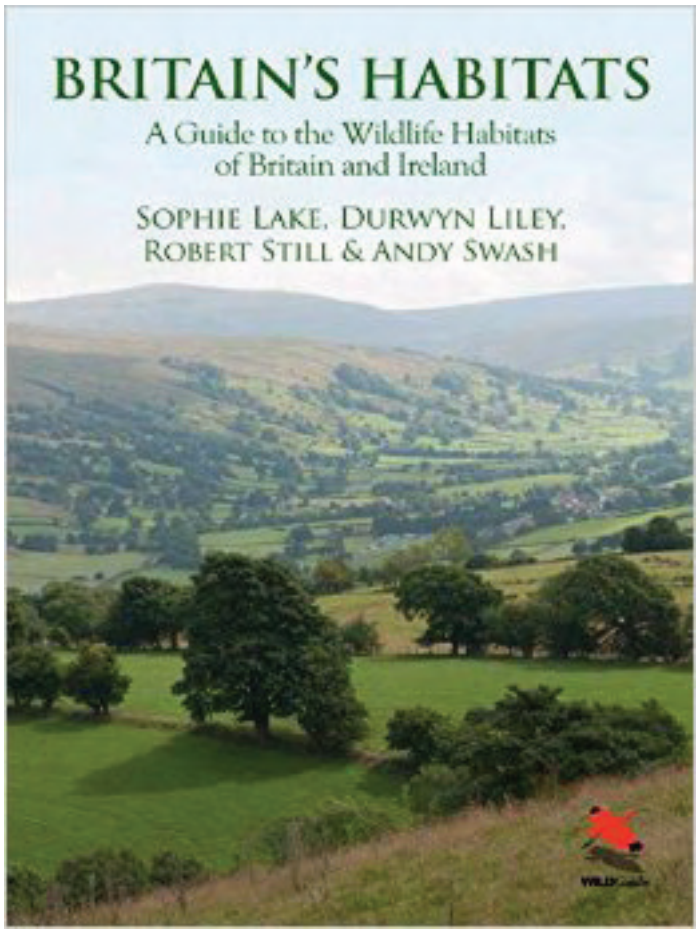
For anyone who has spent time in France this book evokes memories of the wilder insect-rich areas there. It seems to be quite a thing for University entomologists to buy a place in France then fill it with students and wildlife, I was reminded very much of my visits to Dick Askew's "moulin" (that's R.R.Askew, author of "The Dragonflies of Europe" and expert in parasitic hymenoptera).

Like his bumblebees for which he's a reknowned expert, Dave Goulson flits from entomological topic to topic in a series of fascinating essays written in a readable style that makes this the perfect book for an entomologist's holiday read or gift for a young enthusiast. There's chapters on plant/insect evolution in respect of flower design, good background information behind the neonicotinoid issue (DDT version 2, Silent Spring #2) in which he was involved, flies and sewage, bugs, death watch beetles and, of course, plenty of stories about bee research.

Darwyn Sumner

Ecology/Entomology

Sophie Lake, Durwyn Liley, Robert Still & Andy Swash
Britain's habitats: a guide to the wildlife habitats of Britain and Ireland.
WILDGuides. Published by Princeton University Press. 2015. 275pp.



When I enter fly and other records into the biological database I use, I'm often a bit worried that the habitat descriptions I use are not standardised and that others will either find them not very helpful or worse interpret them wrongly. It was for this reason that I bought a copy of this new book in the WILDGuides series, and I have not been disappointed. If widely used, the book has the potential to do much to clarify and standardise habitat descriptions.

Assigning habitat information to records provides valuable ecological context, and may help in future conservation efforts. It may also be of use in ensuring correct identification. This was brought home to me this year after collecting two similar scarce muscids while on holiday in the far north-west of Scotland. Both belonged to the genus *Spilogona*, but one was caught on the edge of a sea loch in a small patch of upper saltmarsh, whereas the other was caught on exposed moorland 2,000 feet up a mountain. The potential for confusing these two species is considerable since their names differ by just one letter - *S. triangulifera* and *S. trianguligera*. Why Zetterstedt should have chosen to give such similar names to the two species defeats me. Anyhow, my point is that the chance of errors arising from mixing-up the names by mistake is much reduced if records are accompanied by habitat data, since the literature clearly recognises the very different habitats the two species occupy.

The WILDGuides book gives descriptions of some 64 habitat types, which together comprise all the major ones found in Britain and Ireland. Each is illustrated with a few excellent photos, including ones of characteristic species to look out for. These species, reasonably enough, focus on flowering plants, birds and butterflies, but there's a balanced selection of other organisms, including a number of flies.

One omission is a discussion of exactly what a habitat is, beyond a general statement that it is a place where animals and plants live. So there's no talk of biotopes or ecosystems, or of the difference between macro-habitats and micro-habitats. Perhaps a decision was made that such a discussion would be rather academic and risk become mired in semantics. My own view is that most of us are reasonably clear what a habitat is, and that the term does not need lengthy description. Suffice it to say that this book covers macro-habitats, largely defined in terms of plant communities or geological features. Another tome would be needed to address micro-habitats, such as decaying wood, sap runs, marginal pond mud, etc, often just as important to entomologists as macro ones.

There is, however, a very useful section on (macro-)habitat classification. The book recognises the potential for confusion caused by the parallel existence of a number of different classifications in the British Isles, each having its own purposes. These include Priority Habitats identified under the former UK Biodiversity Action Plan, Annex 1 Habitats within the European Habitats Directive, the Phase I Habitat Classification, British Plant Communities (National Vegetation Classification), Fossit Habitat Categories (used in Ireland), Countryside Survey (including the Land Cover Map) and Corine Land Cover (a European system based on satellite imagery). The WILDGuides, pragmatically, uses a classification based on the Priority Habitats system. A helpful table is given which relates this to Annex 1 habitats, NVC communities, Phase 1 classification and the Fossit categories.

Another very helpful feature is, for each habitat, a map showing its broad distribution across Britain and Ireland, as far as existing datasets allow. These maps, while sometimes far from complete, allow one to see at a glance where each habitat may expect to be found.

All in all, I thoroughly recommend this guide to anybody who wishes to be more confident about the naming the habitats they ascribe records to. If you wish to be able to define the precise differences between swamps, fens, mires, bogs and flushes, this is probably not the book for you, but if on the other hand you wish to be clear about whether the habitat you've just visited was a blanket bog, a raised bog, an upland spring/flush, a lowland fen, a valley mire or a reedbed, this book will definitely help. It may also inspire you, as it has me, to visit a wider range of the amazing habitats found across the British Isles.

Rob Wolton

Diptera
Russian guides to Nematoceran larvae

Two relatively recent books by Nina and Marina Krivosheina should interest workers of Nematocera and their larvae. These books may not have come to the attention of many UK Dipterists as they are Russian, but the keys are repeated in English and both books are well illustrated, making them a valuable resource for Dipterists studying larvae. One book deals with Palaearctic larvae with keys to genera for all but three of the Nematoceran families. The other book focusses on the larvae of Russian Limoniidae and Pediciidae, with a number of taxa identified to species.

Krivosheina, N.P. & Krivosheina, M.G. 2011.
Key to terrestrial cranefly larvae (Diptera, Limoniidae, Pediciidae) of Russia.
Moscow: KMK Scientific Press. ISBN 978-5-873-17-764-6

This book has 24 pages of keys in English and 539 figures occupying a further 79 pages. An initial short key separates out the different families of Tipuloidea, then the Pediciidae are identified to genus level, with a species key for *Ula*. Keys to the Limoniidae follow, first to subfamily, then to genus and for some taxa to species. To give an impression of the coverage nine different *Dicranomyia sensu strictu* and five different *Limonia* taxa can be identified to species level with this book.

Krivosheina, M.G. 2012.
Key to the Palearctic families and genera of nematocerous larvae (Diptera: Nematocera).
Moscow: KMK Scientific Press. ISBN 978-5-873-17-893-3

This later book tackles a broader taxonomic spectrum covering all the Palearctic families of Nematocera and identifies larvae to genus level, except for the Chironomidae, Simuliidae and Cecidomyiidae which are keyed to subfamily. There are 42 pages of English keys which begin with two separate keys for aquatic and terrestrial larvae (so families such as Tipulidae will appear in both), followed by keys to subfamily and genus. The text is complemented by 403 line illustrations plus 82 habitus photos of larvae in colour.

Duncan Sivell

Harbour view, Wells-next-the-Sea [D Sumner]

Meetings
Reports

Potsdam 8th International Congress of Dipterology 2014

It's hardly possible to summarise what went on at the congress last summer in Potsdam, Germany. The bare statistics are 22 symposia, 285 talks in four parallel sessions, 127 posters, 440 pages of abstracts and about 400 delegates from about 40 countries. Some 20 of those participants were from Britain and included mostly Dipterist Forum members but it was good to meet a couple of non-Forum dipterists. I'm not fond of big meetings but I spent the week elated as this one was so good – exceptionally well organised, faultless accommodation, many fine speakers (all speaking English), and a buzz that you don't get at more mixed congresses. Meeting world leaders in their field – the real big guns – is probably the most exciting part, particularly as they are just ordinary (if exceptional) people very happy to chat.

Dipterology is clearly alive and well in many countries. Thomas Pape made a case for Europe being the frontier of fly diversity research and, although convincing, did not detract from the effort in numerous countries, not just the wealthy EU and USA. Brazil, for instance, sent a large contingent, and there were presentations or posters from, for instance, Iran, Serbia and Romania – countries which we, in our arrogance, may not think would have an interest in flies. Perhaps there is no longer an epicentre of fly studies. But we have to admit a smug pride in hearing from non-British speakers that Dipterists Forum and Dipterists Digest are fine models showing what can be done outside academia and how to engage a wider audience than tenured scientists. There was talk again of setting up an international society of dipterology (as happened at the last congress) so we have the opportunity to press home some of our experience as a 'world leader'.

Subject matter covered everything, of course, but with perhaps an overbearing pre-occupation with phylogenetics (with apologies to those working in this area). But this is probably more an understandable response to the new toy of inexpensive analysis that has opened up the field to everyone. Maybe in 20 years' time dipterists will be taking a more measured approach that balances old-fashioned morphology with what DNA can tell us. However, it is clear that we shouldn't dismiss the value of the new approach, especially away from well studied Europe where a pragmatic use of DNA to measure species-richness will trump laborious species-description using conventional morphology.

As an ecologist with an interest in the natural history of flies, I was disappointed in the relatively few presentations in this area, and in some particularly poor research by students who clearly don't really know much about flies (I won't repeat what one German ecologist said about it!). But just listening to talks in what you think is your main interest misses the point of these whistle-stop tours of fly research. I found myself completely enthralled by the final day's session on fossil flies – mainly those in amber but also conventional rock fossils. This is real Sherlock Holmes stuff, trying to piece together phylogeny from real fossils, not DNA. Behavioural studies were also fascinating as they were often supported by cine film, notably showing sepsid and tephritid courtship where the camera can catch actions far too rapid for our eyes to follow.

Adrian Pont deserves a mention for not only giving an excellent talk on the life of Meigen at the congress dinner but also for being made an honorary member of the ICD – one of only eight living dipterists to hold this honour awarded for outstanding contributions to dipterology and to the ICD. For the next congress in 2018, to be held at Stellenbosch, South Africa, the organising committee includes two DF members, Erica McAlister from the NHM and Adrian Plant from Cardiff Museum.

Martin Drake

Post-congress field trip day 1 "*Collecting habitat by river below*" near Hohnstein, Saxony [Malcolm Smart]

Autumn Field Meeting 2014: Peter Chandler reports on this meeting in his Fungus Gnats Recording Newsletter #8 which accompanies the printed version of this Bulletin

ANNUAL MEETING

Tullie House Museum & Art Gallery, Carlisle
Saturday 22nd & Sunday 23rd November 2014

Dipterists Day 2014

Rob, Stuart and Martin (Chris Spilling)

Cumbrian Dipterology and the Collections at Tullie House Museum

Stephen Hewitt

Steve Hewitt is the Keeper of Natural Science at Tullie House Museum, and an active entomologist with an interest in Diptera. Steve gave a history of the most important collectors in Cumbria and summarised the state of the Diptera collection today. The museum at Tullie House was started in the 1890s by H.A. Macpherson who donated his collection. On his death in 1902, the museum started keeping natural history records, and was effectively the world's first biological record centre that developed into the Cumbria Biological Records Centre. Today the centre remains very active and uploads its records to the NBN Gateway. It has collated over 40,000 Diptera records submitted mainly by local field recorders and the thriving Carlisle Natural History Society, but about one sixth were from the Dipterists Forum.

Important contributors to the Diptera collection were F.H. Day, G.B. Routledge, J. Murray, H. Britten, A.E. Wright, N. Birkett, and two still-active recorders, Dorothy Iveson who curates the collection, and John Parker who remains particularly active over the whole county. Steve used CBRC records to rank sites by species-richness, with Roudsea Moss, Moorhouse and Orton Moss heading the list. Hoverflies, craneflies and empidoids were the most record-rich taxa. A large proportion of the records are from Cumbria, and they include 2128 species of flies, of which 349 are rare or scarce species and five are on the old 'BAP' list. The total is about 30% of the British fauna, which is lower than expected but probably reflects incomplete capture of records, although craneflies with 80% of the British list and hoverflies with 70% are well covered. The museum's collection holds about 15,000 Diptera specimens collected over 120 years with a preponderance of hoverflies and empidoids.

An hour in the life a bee-fly

Martin Drake

Martin, the out-going chairman of Dipterists Forum, described a study he made of the common but relatively poorly studied *Bombylius major*. The study was an example of what can be done by dipterists to increase our understanding of basic ecology. A colony living on the host solitary bee *Andrena cineraria* lives conveniently on his garden boundary. Observing the newly emerged adults and collecting the pupal exuviae showed the population of bee-flies to be far larger than expected. Most adults emerged in mid-morning, regardless of the temperature or inclement weather, and took about an hour to disappear. Some presumably flew away when fully developed but a robin and dunnock were almost certainly major predators of the flies in this first vulnerable hour. As both adults and exuviae can be sexed easily, it was shown that male emergence peaked a few days before that of females. A parasitism rate of the flies on their bee host was estimated by counting bee-holes, and while this was hedged about with fairly broad assumptions, it was not too far from other workers' estimates of *B. major* on other species of *Andrena*.

Bombylius major + pupal exivia (Martin Drake)

Knotty Gnats: Exploring Britain's Trichoceridae

Julian Small

Julian is better known as the organiser of the meniscus midge recording scheme, but today he spoke of his work on winter gnats. After showing the one 'snazzy' species (*Trichocera major*), Julian did admit that these were rather dull creatures. The European fauna has been well studied recently, resulting in a rapid increase in to 53 species, so it is probable that Britain has more species than those on the current list. As a moth enthusiast, Julian runs a light trap as part of the national Rothamsted Insect Survey which has been running for more than 50 years collecting data on macro-moths. In winter months, there can be more flies than moths in the trap,

and this trap and five other RIS traps is the source of Julian's trichocerid specimens. Unusually for flies, the females are easier to identify using their ovipositors than are the males, but some characters used in keys, such as wing venation and markings, are too variable to be useful. Three questions were addressed: are there more species in Britain, what are Alan Stubbs's types A and B, and what is the status of the pair *Trichocera japonica* and *implicata*? Without pre-empting formal publication of Julian's results, it can be revealed that one of the *japonica* / *implicata* pair will need to be deleted from the European lists, two species related to *saltator* are to be added to the British list, and a third species appears to be new to science. This last species looks like *annulata* but is in the *saltator* group, and is found in three of the trap sites. Julian put out a request for material from other sites.

The fly and other life of a Devon hedge

Rob Wolton

Rob is known for his interest in hedges, particularly those in Devon. In response to a challenge from a friend, and inspired by Jenifer Owen's 20 year garden study, Rob set himself the task of a hedge bioblitz. This lasted two complete years. The hedge is unexceptional in a Devon context but nevertheless is well managed for conservation and is structurally diverse. It is also very well connected, being a hedge, to the rest Devon and to many other habitats. Many sampling methods were used, resulting in 2060 species of all taxa (insects, birds, plants and so on) of which 1722 were insects. Diptera, with 830 species, dominated the list, representing 17% of the British fauna and including 27 rare or scarce species. While a similar proportion of the British lists were found for moths and caddis, other large orders, especially beetles, were poorly recorded, so many more species are almost certainly present. Among the flies, gnats headed the list (126 species, a quarter of the total), followed by hoverflies and muscids. Emergence traps showed that 126 species actually developed in the hedge. Of the different guilds, deadwood species were particularly well represented.

Do these animals benefit from the hedge or is it just acting as a barrier that traps them as they move through the countryside? Rob concluded that most benefited, for example using it for food for larvae or adults, courtship or a corridor. The hedge was a key habitat in farmland, particularly saproxylic species, it was used by scarce and common species, and most species found here clearly benefited in some way.

Design and testing of a national pollinator and pollination monitoring scheme.

Martin Harvey

Martin gave this talk prepared by Claire Carvell of CEH, Wallingford, who could not make the meeting. Pollinators clearly perform an important role and there has been much concern about their recent decline. Different taxonomic groups have varying importance depending on the crop, for example, hoverflies are relatively unimportant pollinators of apples compared to bees but more so on oilseed rape and strawberries. Defra published *The National Pollinator Strategy* in November this year, and Martin's talk discussed the report's key area of monitoring. A pilot is being run in 2015 to develop protocols for a full-scale scheme. Different protocols will be appropriate for varying expertise but it is hoped that there will be roles for citizen science as well as professional entomologists. A questionnaire was circulated at the meeting.

The role of Phlebotomine sand flies as vectors of disease

Prof. Paul Bates

Paul works at Lancaster University in the area of leishmaniasis and bartonellosis. His talk was an unsettling account of the unpleasant diseases transmitted by 70 species of phlebotomine sand flies. These are terrestrial flies, unlike the related psychodids found in Britain, whose females need a blood meal before their eggs will develop. They are widely distributed but are currently found no further north than 50º (half-way up France), although may be expanding their range. Paul described a number of methods of trapping them, from sticky traps to a variety of ways of attracting them to people, small rodents or goats. For such an important disease vector, remarkably little is known about the early stages beyond them probably being generalist saprophages. Adult host preferences are far better understood, and most species are moderately specific. People are usually unaffected until they interfere with the normal cycle, for example by going into the flies' habitats or creating the flies favoured resting place in the form of houses. The latter is a real and growing problem as urban areas expand. Domestic dogs are particularly badly affected, and could be an issue for pets being taken on holiday to Europe. The one redeeming feature of sand flies seems to be the males wooing females by singing.

From outdoors to online – using iRecord for the Soldierflies and allies recording scheme.

Martin Harvey

On Sunday, Martin gave an account of using the iRecord online database hosted by BRC for his national recording scheme. The advantages and disadvantages were discussed using the soldierflies and allies recording scheme for examples. While the scheme holds about 80,000 records, about 3600 for 102 species were submitted by 350 recorders using iRecord. Among the advantages is that it can capture records from other online recording activities such as the national Garden Bioblitz and Butterfly Conservation's monitoring transects, which include data that are unlikely to be submitted directly to the recording scheme. Any photographs come together with the data, the records eventually make their way to the NBN Gateway and potentially to other record centres using iRecord. In discussion following the presentation, duplicated records were generally regarded as unimportant as these can be taken into account using spreadsheets when undertaking analysis, for example for phenology; the inability to import data on spreadsheets was highlighted as a limitation, and specialists merely scanning lists was mentioned as inadequate for verification.

Cumbria Biodiversity Data Centre at Tullie House and

Teresa Frost (a trustee of the NBN)

Teresa gave a brief presentation of how this records centre operates and the problems surrounding the complex flow of data between different structures set up for recording wildlife. This was a prelude to lively discussion on a number of issues.

Steve Hewitt made the Tullie House collection available for our perusal.

Annual General Meeting

Saturday 22 November 2014

The Chairman, Martin Drake, opened the meeting at 14.00 pm.

Apologies for absence

Apologies received from Barbara Ismay, John Ismay, Adrian Plant, Malcolm Smart and Judy Webb.

Minutes of the last AGM and matters arising

The minutes of the previous AGM were accepted as correct and there were no matters arising.

Secretary's Report – Nathan Medd, retiring secretary

Membership

In mid-November the subscribed membership stands at 395 with 354 members also taking the Dipterists' Digest. This is encouraging but we have found that there are still a substantial number of members, 92, who are still paying at the old pre-2014 rates. We contacted all incorrect subscribers with a letter in the Spring Bulletin and had a partial response. We are in the process of following up again with direct contacts. This has been a very time consuming exercise for several people and has cost the Forum over £250 in additional postage and printing charges. We urge all members who pay by bankers order to check the amount they are paying and to make sure it is being paid into our new bank account at NatWest. Details are in the last three Bulletins.

In addition to incorrectly subscribed members, we have 50 members from 2013 who have not re-subscribed in 2014 and these too are being contacted. No publications after the Spring 2014 Bulletin have been sent to them.

Meetings

We held three committee meetings in 2014: at Dinton Pastures near Reading (2nd Feb), at Bangor University during the summer field meeting (8th Jul) and at Dinton Pastures (18th Oct). Field meetings

We have had three field meetings this year: Spring meeting at Swanage, (16-18 May), Summer meeting at Bangor (5-12 July) and Autumn meeting at Sherwood Forest and Nottingham (11-18 October). All were organised by Roger Morris despite him having stepped down from the committee at the last AGM. The lack of a replacement is worrying as it should not fall solely on Roger to keep one of the society's main functions going. Roger also continues to collate records made during the meetings for which we are most grateful. The committee will be splitting the roles required to run the field meetings among several members until a new field-meetings officer steps forward. Roger confirmed that he is willing to continue to organise the Spring and Autumn field meetings in the interim.

Local Fly Groups and Insurance

Two local fly groups continue to thrive, those in Northamptonshire run mainly by John Showers, and in Devon. They both provide a steady stream of records and are fostering more recording from both new recruits and experienced dipterists. These provide a good alternative to residential meetings, and we believe should be suppported. The Dipterists' Forum has always covered for third party claims under the insurance taken out by BENHS, as we are affiliated to that society. This year we have re-examined our insurance arrangements and decided that this did not give sufficient protection against claims made by our own members against the society (e.g. in the event of an accident that may have resulted in claim of negligence). We therefore have taken out insurance independent of BENHS that will cover all eventualities and give peace of mind to the organisers of field meetings. This will also cover local fly groups, as will be discussed in the proposed amendment to the DF constitution later in the AGM.

Recording Schemes

This year James McGill has established a Muscidae recording scheme. It is in its infancy at present but will, no doubt, be a very appreciated and useful scheme. In addition Stuart Ball may be initiating a Scathophagid recording scheme (as alluded to at the Preston Montfort workshop). Watch this space! So with the addition of these schemes, 20 schemes now operate in the UK of which 5 produced newsletters in 2014. We hope that Darwyn's map of county Diptera recorders on the back of the Bulletin should encourage more records to be submitted.

Training

To encourage new entomologists to take part in field events and to remove one constraint on taking up the study of flies we have bought ten sets of equipment for use by beginners. These will be used at training courses and field meetings, and include such items as nets, pooters, pins and forceps. Training courses run this year by Dipterists Forum and its members were as follows:

- Our own annual residential course at Preston Montford went ahead this year with Richard Lane on bibionids, Steve Crellin on sepsids and Stuart Ball on scathophagids.
- Devon Fly Group - introduction to families
- John Kramer - cranefly identification workshop for BENHS
- Martin Harvey - two on soldierflies & allies for NHM London and Field Studies Council (along with hoverflies)
- Matt Smith & Chris Raper - tachinid identification workshop for BENHS
- CEH organised a Diptera Recorders meeting in NHM on 23 January attended by about 25 dipterists, and was the first meeting to bring together Diptera recorders for a long time. Not since the very early pre-Dipterist Forum annual meeting has there been any attempt to share ideas on recording so thanks to Helen Roy for organising it.
- Roger Morris and Stuart Ball ran six hoverfly training courses and also a hoverfly field meeting

Publicity

DF flew the flag at the AES exhibition at Kempton Park and BENHS exhibition in London. Modest recruitment (2 at Kempton) but the aim is to let people know that we exist and what we do. We now have some wonderful Dipterists' Forum business cards bearing contact information for the forum as well as a lovely colour image of Bombylius major. Thanks to Erica for organising those. On the social media side of things we are small but growing in popularity: We are now up to 331 Twitter followers and 295 members of our Facebook group. Social media is a great way of communicating news, sharing information and attracting new members so thank you to Erica for keeping up our online presence!

Conservation

Rob Wolton's round-up of work on DF's 'Adopt a Species' shows that this project continues to generate useful information on uncommon species. Some of this is being used directly in fighting planning applications for developments that threaten prime fly habitat (notably Judy in her Oxfordshire fens). A publication that has helped recording of popular families of flies has been re-printed this year: British Soldierflies and allies (Alan E Stubbs, Martin Drake and David Wilson). This second edition of

British Soldiers involved big input from DF members (for text, and Malcolm Storey for page make-up), so a big thank you to all involved. A second edition of the deservedly popular Britain's Hoverflies (Roger Morris and Stuart Ball) is also in the pipeline. We look forward to that.

Publications

A big thank you to Darwyn and Judy for the continued production of the Bulletin, and to John and Barbara Ismay for getting it printed and stuffed into envelopes. This really is a fantastic publication, well worth the effort it takes to produce. It features articles by members so if there are any budding natural history writers amongst you please do get in touch with Darwyn who appreciates interesting contributions.

Last year we had completed scanning Series 1 of Dipterists Digest. This year we thank Colin Le Boutillier for scanning vols 1-9 of the Second Series, half of which are out-of-print. As issues become unavailable on paper, they will be posted on website where they may be downloaded.

Treasurer's Report – Howard Bentley, retiring treasurer

Howard Bentley - the new chair (Chris Spilling)

At the end of 2012 the Forum had a surplus of £6278. This was because we still held most of the money from two grants – an OPAL grant of £3000 earmarked for illustrations of the forthcoming cranefly book, and a grant of £1600 from Natural England intended for the purchase of computer equipment for use in training courses. In addition we held a number of deposits for the then unpublished Hoverfly Wildguide. As I explained to the 2013 AGM, those moneys had largely been spent during the year, and I therefore predicted that the final accounts for 2013 would show a deficit. As the above accounts show, this proved to be the case, and we were in deficit to the tune of £714. Once again I must express my gratitude to Tony Pickles and his colleague Mr. Harmer, who have audited our accounts without expecting payment for their services. We are very grateful to them.

Currently we have £28,468 in the bank – an increase of £1792 from our balance at the end of 2013. We also have material assets (microscopes, display boards, storage boxes etc.) with a total value of very nearly £5000. The forum remains on a solid financial footing.

Dipterists Digest Editor's Report – Peter Chandler

Again it has been possible to produce 2 issues of 102 pages each. The first was published in May and the second expected to be ready for distribution in early December (publication date 1 December). The first part included several long papers, in particular the important hedge study by Rob Wolton. Of 12 included articles 2 were on foreign Diptera and there was only 1 species, a phorid, new to Britain. The second part has 33 contributions, mostly short. There are 4 longer papers on foreign Diptera, but there are also 6 articles on species new to Britain. Two of these formally record species that have previously been cited in local journals, the chloropid *Homalura tarsata* and the fruit fly *Drosophila suzukii*.

The latter is the subject of an article by staff of East Malling Research Station, where it was first recorded in Britain in 2012. We don't know how long it has been in this country, although it is already a pest of fruit farms, but it has apparently only come to the notice of dipterists in 2014. We consequently have the unusual situation of their paper being followed by 9 notes, recording it from as many additional counties, as well as further Kentish records. So its population has suddenly exploded all over south-east England, possibly making use of wild blackberries and elderberries as well as cultivated fruit.

There has been a welcome difference between the production of these two parts, in that I acquired a new computer in June. With the first part I was still struggling to produce pdfs that could be submitted to the printers. Figures had to be inserted in eps format, which apparently made conversion to a pdf easier, though considerably increasing the size of the file. Each issue had to be split into several pdfs to permit sending as email attachments. With the second part I was able to make one pdf of 13.6MB that could be sent to the printers as a single email attachment, only the cover pages needing to go separately. Thus a great advance was achieved in handling of the text.

There was, however, an unexpected problem. The printers told me that if images are embedded into a Word 2007–2013 document their resolutions will be capped at 220dpi, while a minimum of 300dpi is preferred for a file being printed professionally. They advised that the way to avoid this happening is to choose Link to File, rather than Insert, when adding images to the document. This proved a quick process and will hopefully produce a good result.

Last year I mentioned my intention to include an article about Colonel J.W. Yerbury and Dr J.H. Wood, to celebrate their contribution to the study of Diptera, and to acknowledge 2014 as the centenary of Wood's death. 1914 was also the last year in which Yerbury was an active fieldworker, though he lived till 1927. Work on this has begun but, as it is becoming quite long, I decided that it should be a separate additional issue. That will preclude it holding up publication of articles on other subjects. The intention is for it to be a third part of the 2014 volume (21), although publication will not be practicable until some time in 2015.

I am, however, urgently requiring more articles and notes to be

BNHS Neglected Insects Conference 2014: The afternoon session was devoted to Diptera. Take a look at John Pitts' photographs of the event at https://www.flickr.com/photos/pitzys_pyx/15802575701/in/photostream/

submitted, for the publication schedule to be maintained in 2015. No complete articles are yet ready for next year's issues, although several are promised.

I thank all authors for their support in 2014. I am also grateful to Stuart Ball for his work on keeping up to date the Digest contents on the website. Following uploading those for the May issue, he calculated that there had to that date been exactly 1,000 articles published by exactly 300 authors! That takes into account those with multiple authors. I haven't attempted to work out how many of the authors were or are Forum members.

I thank Colin Le Boutillier for scanning volumes 1-9 of the second series, which were among those published as camera ready copy by the previous printers, for which pdfs didn't already exist. This has enabled Stuart to make pdfs available on the website for issues that are now out of print. I am again grateful to Mike Pugh and Richard Underwood for proof reading. I also thank Richard for efficiently carrying out distribution, and in advance for the December issue.

Martin Drake, on behalf of the meeting, expressed many thanks to Peter for all his hard work in producing the Digest.

Amendment to Constitution to accommodate local Diptera Groups

The amendment to the Dipterists Forum constitution was introduced by Martin Drake. The intention is to allow local groups to become affiliated to the DF, so that they can be covered by the new insurance scheme which protects the DF against potential litigation from members. Local Groups can make use of the insurance if the DF constitution allows such affiliated groups and if local groups have their own constitution. A pro-forma constitution has been developed by John Showers. The amendment could not be agreed in the current format, but a proposal by Alan Stubbs, 2nd Roger Morris, to approve the change in principal and to leave the detail to the Committee was agreed unanimously.

Action:

Martin Drake will send Stuart Ball a PDF of the existing DF constitution to go on the website.

BENHS to be informed that DF are taking out their own insurance and not using that provided by BENHS. Ensure that this does not affect DF being able to use Dinton Pastures or discounted book purchases

Circulate the draft local group constitution for consultation amongst the commitee, including definition of what makes a local group.

Chairman's Vote of Thanks to Retiring Members

Mick Parker

Mick had spent 8 years as membership secretary and also organised the AES contribution from the DF. He had also stored the collection of back numbers of the Bulletin and Digest.

Chris Spilling

Chris had been on the Committee since 1994 including a stint as Chairman. His contributions included many excellent photos, manning the stall at the AES and contributions to the Cranefly book.

Election of Officers

The Chairman is elected biennially. The Secretary, Treasurer and other elected officers with specific responsibilities (detailed below) require annual election. The constitution (7c) currently requires nominations 30 days in advance of the AGM. Other elected committee members serve for two years. The officers and general committee members proposed for re-election or election this year 2014, and accepted, were as follows:

Chair	Howard Bentley
	(proposed Martin Drake, 2nd Erica McAlister)
Vice Chair	Martin Drake
	(proposed Howard Bentley, 2nd John Showers)
Secretary	Amanda Morgan
	(proposed Howard Bentley, 2nd Martin Drake)
Treasurer	Victoria Burton
	(proposed Howard Bentley, 2nd Martin Harvey)
Membership Secretary	John Showers
Field Meetings Secretary	Vacancy
Indoor Meetings Secretary	Duncan Sivell
Bulletin Editor	Darwyn Sumner
Assistant Editor	Judy Webb
Publicity Officer	Erica McAlister
Website Manager	Stuart Ball
Conservation Officer	Robert Wolton

Committee members proposed for re-election 2014

Malcolm Smart
Chris Raper
Mark Pajak
Peter Boardman

In order for the new treasurer Victoria Burton to have access to the bank account, the meeting agreed unanimously the following (proposed Howard Bentley, 2nd Nathan Medd):

> It was resolved that the authorised signatories in the current mandate, for the accounts detailed in section 2, be changed in accordance with sections 5 and 6 and the current mandate will continue as amended.

Chairman's thanks to hosts and formal closing of the Annual General Meeting.

Howard Bentley thanked Martin Drake for his two terms of office as Chairman and thanked Duncan Sivell for organising such a successful weekend. Our hosts in Carlisle were thanked for provision of such a superb venue. The meeting was formally brought to a close.

Amanda Morgan, Secretary

Read about Dipterists Day in Carlisle 2014 at https://storify.com/kitenet/dipterists-forum-in-carlisle-2014

Forthcoming
2015

Diptera Workshops 2015

Acalypterate Flies

Preston Montford Field Studies Centre

20 - 22 February 2015

Led by John Ismay, Barbara Ismay & Alan Stubbs

The Acalypterates form a large part of our Diptera fauna, comprising almost a quarter of the species and nearly half the families found in Britain. Although these flies are widespread and ever-present, Acalypterates tend to be under-recorded. A few families of medium to large sized species (e.g. Tephritidae, Sciomyzidae, Conopidae) are relatively well-studied, but many Acalypterates are small and indistinct and often over-looked. This workshop will first focus on identifying all Acalypterates to family level and will then look at a selection of smaller, more obscure Acalypterate families in more detail, identifying them to species level.

A revised draft key to Acalypterate families will be prepared for the workshop and some time will be spent examining morphological features known to cause confusion. The "costal break" in the leading wing vein is an important character that is not always obvious when it is present. Interpreting this character correctly is critical for determining which family an Acalypterate fly belongs to. Chaetotaxy (the location and pattern of bristles) will also be reviewed as these are important features used to tell families and species apart.

After family level identification has been covered the workshop will focus on 15 Acalypterate families in particular, comprising a total of 69 species. These families have been chosen because they do not have an existing recording scheme or study group nor have been covered in recent Diptera workshops. Revised draft keys will be presented. Many of these families are associated with particular habitats. The Canacidae (11 species), Coelopidae (3) and Heterocheilidae (1) are all found on the coast and the Stenomiciridae (2) occur in fens. Six families belong in woodland; the Acartophthalmidae (2), Dryomyzidae (3), Campichoetidae (2), Strongylophthalmyiidae (1), Aulacigastridae (1) and Periscelididae (3). The latter two families are associated with sap runs. The Asteiiidae (8) are found in both woodland and grassland habitats and two of the larger families covered in this workshop, the Piophilidae (14) and Chyromyidae (11), have varied habitat preferences although Piophilids do have an association with carrion and Chyromyids with birds' nests. The last two families to be covered also have animal connections. The Camillidae (5) are found in and around mammal burrows while the Braulidae (2) live in bee hives. The Braulids are particularly distinctive as they lack wings!

In addition to the 15 families that will be looked at in detail a further seven Acalypterate families are represented by single species in Britain. While these families will not be specifically targeted in the second half of the workshop they will, in effect, have been taken to species level using the revised family key in the first half of the workshop.

As always catching your fly is a basic pre-requisite to studying them! Suggestions on when and where to find different Acalypterates will be given as part of an ecological overview of the group. This will look at which habitats to target and which techniques are best suited for collecting. The Acalyptrates include families of great economic importance (Tephritidae and Agromyzidae) and some beneficial families, e.g. Sciomyzidae. They comprise a large element of Dipteran biodiversity and some are only known from so called 'good' sites, so can be useful indicators of habitat quality.

This workshop, organised and run by Dipterists Forum, is aimed at those who have some experience with flies. It has been arranged by popular request and is expected to be quite heavily subscribed. Places will be limited by the size of the venue so if you are interested in attending, please book early to ensure that you get a place. Bookings can be made through the FSC webpages in the autumn (http://www.field-studies-council.org/).

Field meetings 2015

Spring Field Meeting

Norfolk Coast

15-17 May 2015

This meeting is intended to allow us to explore parts of the Norfolk coast and The Broads. It will be based around guest houses in Cromer. Members wishing to participate will be expected to book their own accommodation but if possible we will try to organise ourselves in close proximity to one another.

If interested, please let Roger Morris know: roger.morris@dsl.pipex.com

Summer Field Meeting

Nottingham

11 July – 18 July 2015

I have booked accommodation at Nottingham University. The booking is for 20 places, but I expect we can expand the numbers if there is sufficient interest. Early booking is therefore recommended.

Nottingham provides an excellent centre for looking at a largely unexplored part of the country and within striking distance of the Derbyshire dales and Sherwood Forest.

Deposits (£50) should be sent to Roger Morris, 7 Vine Street, Stamford, Lincolnshire PE9 1QR £360 total

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.

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

Events Calendar 2015

Dipterists Forum & selected meetings

24-25 January 2015, 10am-5pm daily 'Introduction to Fly families (Diptera)' – 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 14 participants, so early booking recommended.

20-22 February 2015, DF Advanced Workshop on Acalypterate Flies. Tutors John & Barbara Ismay and Alan Stubbs. Preston Montford Field Studies Centre, Shrewsbury. Details posted in this issue and will be on FSC website: http://www.field-studies-council.org/prestonmontford/

14- 15 March 2015, 'Introduction to Fly families (Diptera)' – tutors John & Barbara Ismay . The Pelham-Clinton Building, Dinton Pastures Country Park, Davis Street, Hurst, Reading RG10 0TH. Please contact Dr. Mike Edwards, BENHS Indoor Meetings Secretary, 53 Great Cranford Street, Poundbury, Dorchester, Dorset DT1 3SQ (E-mail: m.edwards787@btinternet.com) in advance to book your place at a workshop.

21 March 2015 BENHS Annual General Meeting and Presidential Address. University Museum of Natural History, Parks Road, Oxford OX1 3PW

April TBC A one day conference for hoverfly recorders. Contact Roger Morris for details (7 Vine Street, Stamford, Lincolnshire, email: roger.morris@dsl.pipex.com)

15-17 May 2015, DF Spring Field Meeting to Norfolk Coast. Based around guest houses in Cromer. Members wishing to participate will be expected to book their own accommodation but if possible we will try to organise ourselves in close proximity to one another. Contact Roger Morris for details (7Vine Street, Stamford, Lincolnshire, email: roger.morris@dsl.pipex.com).

4 - 8 June 2015. 8th Int. Symposium on Syrphidae. Monschau (Germany) Contact Ximo Mengual Phone: 0049 (0)228 9122 292 E-mail: syrphidae8@gmail.com . http://zfmk.de/web/Forschung/Kongresse/2015/201506_ISS8/index.en.html

27/28 June 2015 Members of Dipterists Forum invited to a recording weekend at Wicken Fen, Cambridgeshire. Overnight accommodation can be suggested if required. If interested/wanting to book contact Joan Childs Strategic Manager,Wicken Fen: joan.childs@nationaltrust.org.uk.Tel: 01353 720274 Wicken Fen, Lode Lane, Wicken, Ely CB7 5XP.

11-18 July 2015, DF Summer Field Meeting to Nottingham area. Derbyshire Dales and Sherwood Forest within reach.Accommodation in Nottingham University. 20 places booked, deposit of £50 required to secure a place. Contact Roger Morris for details (7 Vine Street, Stamford, Lincolnshire, email: roger.morris@dsl.pipex.com)

2-4 September 2015, RES Ento ,15 "Insect Ecosystem Services" Annual National Science Meeting and International Symposium. **Venue: Trinity College Dublin**

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. See http://www.amentsoc.org/events/exhibitions.html (*Please take a camera - ed.*)

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).

November 2015, BENHS Annual Exhibition and Dinner Conway Hall, 25 Red Lion Square, Holborn, London WC1R 4RL. See http://www.benhs.org.uk/

(Provisionally) **21-22 November 2015, Dipterists Day and AGM, Birmingham Details TBC.**

2016

February 2016, the identification workshop is planned to cover the families Sarcophagidae, Calliphoridae & Rhinophoridae.

Throughout the Year:

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

The Northants and Peterborough Diptera Group hold meetings every weekend from end of April until sometime in September/October. 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)

Post-congress field trip 2014 near Hohnstein, Saxony [Malcolm Smart] "Spot the dipterists" - and how did Malcolm get in his own photo?

And now ...

Values and Priorities

Last autumn, a set of instruments was landed on a comet. Pretty clever, even on 'too small' astrophysics budgets. I can never understand how it is possible to receive such weak radio signals over such great distances of space, but not surprising since I cannot even hear bush crickets screaming their heads of right next to me.

And, about the same time, a nearly complete skeleton of *Stegosaurus* was put on display at the Natural History Musem, in the darkest gallery. A nocturnal species perhaps, or a dinosaur in the room that everyone should pretend is not there? There must have been a hefty price tag on the most intact skeleton of such a dinosaur, whose value will be measured in increased museum attendance figures as much as the scientific value which is notional.

And there were yet more records broken for the highest auction prices of paintings, mere artifacts whose surreal financial value is often a matter of fad and opinion.

You can see where I am leading. For most people, the costs are impersonal and out of this world, a passing news item, or an incidental view in a gallery where many things compete for attention.

As naturalists, we quietly plod along, gradually adding to the body of scientific knowledge. Finding a fly on Mars or one as big as *Stegosaurus* would increase our street cred, but as yet no accurate portrayal of a fly has won the Turner Prize (if a pickled cow can win, why not a giant glass-case full of live a fly maggot? – remember where you first got the idea). Somehow, we need to find new ways of making our subject more up-front in catching the interest and imagination of more people with a latent aptitude. We have done pretty well – when I got seriously into Diptera in the early 1960s, the list of dipterists was short enough to remember all the names. Now we have over 400 members, and there are far more with useful books. None the less, the world will be a very different place by the year 2115, and yes, my hobby horse again, that the focus must be on finding as much about life on this planet as possible now, before much of it is extinct, rather than swanning off to Mars to see if some microbes are endemic. Planet Earth Endemic s are of far more consequence, and still there are millions of species that have yet to be discovered as new life forms, including within one of the largest orders, the Diptera.

The Biodiversity Action Plan still exists, less emotively and blandly re-titled Section 21. 'Ecological Services' is the current big thing, including Pollination, yet there is only sketchy understanding of the ecological role of many species. This is the current attempt to put a price on nature, in a world where anything without an economic value is judged as worthless and a waste of space. Yet, human health and wellbeing is given a positive price tag, and that includes contact with nature such as natural history. Somewhere , hidden within the equations, come the activities of dipterists. More Dipterists = more value?

Alan Stubbs

Contributing Bulletin items

Text

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

Illustrations

8. Colour photographs are now used extensively in the Bulletin, they appear coloured only in the pdf (older Bulletins may be viewed in colour on our website) or on the covers.
9. Please include all original illustrations with your articles. These **should** be suitably "cleaned up" (e.g. removal of partial boxes around distribution maps, removal of parts of adjacent figures from line illustrations) but please do not reduce their quality by resizing etc. .
10. Please indicate the subject of the picture so that a suitable caption may be included, in some cases it will be possible for the picture file's name to be changed to its caption (e.g. 049.jpg becomes Keepers Pond NN045678 12 Oct 2008.jpg). All group pictures should identify all the individuals portrayed.
11. **Powerpoint** files may be submitted, they are a useful means of showing your layout and pictures are easily extracted.
12. Pictures contained within Word files are of too low quality and cannot be extracted for use in the Bulletin.
13. Line artworks are also encouraged - especially cartoons
14. Colour pictures and illustrations will be printed in black and white (uncorrected) and so it would be wise to see what a B&W photocopy looks like first, although the print quality from Autumn 2009 onwards gave excellent B&W results.
15. A suitable colour photograph is sought for the front cover (and inside front cover) of every copy of the Bulletin, note that it must be an upright/portrait illustration and not an oblong/landscape one for the front cover.
16. Due to the short time-scales involved in production, the editors will not use any pictures where they consider there to be doubt concerning copyright. A**dd your personal details to the metadata of the picture**, guidelines to this in Bulletin #76.

Tables

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

When to send (deadlines)

Spring bulletin

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

Autumn bulletin

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

Where to send

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

Hoverfly Newsletter
Number 58
Spring 2015
ISSN 1358-5029

In July 2001 the First International Workshop on the Syrphidae was held in Stuttgart, since when a Syrphidae Symposium has taken place in alternate years, each in a different country. This year sees a return to Germany for the 8th in the series, which will be in Monschau from 4 to 8 June. The organisers have now issued final details which can be found on their website www.iss8.zfmk.de. This issue of the newsletter reflects continued high activity among the hoverfly recording community in spite of the insects themselves being yet again in rather short supply. The long-awaited status review is now published and a new edition of **Britain's Hoverflies** is imminent - and we also have another species of *Melanostoma* to look out for in the field and in existing collections.

This newsletter and those of other schemes are published within the Bulletin of the Dipterists Forum, but the copy that is issued in the Bulletin is reproduced in black and white. The original version which includes colour images and sometimes colour graphics will be filed in due course as a pdf. on the Hoverfly Recording Scheme website, but any reader who would like to receive a copy of the pdf. sent as an email attachment may let me know, and I can send one once the Bulletin has been despatched. Articles and illustrations (including colour images) for the next newsletter are always welcome. Copy for **Hoverfly Newsletter No. 59** (which is expected to be issued with the Autumn 2015 Dipterists Forum Bulletin) should be sent to me: David Iliff, **Green Willows, Station Road, Woodmancote, Cheltenham, Glos, GL52 9HN, (telephone 01242 674398), email:davidiliff@talk21.com**, to reach me by 20 June 2015. The hoverfly illustrated at the top right of this page is a female *Volucella bombylans* (a buff-tailed example, apparently intermediate between forms *plumata* and *haemorrhoidalis*).

Hoverfly Recording Scheme Update, Winter 2014-15

Roger Morris
7 Vine Street, Stamford, Lincolnshire, PE9 1QE

Finally published! At long last the hoverfly status review has emerged into the daylight and on to the website of JNCC. It has been 8 years in gestation, during which time the numbers of species listed have steadily declined as we get an improved understanding of hoverfly distribution. This is very much a result of the records contributed by recorders, who all deserve a big 'thank you'. For those who want a copy, it can be downloaded from http://jncc.defra.gov.uk/page-6907.

Well that is one job off the list, but there are many more ideas in development. Firstly, the **WILD***Guide* 'Britain's Hoverflies': late this summer and during the autumn we were very busy preparing revisions to the book for a second edition. It is amazing to think that the first print run of (we think) 4,000 copies has almost sold out. So, we have sorted out the known glitches and have added various additional bits; not least a substantial section on photographic tips, and four pages of plates using stacked photographs from specimens. Several additions have also been made to the species accounts. The plates represent the species most commonly recorded by photographers and will hopefully help them get to grips with the family. The technique seems to work well, so we may well use it in other products. The revised guide should be in the shops by April. As in the case of the first edition, royalties will go to Dipterists Forum to support training efforts, production of keys etc.

The photos we have used in the plates in the **WILD***Guide* were originally taken to populate a new hoverfly card for the Field Studies Council. Hopefully, with the **WILD***Guide* out of the way, we will make progress on that too and get it off the books this autumn. We also have a revision of the Hoverfly Atlas in hand. As we write, records as pouring in and

the dataset is growing rapidly. It currently stands at over 820,000 records, of which over 811,000 are regarded as reliable and are used in analysis. 2014 could be a very good year for records as we start to see the results of several years training taking effect. Several alumni are now very substantial contributors to the scheme and it is great to see replacements for the 'old guard' filling the ranks that have been somewhat depleted by time. It is amazing to think that a substantial number of the original contributors to the scheme are continuing to make regular contributions but, as figure 1 shows, there was quite a drop in recruitment in the period 1990 to 2005 before the effects of the training scheme kicked in.

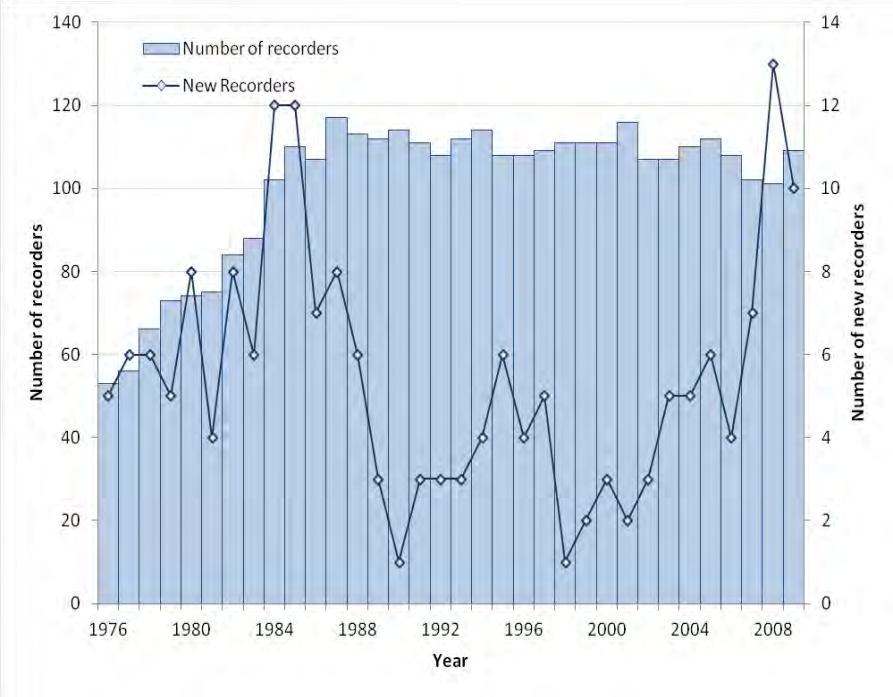


Figure 1. Yearly numbers of recorders and recruitment of new major contributors.

Recorder = someone who has submitted ≥5 records on at least two occasions

Started = first year we had records from someone who has submitted ≥ 250 records

Inevitably, numbers of records for individual years have fluctuated, but since 1984 at least 15,000 records have been submitted annually, with the majority of years exceeding 20,000 since 1985. Peaks in activity largely coincide with major events such as the publication of Stubbs and Falk in 1983, a call for records in the early 1990s, and a further call to support the 2011 atlas (figure 2).

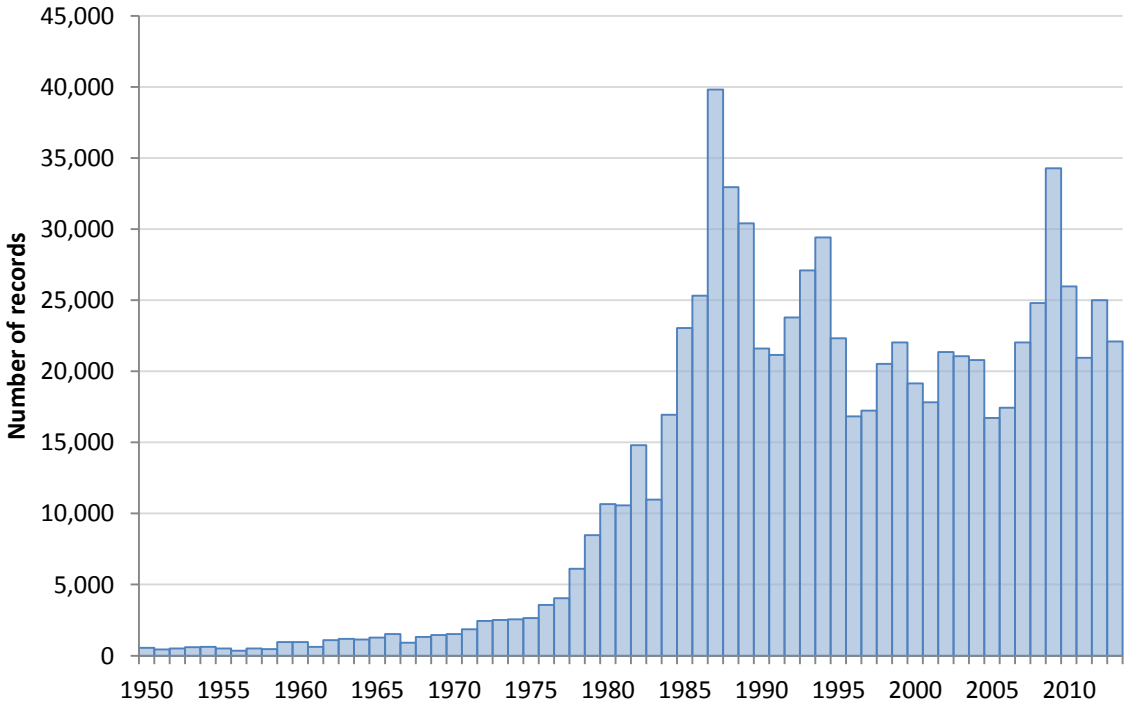


Figure 2. Numbers of records within the HRS database from 1950 to 2013.

The HRS dataset is now at a scale where it can be used in a great many ways, and it is regularly called upon by academic researchers. At the moment the interest is pollinators and the HRS data are being used to inform the development of ideas for a national pollinator monitoring programme. Quite what will emerge is as yet unclear, but in the meantime the HRS has launched its own attempt to develop a long-term dataset with the garden monitoring scheme. A small but dedicated band of recorders has been active this year and data are starting to come in. At this stage we have not undertaken an analysis but we will have done so by the next issue. Our intention is to prepare a first year report and to make this available as a download on the UK Hoverflies Facebook page. It will also, perhaps go onto the DF website and will be made available upon request too. More next time!

Meanwhile, we are also working on organising a one-day conference for hoverfly recorders to help to inform everyone about the scheme's outputs and to give feedback on the contributions made by everybody. Some of that feedback will include analysis by JNCC that helps to inform Government about the plight of Britain's wildlife. Hopefully it will also include the initial results of the garden monitoring scheme and data from the incredibly active group of photographers that post on UK Hoverflies. Details of the conference have yet to be finalised and will be posted on the DF and HRS websites as well as the UK Hoverflies and UK Diptera Facebook pages. Our hope is that it will take place in April and will coincide with the production of a revised atlas.

One of the recurring questions about biological recording is whether distribution maps do much more than plot the distribution of recorders. We think that the results are a bit more complex, as the maps tend to show nice places where people like to go, which in turn may be indicative of biodiversity hotspots. Distribution modelling can help to test whether the maps have meaning and hopefully the following gives a clear picture of the relative species-richness of hoverflies across the country (figure 3a-c).

Figure 3a. Overall coverage. Filled = 2000 to 2014, grey = 1980 to 1999; open = pre-1980

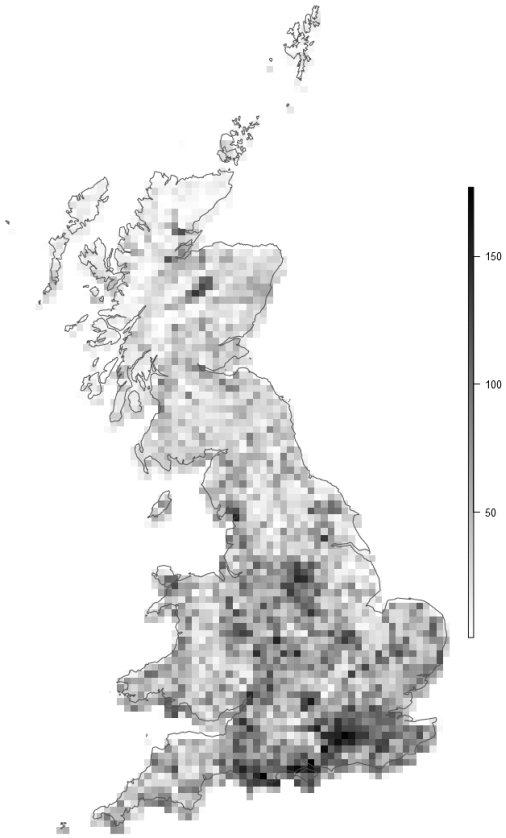


Figure 3b. Numbers of species per 10km square. The maximum number of species is 177 in SY89

Figure 3c. Modelled species richness using Frescalo [i].

The resulting modelled species-richness map seems to be highly plausible, demonstrating the importance of the southern woodland belt and showing how perceived weak areas on dot maps are likely to look if recorder effort was constant across the country. Areas of likely low richness are as expected: the Fens of eastern England, parts of central and north Wales, The Pennines and high ground in the Lake District, the southern uplands of Scotland and much of the Highlands and Islands of Scotland. The immense richness of southern England illustrates just how significant demand for new building land in the south-east could be for hoverflies and, as likely as not, much of the rest of Britain's biodiversity.

[i] Frescalo is a computer program that estimates species richness and time trends when recording effort is uneven.

Melanostoma mellarium (Meigen, 1822): one step forward in resolving *Melanostoma* identification issues

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The truism that even the longest march begins with but a single step may have been first used in relation to human endeavour far removed from the naming of hoverflies. But it does seem somewhat appropriate when considering the advance represented by the reinstatement of the species *Melanostoma mellarium*. It's no secret that *Melanostoma* is a bit of a dog's dinner, taxonomically, with either polymorphic species or unrecognised taxa tending to complicate the naming of specimens, even from quite mundane localities. And *Melanostoma*, of one sort or another, can turn up almost everywhere in this part of Europe, from March to October!

Genetic characterisation of Fennoscandian *Melanostoma* populations has led Haarto and Ståhls (2014) to recognise four species in that part of Europe. Their work validates the status of *M. mellinum* (L.) and *M. scalare* (Fab.) as distinct species, at the same time confirming the conclusion of others that *M. mellinum* can exist in forms with large frontal dust spots in the female. They also confirm the separate identity of *M. dubium* senu auctt in Fennoscandia, but establish that *dubium* of Zetterstedt is actually a synonym of *M. mellinum*, so requiring them to give a new name to *dubium* sensu auct. , which they name as *Melanostoma certum* Haarto and Ståhls. The fourth species recognised from this genetics work is *Melanostoma mellarium* (Meigen). *M. mellarium*, in its general appearance, overlaps with both *M. mellinum* and *M. scalare* but, now that it has been characterised genetically, its morphological diagnosis becomes possible and keys separating it from other *Melanostoma* species can be produced. From data available to the author it is apparent that *M. mellarium* is widespread in Europe, occurring in Scandinavia, the Alps, the Pyrenees and northen Spain, and in the British Isles. This note is to bring the existence of this rather obscure species to the attention of those interested in the distribution of syrphids in Britain and Ireland. The key provided will hopefully help in separating *M. mellarium* from the other known Atlantic zone species. However the key is not particularly easy to use and if it can be improved upon that would be all to the good. It should also be borne in mind that reinstatement of *M. mellarium* does not resolve all the taxonomic puzzles involving *Melanostoma*! Following the key what is known of the ecology of *M. mellarium* is summarised and other "*Melanostoma* issues" are briefly discussed.

Key to some *Melanostoma* species, 19 December 2014
This key comes with the health warning that it is unlikely to deal with all *Melanostoma* specimens collected in Britain or Ireland.

1 Males, eyes meeting on frons **2**
----- females, eyes separated on frons **5**

2 Sternite 2 more than 2x as long as the width of its posterior margin; body length 8 – 11mm (junction of cross-vein r-m with wing-vein R4+5 nearly always basal to the junction of wing-vein Sc with the costa; distance between junction of Sc with the costa and vein Rs with the costa greater than the distance between the latter point and the junction of R4+5 with the costa: Figure 1) ..... ***scalare*** (Fabricius)
widespread in European lowland and montane zones
----- sternite 2 less than 2x as long as the width of its posterior margin; body length 6 – 8mm **3**

3 Hairs on the anterior half of the mesoscutum including many at least as long as half the median length of the scutellum; hairs on the tergites all pale (white/pale grey); body length 6 – 7mm ..... ***certum*** Harrto and Stahls + *dubium* sensu auct of Scotland and many parts of the Alps; *montane/ subalpine zones*
----- hairs on the anterior half of the mesoscutum no longer than one quarter of the median length of the scutellum; tergites with black hairs intermixed with the pale hairs, especially along the mid-line and close to the posterior margins of the tergites; body length 7 – 8mm **4**

4 Sternite 2 at least 1.5x as long as its maximum width; mesoscutum usually with black hairs intermixed with the pale hairs (can be predominantly black-haired); body length 7 – 8mm (frons mostly black and shining, dusting restricted to a very narrow band against the eyes) ..... ***mellarium*** Meigen; *montane/subalpine zones of the British Isles and the Alps; less frequently at lower altitudes*
----- sternite 2 no more than 1.25x as long as its maximum width; mesoscutum usually without black hairs (hair-covering brown/greyish-brown); body length 7.5 – 8mm ..... ***mellinum*** (L.) + various forms of unknown taxonomic status; *widespread in European lowland and montane zones, also strongly migratory and in consequence encountered at higher altitudes*

5 Sternite 4 2x or more as wide as long; tergites entirely black, or with at most a pair of very small, round, orange marks on tergite 2; body length 6 – 7.5mm ..... *dubium* (female) sensu auct, of many parts of the Alps and Scotland
----- sternite 4 distinctly less than 2x as wide as long; tergites 2 – 4 either with pale markings, or with pale markings on only tergites 3 and 4, ot tergites entirely black; body length 6 – 11mm **6**

6 Hairs on the arista more-or-less outstanding and, in the basal half of its length, slightly longer than half its basal diameter; body length 7.5 - 9mm (junction of cross-vein r-m with wing vein R4+5 nearly always basal to the junction of wing vein Sc with the costa: Figure 1) ..... ***scalare*** (female)
----- hairs on the arista more-or-less adpressed to the arista and all shorter than half the diameter of the arista **7**

7 Mesoscutum (measured between the wings) wider than the maximum width of the abdomen (Figure 2b); body length 7 – 8mm (tergites usually with a pair of pale marks on tergite 3 and on tergite 4; tergite 2 usually without a pair of pale marks, but may have a pair of small, obscure pale marks; tergites may be entirely black; when pale marks are present on a tergite they are confined to the anterior half of the tergite: Figure 2b)
..... ***mellarium*** (female)
----- mesoscutum (measured between wings) narrower than the maximum width of the abdomen
..... **8**

8 Lateral to the lunule, the frons is dusted across its entire width, to the eye margins; tergites entirely pale-haired and without pale markings; body length 5 – 7mm ..... ***certum*** (female)
----- frons, lateral to the lunule, only narrowly dusted along the eye margin, undusted and brightly shining across most of the distance to the eyes; tergites partly black-haired and often with a pair of pale marks on at least tergite 3 and tergite 4; body length 6.5 – 8mm ..... ***mellinum*** (female) + forms of uncertain taxonomic status

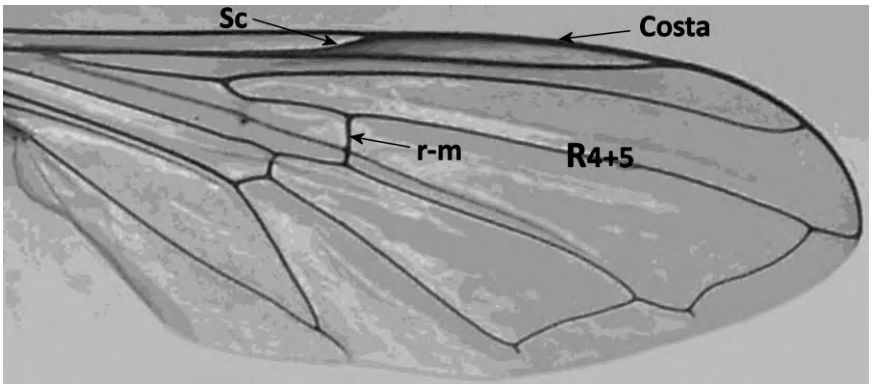

Figure 1: right wing of *Melanostoma scalare*

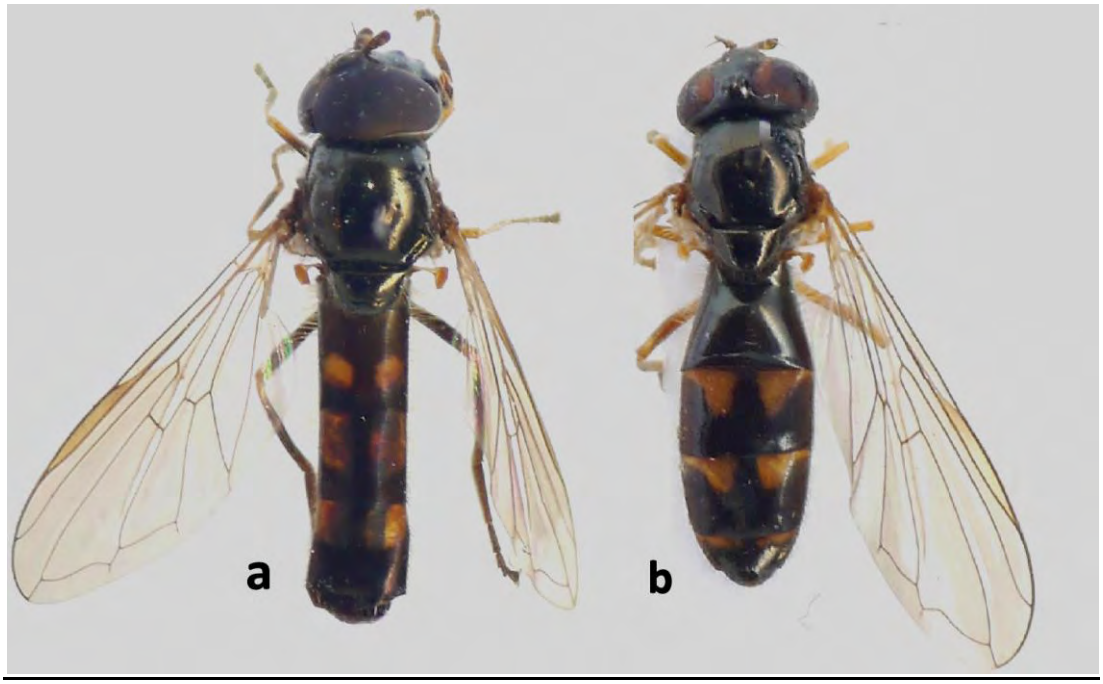

Figure 2: *Melanostoma mellarium*, a = male; b = female.

Melanostoma mellarium

In central Europe, *M. mellarium* is hardly met with below 1000m, but becomes quite frequent in both calcareous and non-calcareous grassland in the subalpine zone. On more acid sites it is usually found along streams. The same is true of the Pyrenees (Jean-Pierre Sarthou, pers.comm.). In Finland, Haarto and Ståhls (2014) refer to *M. mellarium* as found above the tree line. In Atlantic parts of Europe, *M. mellarium* occurs in unimproved upland grassland and moor and also at lower altitudes, being recorded almost at sea level along streams in blanket bog in the west of Ireland. In the limestone grassland at c. 200m alt., in the Burren in Co. Clare, *M. mellarium* also occurs away from streams. This species can be found in flight with other *Melanostoma* species, but has a shorter flight period than both *M. mellinum* and *M. scalare*. *M. mellarium* seems to be univoltine, and is on the wing in June/July. In Britain, scattered records of *M.*

mellarium might be expected along streams in moorland and in upland grassland, from Cornwall to the north of Scotland.

Other taxonomic issues in *Melanostoma*

The opening remark of this note alludes to re-instatement of *M. mellarium* as but a step towards sorting out how many *Melanostoma* species are present in Europe. The above key highlights one of the other issues, by separating females of *M. certum* from females of *M. dubium* sensu aucct of the Alps and Scotland. For the moment, one option is to consign these apparent variants to *M. certum*. But, whether they are conspecific with *M. certum* will require a more comprehensive genetic examination of *Melanostoma* populations to decide: Haarto and Ståhls (2014) refer only to genetic characterisation of Fennoscandian populations. There are other more-or-less distinct *Melanostoma* phenotypes in the humid beech forest of the Alps and Vosges mountains, another in the Schwarzwald, another in the rather special, montane wetlands of the Jura and doubtless more elsewhere in Europe. Based on morphology alone it is just not possible to know whether these are discrete species. So far, genetic characterisation of *Melanostoma* populations shows promise in resolving such issues. The next step might usefully be to genetically characterise the British *Melanostoma* populations, in order to clarify the relationship between *M. certum* and Scottish "*M. dubium*", for instance.

The key included in this note is derived from Speight and Sarthou (2014). More infomation on European *Melanostoma* species can be found in Speight (2014).

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Portevinia maculata in Norfolk – a targeted survey

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Among diptera taken by Tony Irwin during a collecting session at Holt Hall, North Norfolk in May 2011 was a male *Portevinia maculata* which represented the first county record for 73 years. This gave rise to the realisation that other populations must be present in the county and as a consequence a targeted survey was undertaken in 2014. It was promoted via Norfolk Wildlife Facebook, Norfolk Wildlife Yahoo Groups and the Norfolk Biodiversity Information Service (NBIS). With a database of Ramsons sites to hand, supplied by Bob Ellis, the Botanical Recorder for East Norfolk, participants were requested to search sites during the spring flowering period when the distinctive males can be found on the inflorescences and foliage of the foodplant. Photographic evidence was requested.

An enthusiastic response led to the discovery of nine sites which included Warren Woods, Cromer where Ken Durrant had recorded the species in 1938. The other sites (in a further 5 ten-kilometre squares) were Ashwellthorpe Lower Wood, Booton Common, Castle Rising Wood, a woodland site near Felbrigg Great Wood, Hockering Wood, Reffley Wood near Kings Lynn, Sheringwood in Beeston Regis and Swanton Novers Great Wood. The stronghold is evidently North Norfolk where further populations can be anticipated in unvisited, mainly private, woodland, and potential sites remain to be surveyed elsewhere.

Above all perhaps, the survey has highlighted how, within Norfolk, a widespread albeit local hoverfly with a short flight period can go undetected if its habitat lies outside the high profile areas of the Broads, Breck and coastline, where most diptera research has been undertaken. The reliance of *Portevinia maculata* on a single foodplant, and the ease with which it can be identified from photographs, make it ideal for a Citizen Science project. A survey run on similar lines to the above in other parts of East Anglia where the species is poorly recorded could well produce similar results.

Xanthandrus comtus in Cornwall

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On 9 September 2014 I noticed a male *Xanthandrus comtus* in my garden in Torpoint, Cornwall, the first I had seen since 2008. Then, on the morning of 14 October, I found a female in my overnight garden moth trap (a Heath trap, using a 40W actinic tube). On the morning of 20 October, I found a male in the same trap followed by another male on 22 October near the trap, although not inside it. This is not the first time *X. comtus* has been attracted to the trap: males were found in the same trap in November 2007 and October 2008.

My first encounters with *X. comtus* were on the Isles of Scilly: St Mary's and St Martin's in 1992, followed by records from Tresco in 1993 and St Mary's again in 1995, 1996 and 1997. In all cases they were found visiting ivy flowers in October. I haven't visited the islands since 1997.

Since 1993 I have recorded *X. comtus* at six (mostly coastal) sites in my local patch, the extreme southeast of Cornwall, with several records in 1993, no records from 1994 to 1997, then annually from 1998 to 2008 when another gap took place until 2014. Most of the above records (both from Scilly and mainland Cornwall) occurred between August and November, although, at Penlee Battery Cornwall Wildlife Trust Reserve, I recorded it once in June 2000 and three times in July 2008.

The autumnal dates would indicate that it occurs as a migrant, although the mid-summer dates could suggest that it is also an occasional resident in the area.

As for its appearance in the moth trap, *X. comtus* does appear to be relatively easily attracted to the light. Only *Melanostoma scalare, Platycherus albimanus* and *Episyphus balteatus* have appeared in the trap more often and there are plenty of common species in the garden which have never done so.

An outbreak of *Criorhina ranunculi* (Panzer, 1804) on Wenlock Edge, Shropshire.

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I noted with interest Ian Andrews' note of large numbers of *C. ranunculi* at cherry laurel in east Yorkshire in April 2014 (Andrews, 2014). Subsequently, Jim Cresswell and Keith Fowler informed me of a similar encounter on 9 April 2014 in an old quarry on Wenlock Edge, Shropshire (SO5998). Here Jim and Keith witnessed "over three dozen" *C. ranunculi* about goat willow flowers. Jim reported: "It was a sunny day with a strong south westerly breeze. All the insects interested in the willow were sheltering on the leeward side on the whole extent of the tree, from waist height to the top." Some of the males were engaged in the usual head butting of any medium to large sized insects that were also flying about the goat willow.

In some thirty years of hoverfly watching I have personally only ever seen up to five individuals at one site, so this observation, taken alongside Ian Andrews' observation, does seem to indicate that the spring of 2014 was a remarkable season for this spectacular spring hoverfly.

Reference

Andrews, I. (2014), Large numbers of *Criorhina ranunculi* at cherry laurel, *Hoverfly Newsletter* No. 57.

Callicera rufa in England – an update

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Since I reported the recording of *Callicera rufa* in England in 2009 and 2011 (Jones 2011 & 2012), three further sites have been discovered in Shropshire, Staffordshire and Norfolk.

In June 2013 Brett Westwood came across a female *C. rufa* ovipositing into a tiny rot hole on a fallen trunk at The Million, Enville Common, Staffordshire (SO8486). Brett reported that this particular female was so engrossed in its ovipositing activity that it landed on his camera and his arm as he was trying to photograph it! The Million is heavily planted with pine and other conifers.

On 26 June 2013 Maria Justamond photographed a single female resting on an oak tree trunk in plantation woodland at Shawbury Heath, Shropshire (SJ543195). This site is about 5km north of Haughmond Hill, so it is very plausible that one site has "seeded" the other. The four sites across Shropshire and Staffordshire are within an area less than 30 miles across, so it is certainly well established in this part of the West Midlands.

Roger Morris informs me that there is a 2014 record for *C. rufa* from Holme, Norfolk, so together with previous records from Bedfordshire and Nottinghamshire, we now know of records from five English vice counties. It seems highly likely that *C. rufa* is widespread across England and very probably into Wales.

C. rufa appears to have quite a long season, based on 13 Shropshire sightings, in 2011 – 2014, the date range is 7 May – 27 June, with ten of those sightings falling in May. There is a good spread of dates throughout May.

In 2014, at Little Hill, Wrekin on 17 May, Keith Fowler witnessed several *C. rufa* lekking on two Scots pines on the hilltop and also flying about and landing on leaves of a rowan tree. At Haughmond Hill a single male on a Scots pine trunk was seen by me on 18 May. At both Little Hill and Haughmond Hill, *C. rufa* has been seen at precisely the same two locations in four consecutive years. At Little Hill *C. rufa* has been seen on one particular tree in each year. At Haughmond Hill trees have fallen down and so different trees have been used in different years, but nonetheless the area used by lekking males is very small. Despite thorough searching across Haughmond Hill, no other areas have been found with *C. rufa* present. These observations strongly indicate that lekking locations are quite critically defined.

References

Jones, N. (2011). Astonishing discoveries of *Callicera rufa* in England, *Hoverfly Newsletter* No. 51. 4-5.

Jones, N. (2012). A further record of *Callicera rufa* Schummel, 1842 in Central England. *Hoverfly Newsletter* No. 52. 6-7.

Creating artificial rot holes for *Callicera rufa*

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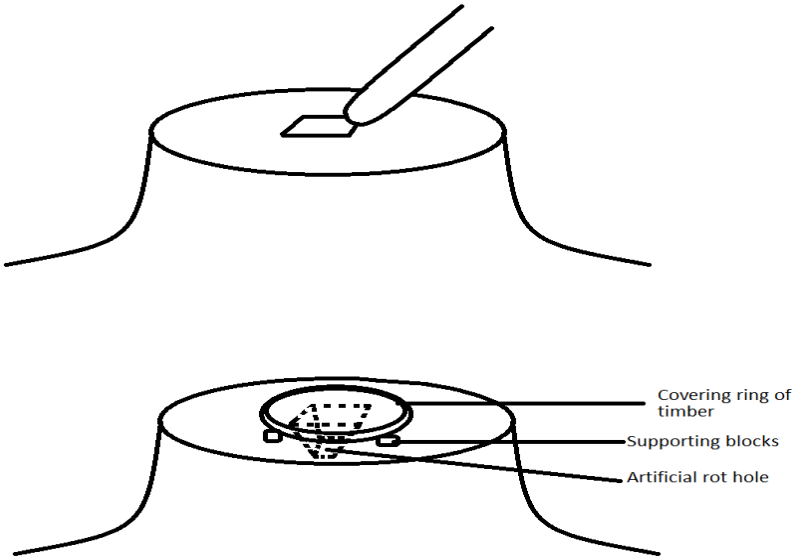
The Malloch Society has trialled the use of artificial rot holes as a way of promoting habitat for some of Scotland's rarest hoverflies (*Callicera rufa* and *Blera fallax*) They have demonstrated that it works, and it would seem that the holes are very easy to construct. We know that *Callicera rufa* will colonise such holes relatively quickly.

The principles are simple. It would seem that in the wild, rot holes in pine stumps need to be in stumps over 20 inches in diameter (50cm). Holes in stumps of Scots Pine *Pinus sylvestris* are known to work well, but the possibility of colonisation of other conifer stumps should not be ruled out. There is therefore scope to create holes in a range of stumps and to monitor these for their efficacy. We just do not know what will turn up, so all options are worth

considering. Notches cut into the junction of a branch and trunk have also been successful and have been shown to be colonised for many years after the original hole was created. The one issue I would worry about is whether such notches weaken the tree and hasten its collapse – beware as there may be health and safety implications.

An artificial rot hole is very simple to make. In essence, it is an inverted pyramid or box, created by drilling the centre to the stump by a chainsaw. The hole will naturally fill with water, and the mixture becomes quite viscous as pine resins seep into the water. Placing a raised cap over the hole is useful because it shields holes from desiccation and predators. A cap can be easily made from a thin slice of a trunk or branch raised above the stump on several blocks of wood – again, off-cuts. The hole can be 'seeded' with chips of conifer timber resulting from the drilling process, and this does seem to help the development of the rot hole biology.



The absolute dimensions of artificial rot holes can be varied but holes around 5 to 6 inches square and four to five inches deep are probably about right. The obvious issue is how long each takes to cut, so it is necessary to be practical about what can be achieved. Variations on a theme might also be worth trying. It may also be helpful to place brash over the stumps to provide some additional protection against disturbance and desiccation but this is not essential as far as I am aware. The hole will naturally fill with water over time, but priming it with rainwater may help. The holes need to be created before May/June when the adults fly.

Once the holes are created, there is a need for patience. Checking the holes in the autumn or spring will reveal whether any larvae have started to develop. It is possible that you will see several species of larvae, but those of *Myathropa florea* are most likely. Those of *Callicera rufa* have much shorter tails and more obvious pseudopodia.

The logical way of recording the larvae is to count and photograph them before returning them to their rot hole. Once photos have been assembled, we can determine what has been found. Numbering the artificial holes and recording which photos relate to which hole will help relocation of any likely larvae. It is not certain that larvae will be found in the first year, but the chances are good that something will be found, if only *Myathropa florea.*

Interesting records from Shropshire

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In common with most other dipterists, I found 2014 to be an appallingly poor year for Diptera, with very low numbers of even the most common species throughout the season. Amongst the Syrphidae only some *Eristalis* species appeared in any numbers as the season progressed. Consequently finding the scarcer species was even more challenging than usual and my report for 2014 is accordingly a short one.

Cheilosia soror – At Buildwas (SJ6305), where there are soils with a calcareous influence, a single female was amongst numerous *Cheilosia* species pooted from upright hedge parsley *Torilis japonica* and hogweed *Heracleum sphondylium* flowers on 23 July. This is the second Shropshire record. 23 July was one of very few days in 2014 when I witnessed decent numbers of *Cheilosia* flying.

Cheilosia velutina – on another day when good numbers of *Cheilosia* were flying, I collected a single female *C. velutina* from hogweed flowers from a meadow within plantation woodland at Dudmaston (SO7490). This was only the second vice county record for the species.

Brachyopa – three species, *B. bicolor*, *B. pilosa* and *B. scutellaris* were all flying about beech trees at Haughmond Hill, Shrewsbury (SJ5314) on 30 April, a most unusual occurrence.

Chalcosyrphus eunotus – a single female was recorded from alongside the Cound Brook at Big Wood, Eaton Mascott (SJ5305) on 29 June. This was a well worn individual and is a very late date for this early spring species. This record brings the number of known sites for *C. eunotus* in Shropshire to 11. Coincidentally, Alastair Hotchkiss discovered several new sites for the species in neighbouring Montgomeryshire during 2011, confirming, at long last, the long held conviction that it must be present in many mid Wales valley woodlands.

Also at Big Wood, Eaton Mascott on 29 June, a single female *Xylota florum* was recorded, the first I had encountered in several years.

Winter hoverflies

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Many of us cease recording hoverflies by the end of September, even though we know that some will be found throughout the year. This almost certainly means that winter records are under-represented in the dataset. Recent advances in photographic recording and the development of a new recording community at Facebook's UK Hoverflies page have made a huge difference in this respect. Photographers are seemingly far less inhibited by the cold and regularly post shots of hovers seen in the winter. This new data source has generated some really surprising results. For example, we see remarkable numbers of posts of *Xanthandrus comtus* in December and January (Figure 1). The majority of the records are from southerly locations, however, and therefore we must not assume that the potential for winter hoverflies is universal. Nevertheless, they are certainly about where conditions are favourable!

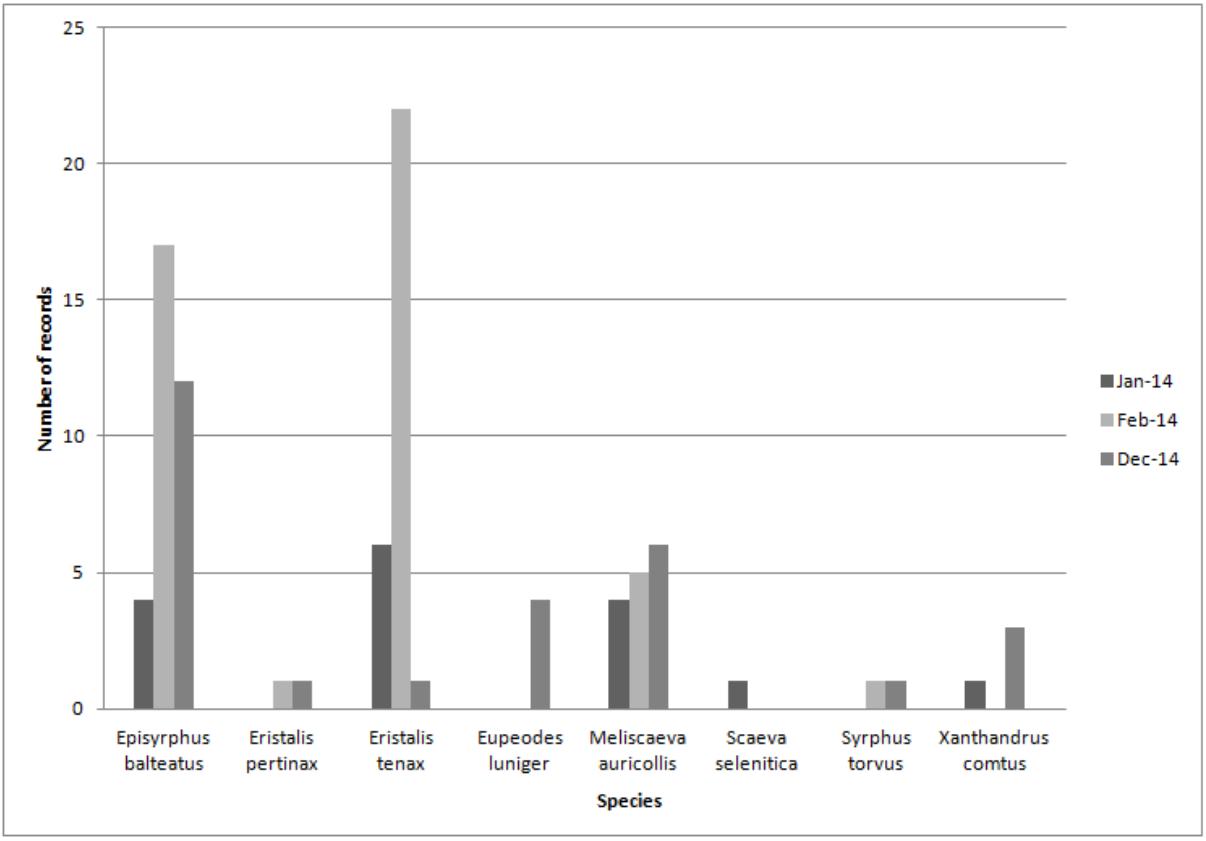


Figure 1. Hoverfly species recorded by photographers in the winter months of 2014.

There are several striking points about the data. The most obvious is the frequency of *Episyrphus balteatus*, which is often primarily regarded as a migrant. This is clearly not the case as *E. balteatus* occurs throughout the winter months in southern England, often as very dark forms that are indicative of development in cold conditions. Similarly, *Meliscaeva auricollis* is frequently observed and appears to be continuously brooded at least in southern England (figure 2). Hibernation by *Eristalis tenax* also seems to break quickly if temperatures rise, with numbers rapidly rising in February.

By March (figure 3), the range of species on the wing gathers pace but records continue to be dominated by the broader winter assemblage. As might be expected, *E. pertinax* starts to become dominant in the photographic record, but an interesting feature is the numbers of *Syrphus torvus*. Only a small proportion of *Syrphus* can be identified from photographs but *S. torvus* can often be spotted in good quality photographs in which the eye hairs can be seen when enlarged.

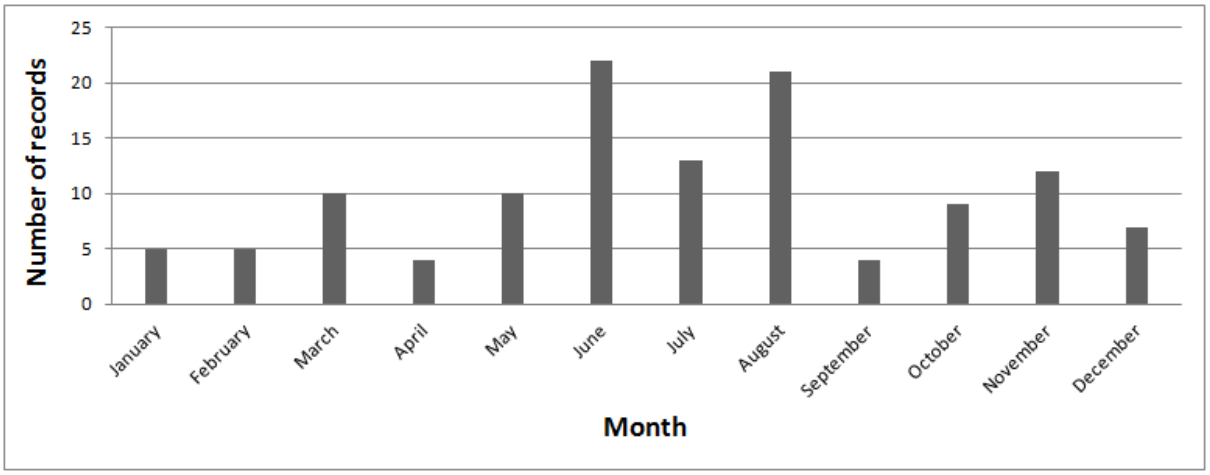


Figure 2. Abundance of *Meliscaeva auricollis* in 2014 based on photographic records.

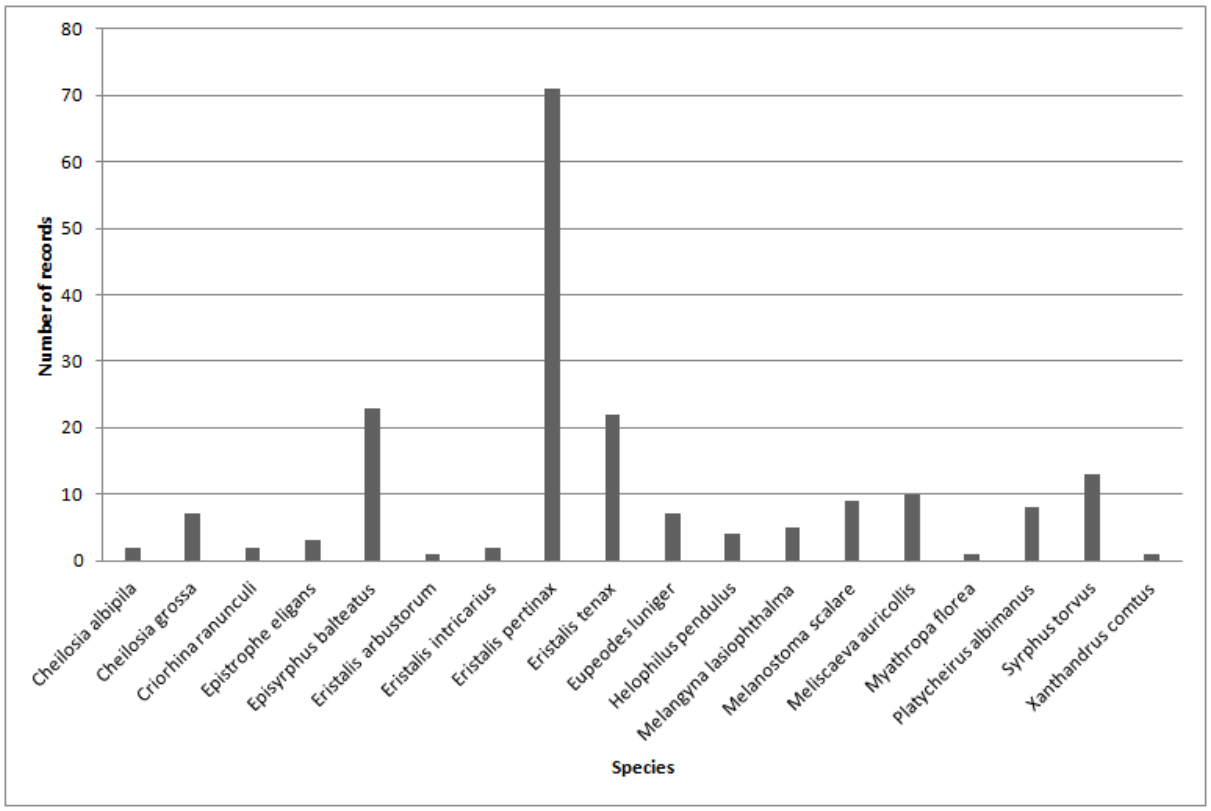


Figure 3. Hoverflies recorded by photographers in March 2014

There is much more to be done with the photographic data - eventually more will emerge, but meanwhile these graphs for *Eristalis tenax* (figure 4) and *E. pertinax* (figure 5) may be of interest in connection with activity in winter and early spring.

The apparent spring emergence peak for *E. tenax* appears to have been in February, which suggests that this species was very much on the wane by April. More data will be needed to determine quite how this compares with other years. The dataset for 2012 and 2013 is probably not as comprehensive because we did not have quite such an active Facebook group. Data for 2015, on the other hand, could be very constructive as this group is now making a substantial data contribution.

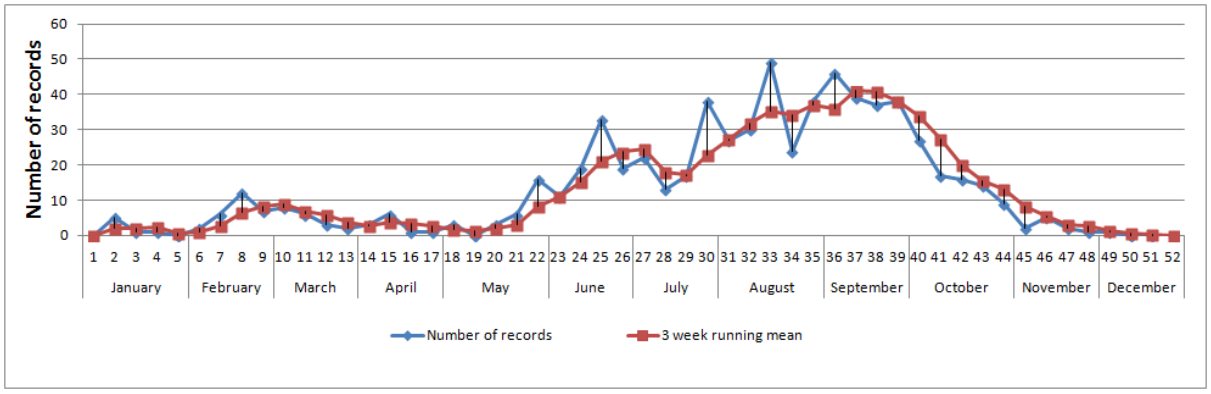


Figure 4. Frequency of photographic records of *Eristalis tenax*, with a 3-week running mean used to smooth the data superimposed.

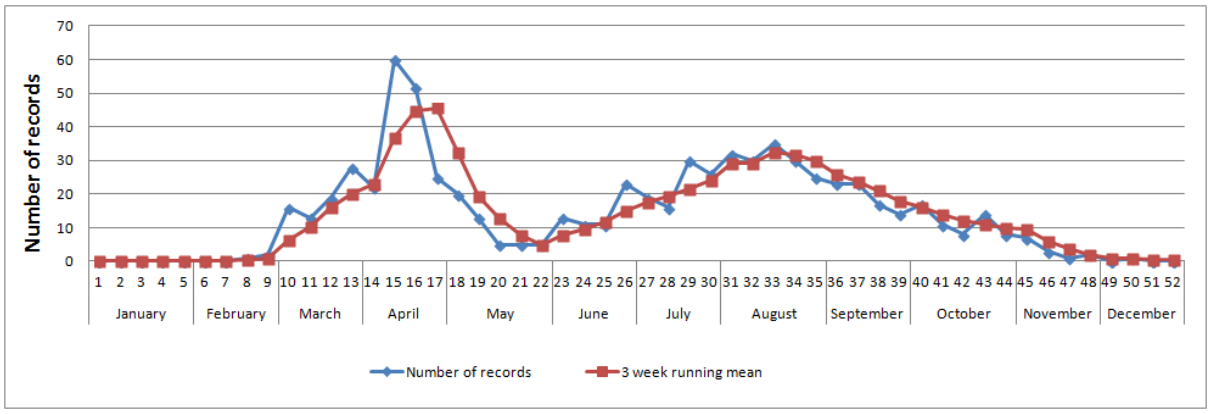


Figure 5. Frequency of photographic records of *Eristalis pertinax*, with a 3-week running mean used to smooth the data superimposed.

Both graphs are instructive because they show very clear patterns of abundance which suggest that photographers are providing quite an accurate picture of what is happening for those species that they see, and which can be identified from their photos. Intuitively, the graphs look to mirror field experience. In the case of *E. tenax* I frequently reflect on how few I see in the spring and have often wondered whether I am missing them somehow. I find myself reassured that I am probably not overlooking them. These very simple analyses offer an important insight into the potential value of building a network of photographic recorders through social networking and image-hosting sites.

There is no doubt that the range of species depicted by photography is more limited than the overall assemblage of hoverflies at a site. Some species are really only seen by developing a good knowledge of their biology and behaviours, or by using techniques such as sweeping that do not lend themselves to photography. Others are so taxonomically difficult that they cannot be reliably identified from photographs. BUT, there is a significant proportion of the British fauna that CAN be identified from photographs and these sources do yield valuable information that may be used in certain important applications such as looking at pollinator abundance and perhaps also monitoring range changes.

There is no escaping the problems of difficult genera such as *Cheilosia*, *Platycheirus* and *Pipiza*, but this should not dissuade the recorder who prefers not to take specimens from making a meaningful contribution to recording schemes such as the HRS. Clearly, substantial data for common species can be used in ways that extend beyond the simple development of dot maps. The critical issue is to be aware of which species can and cannot be identified, and to know which species dominate the dataset, so that the inevitable skews in the data are recognised in any analysis.

Fungus Gnats Recording Scheme

Newsletter 8 Spring 2015

The updated review of the conservation status of all species carried out in 2013, mentioned in recent newsletters, has yet to be adopted, while further additions continue to be made to the British list. 2014 produced an interesting range of new records.

Results of Field Meetings in 2014

There were four Dipterists Forum field meetings in 2014, three of which I attended. Numbers of species recorded was generally higher than in 2013 but dry conditions in late summer reduced gnat activity, and the late autumn flush of fungi that finally came was too late for the autumn field meeting.

The number of species recorded at each meeting were: Swanage, Dorset 16-18 May (66), Kingussie 1-7 June (160), Bangor, North Wales 5-12 July (80) and Worksop & Nottingham, Nottinghamshire 11-18 October (106). The combined total for the four meetings was 231, compared to 203 for the five meetings in 2013. The combined total for the two Kingussie meetings (September 2013 and June 2014) was 198.

Swanage: Gnat numbers were relatively low at most of the sites explored on this three day meeting, the largest numbers being found at the first site visited on 16 May. This was Wytch Heath, where 44 species were recorded in a conifer plantation, among undergrowth of holly and ground cover of heather and accumulations of dead wood. These included *Mycetophila sublunata*, which was also found at Arne on 18 May. At Studland, the wood by the Discovery Centre produced *Mycetophila uliginosa*.

Kingussie: The species count while at Kingussie was 158, but two extras from Moffat were found by Alan Stubbs on the way up to bring the overall total to 160. The weather was changeable, with two wet days on which fieldwork was limited. The last day produced the best site totals, 50 at Craigellachie NNR, 52 at Lynachlaggan Wood and 56 at Uath Lochans.

Phronia bicolor, from pinewoods at Boat of Garten, was an addition to the British list. *Brevicornu subfissicauda*, from Altnaglander, was already known to me as British, but has hitherto escaped publication (except in Fauna Europaea), so further details are given here. A *Trichonta* species found at Altnaglander has genitalia differing from published figures and awaits elucidation. Other good finds were *Mycetophila mohilevensis* from Boat of Garten aspen wood and *Sciophila plurisetosa*, at Loch Morlich. These are the 5th British record in both cases, following the correction of a previous record attributed in error to *S. plurisetosa* (see below).

Sciophila rufa was recorded from larvae in their webs under *Fomes fomentarius* brackets growing on dead birch trunks. I collected a larva at the Boat of Garten aspen wood on the Monday 2 June; this spun a cocoon on the next day and a female gnat emerged on the following Tuesday 10 June. Chris Spilling found larvae at two other sites, Lynachlaggan Wood (NH8102) and Glen Feshie (NH8502), and also reared adults from them.

One species that I was surprised not to see was *Gnoriste bilineata,* a large gnat with long proboscis that flies in May and June, and is widespread in the Highlands. Geoff Hancock tells me that he caught it at Mound Alderwood in Sutherland on 24 May during a Malloch Society meeting. I found it at the same site on 26 May 2002.

Bangor: I was absent from this meeting. Gnat samples have been provided by some of the participants, for which I am grateful to Martin Drake, Andrew Halstead, Roger Morris, Alan Stubbs and Rob Wolton. Low catches in other groups have been reported from this meeting (Drake 2014), so it is pleasing to note that the gnat records amounted to 80 species, including some new to Wales. In particular two very little known *Macrocera* species were turned up by Martin Drake, who also found *Manota unifurcata* for the first time in N Wales - the most northerly British record so far (further details of these records below). *Keroplatus testaceus* was found on the Lleyn peninsula on 9 July, confirming its widespread presence in N Wales; an Anglesey record was cited in newsletter 6 (p. 3).

Nottinghamshire: It was a uniform selection across most sites, with mostly common species, though the areas of Sherwood Forest and Clumber Park visited showed great potential, and this region is to be the location for the 2015 summer field meeting. The most Notable finds were *Exechia dizona* and *Exechiopsis seducta*, both from Aviary Wood (SK625732), part of Clumber Park. *Greenomyia mongolica* at ivy flowers in Morning Springs Wood (SK495489) was unexpected (see below). *Mycetophila hetschkoi* was found at Seller's Wood (SK523454), a new regional record for this mainly south-western species. Top sites for gnats were the area of Clumber Park close to the south gate (SK615735) (52), the Birklands area (SK626684) of Sherwood Forest (50), Morning Springs Wood (34) and Aviary Wood (33). Andrew Halstead caught *Mycetophila sigmoides* at Wollaton Park (SK5238) on 18 October

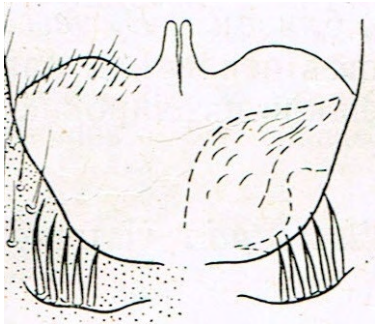
Gnats new to Britain in 2014

Like other recent additions to the British list the three species introduced here can presently only be treated as Data Deficient. One of the species added last year, *Epicypta fumigata*, on a single specimen found in Devon by Rob Wolton, was found again by him in 2014 at a nearby site (see below). There have been further records in 2014 of some other recently added species, including *Exechiopsis seducta*, *Mycetophila sublunata* and *Greenomyia mongolica*, but none of *Exechiopsis davatchii*.

Brevicornu subfissicauda Zaitzev, 1985

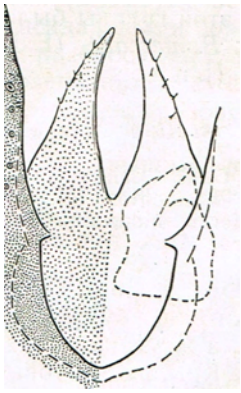
Thompson Common (TL9396), Norfolk, 29.v.2000, 1 male (I. Perry); Altnaglander (NJ169285), Banffshire, gulley in birch woodland, 2.vi.2014, 1 male (A.E. Stubbs).

This is a member of the species group including *B. fissicauda* and *B. intermedium*. These species have very similar structure to the male genitalia, with a convex apical margin to sternite 8 (shown in figure of *fissicauda* below), differing most obviously in the form of the ventral median process of the gonocoxites, which is not easy to see without mounting and dissection of the genitalia. *Brevicornu subfissicauda* was described from the USA by Zaitzev (1985), and the figures of the three species shown here are taken from his paper (it is not included in Zaitzev 2003). It was later recognised to occur in Europe, where it is widespread but rarely recorded; there are records from France (Withers 2014), Spain, Italy, Germany, Switzerland, Croatia and Serbia.



Brevicornu subfissicauda ventral median process of gonocoxites (from Zaitzev 1985)

Brevicornu fissicauda



Brevicornu intermedium

ventral median process of gonocoxites (from Zaitzev 1985)

Brevicornu fissicauda is a common species throughout Britain while *B. intermedium* is widespread in the south, with a Scottish record from Caddam Wood (NO3856) on 22.x.1993; *B. subfissicauda* is apparently less frequent, but could have been overlooked.

Mycetophila stylatiformis Landrock, 1925

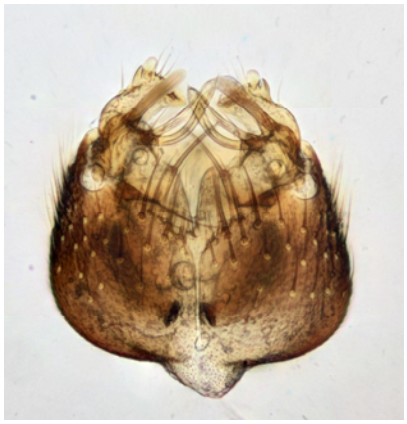
Windsor Forest (SU9274), Berkshire, 25.vi, 2 males; 7.viii, 1 male; 18.ix, 7 males; 2.x, 1 male (all 2014: P.J. Chandler).

This species is very close to *M. stylata* (Dziedzicki, 1884), which has not been found at Windsor, so 11 females found there (25.vi. 23.vii, 18.ix, 2.x and 23.x) were concluded to also be *M. stylatiformis*. A further male has since been found in material collected by Ivan Perry at the Warburg Reserve on 21.vi.2014, while he also found a male of *M. stylata* there on 19.x.2014.

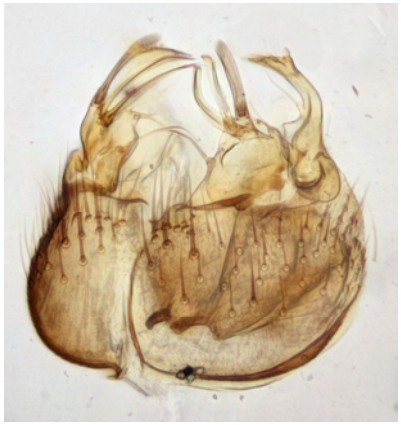
Mycetophila stylatiformis is only separable by small differences in the male genitalia from *M. stylata*, so females cannot at present be separated. These species both have a broad apical marking including the tips of both radial veins.

Wing of *Mycetophila stylata*

Zaitzev (2003) figured *M. stylata*, but *M. stylatiformis* has only been figured by Landrock (1925, 1927). The gonostylus in both species has the ventral lobe bearing three large thickened setae. They differ in the form of the dorsal lobe, which is more slender and tapered apically in *M. stylatiformis* (see photographs).



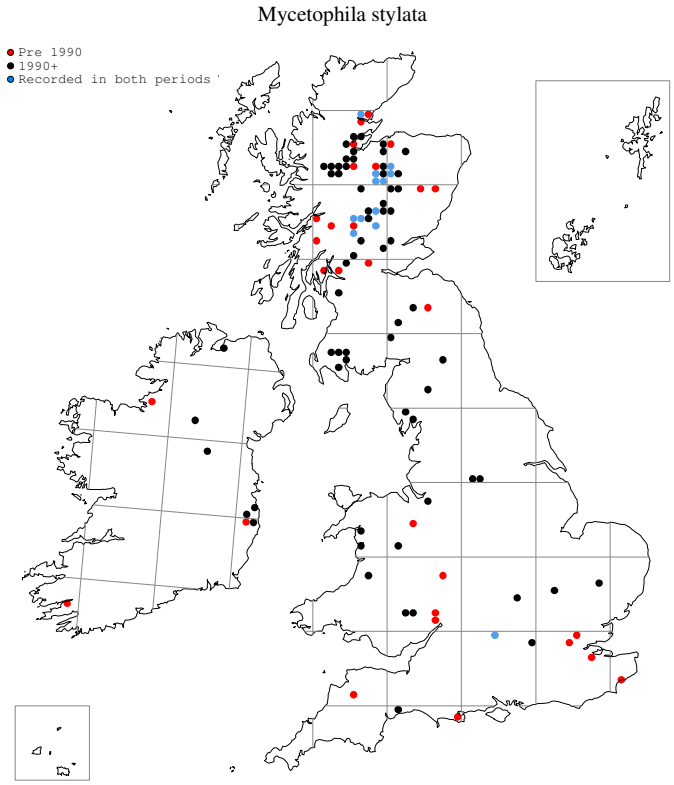
Male genitalia of *M. stylata*, ventral view



Male genitalia of *M. stylatiformis*, ventrolateral view

In Europe *M. stylatiformis* is little recorded. Landrock (1925) described it from the Czech Republic and there are otherwise records only from Spain (Chandler & Camaño Portela 2011), Germany, Slovakia and Serbia, while *M. stylata* is more widely known but again there may have been confusion between them.

Specimens of *M. stylatiformis* were exhibited at the BENHS Exhibition and the DF AGM in Carlisle. It is possible that it has hitherto been confused with *M. stylata* and it will be necessary to check previous records to ascertain if that is the case. *Mycetophila stylata* has a mainly northern and western distribution (see map below) and is common in Scotland, but there is a scatter of records in the south-east. It has not been recorded at Windsor, although there is a record of it from the nearby Burnham Beeches (SU98) and the finding that both species are present at the Warburg Reserve supports the need to verify earlier records.



Distribution of *Mycetophila stylata* (records to end of 2011)

Phronia bicolor Dziedzicki, 1889

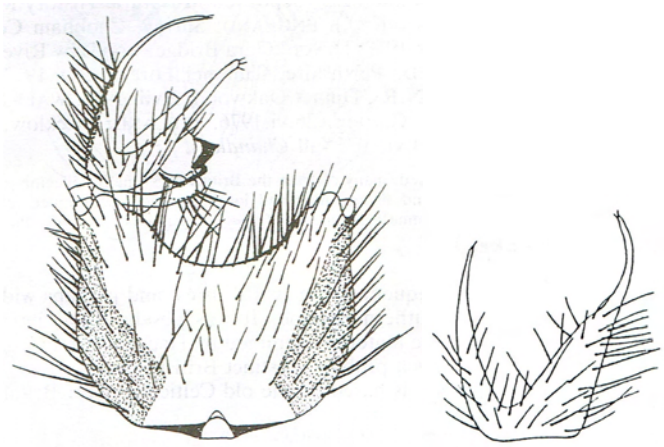
Kinchordy conifer woods, near Boat of Garten (NH9317), 2.vi.2014, 1 male (P.J. Chandler).

This male of *Phronia bicolor* was found among a large catch of gnats that were congregating around the upturned roots of fallen pine trees, taking advantage of the localised higher humidity. It is close to *P. coritanica*, which was in numbers there and at other sites visited during that week, so could easily have been overlooked elsewhere. *Phronia coritanica* is a common species throughout the British Isles

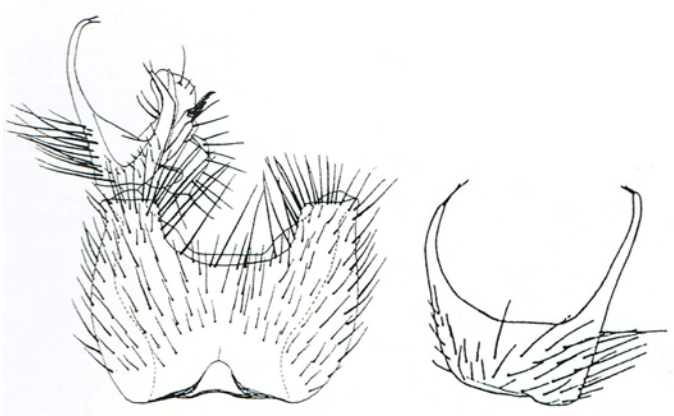
Phronia bicolor is a Holarctic species that is widespread in Europe, so there is no obvious reason why it should not have been recognised in Britain before. I have checked available specimens of *P. coritanica* and haven't yet found another example of *P. bicolor*.

Chandler (1992) figured the genitalia of this and allied species and the figures of *P. bicolor* and *P. coritanica* from that paper are shown here. Zaitzev (2003) also figured *P. bicolor* but omitted *P. coritanica*, which is widespread in western and northern Europe, but not yet recorded for Russia.

The most obvious difference between these species is the form of the apical ventral margin of the gonocoxites which is shallowly and evenly concave in *P. bicolor*, but with a stepped appearance to this margin in *P. coritanica*. Both have the gonostylus deeply divided into two lobes, which are slender apically with short apical hairs, but with a differently formed basal part.



Phronia bicolor: ventral view of male genitalia and lateral view of lateral lobe of right gonostylus (from Chandler 1992)



Phronia coritanica: ventral view of male genitalia and lateral view of lateral lobe of right gonostylus (from Chandler 1992)

New findings of *Macrocera*

Macrocera records don't often figure in accounts of interesting finds. As reported above Martin Drake found two scarce species on the Bangor field meeting. He also caught specimens of *M. pusilla* at two sites on the Devon coast, which may throw light on the identity of *M. propleuralis*. Ivan Perry was puzzled by some specimens from a montane site in Scotland, which appear to be *M. estonica*.

Macrocera estonica Creag an Lochainn (NN592411), Perthshire, 1 male, 2 females (I. Perry).

One of the females is typically coloured, the thorax and abdomen mainly shining black with obscurely yellowish scutellum and narrow hind margins to the abdominal tergites. In the male and second female the body coloration is by contrast shining dark brown, with the abdomen a little darker. This initially suggested that they might be a different species but there are no apparent structural differences. It is possible that they were teneral and had not taken on the full coloration characteristic of this species, but there is no other evidence to support that conclusion. Further investigation of *M. estonica* at this site and elsewhere would be of interest.

This species has been recorded from a range of open habitats, including moorland, heathland and wetlands. There are previous British records from 14 hectads, mostly from the Pennines to the Scottish border, but there are several from Welsh and East Anglian wetlands. Previous Scottish records are from upland sites, the Langholm Hills, Dumfriesshire (1979) and Allt Feith Lair, Perthshire (1999).

Macrocera fastuosa Coedydd Aber (SH6671), N Wales, 1 male, 7.vii.2014, mixed woodland with a waterfall (C.M. Drake).

There are only three previous widely scattered English records: Clovelly, Devon (1927), Wyre Forest (1988) and Chafer Wood, North Yorks Moors (2000). These few records are from wet woodland with streams. The larval biology is unknown. Its survival at the two pre-1990 sites is in doubt, so it has been suggested to warrant Vulnerable status in the latest unpublished review. This new discovery in Wales is therefore highly significant and investigation of its status there would be desirable.

Macrocera inversa Coed Ffrith Siân (SH783616), N Wales, 9.vii.2014, 1 female, mixed woodland with stream (C.M. Drake).

This is a more remarkable find even than that of *M. fastuosa*. It was only hitherto known in Britain on the type material of the synonym *M. bipunctata* Edwards, from two sites in NW England: Bowness (1889) and Tilberthwaite Ghyll (1923). Precise habitat details were not recorded for the two British records, but Tilberthwaite Ghyll is a rocky gorge with waterfalls, suggesting an open upland habitat. The larval biology is unknown.

It was also suggested for Vulnerable status in the unpublished current review; it was recognised that the lack of more recent records may be due to insufficient recorder effort in the habitats concerned, but the absence of post-1923 records indicated that it was clearly very restricted in occurrence or even extinct in Britain. Again further investigation of its Welsh status is necessary. Both this and *M. fastuosa* are widespread but uncommon in Europe.

Macrocera maculata Isle of Grain (TQ873741), East Kent Malaise trap, 16.vii-21.viii.2014, a site with small strips of roadside woodland (M. Ashby, T. Bantock & C.W. Plant).

This species is found in dry woodland and woodland edge habitats, also old hedges, often in calcareous areas. It is widespread in the eastern counties of England, north to Yorkshire and extending west to Somerset, with previous records from 21 hectads. The larval biology is unknown.

Macrocera pusilla Haven Cliff (SY2689), coastal landslip, 2 males and Seaton (SY2389), seepages on soft rock cliffs, 2 males 23.ix.2014 (C.M. Drake).

These specimens, found by Martin Drake at two coastal sites in Devon, vary in the length of vein Sc, such that one of those from Seaton would run to *M. propleuralis* in the handbook, leading to the suspicion that it may be a variant of *M. pusilla*.

Macrocera propleuralis was described by F.W. Edwards (1941) from a single female caught by him on the window of a beach shelter at Sidmouth, Devon on 11 June 1938. It has not been identified by any subsequent authors, so no male has been associated with it. It was compared to *M. fasciata* and in the key by Hutson *et al*. (1980) it is grouped with that species as having vein Sc reaching the tip of the basal cell (i.e. the level of the radiomedial fusion) as in most *Macrocera* species. Edwards (1941) also added *M. pusilla* to the British list on one female, compared to *M. anglica* as both have vein Sc short and ending well before the tip of the basal cell. Males of *M. pusilla* also agree with *M. anglica* in having three teeth on the gonostylus while most *Macrocera* have only two.

I have not yet been able to compare these specimens of *pusilla* with the holotype of *M. propleuralis*, but Erica McAlister has kindly supplied the photograph shown here, which tends to confirm this conclusion. The specimen had been partly dismembered and the apical part of the abdomen had been macerated and placed in a tube of glycerine by Tony Hutson.

The main doubt about its conspecificity with *M. pusilla* relates to its size (wing length 5mm), while most *pusilla* are 3-4mm wing length. However, these Devon specimens vary from 3.6 to 4.3mm, the largest being that with vein Sc longest. Females of *Macrocera* may also be larger than the corresponding males. Vein R_1 is described as thickened apically in *M. propleuralis* as appears in the photograph; this is less evident in males of *M. pusilla* but other characters are similar. The proximity of its type locality to these new records of *pusilla* strongly supports the synonymy and would explain why *propleuralis* has remained "Data Deficient".

Macrocera pusilla is a Nationally Scarce species with a scattered but widespread distribution in S England and Wales, with records hitherto from 22 hectads. It is found in wooded, woodland edge and open habitats, including bogs and fens, in addition to the coastal habitats recorded here. It had also been recorded from another coastal site in the same area, Culverhole Point (SY2789) on 26.vi.2003 by David Gibbs.

Recording at Windsor Forest in 2014

I have made regular visits during 2014 to the Highstanding Hill area of Windsor Forest, at about fortnightly intervals. This survey was initiated as a result of the recognition that the Diptera records for the Windsor Forest and Great Park area needed to be collated, both to establish what is already known and to assess the effect of management changes. Attention was concentrated on the Highstanding Hill area because that is well known to dipterists and was one of the areas included in the Dipterists Forum weekend field meeting in 2010.

That meeting was arranged because, while there had been extensive recording at Windsor in the second half of the 20th century, there had been a hiatus in recording there since the 1990s. The need to determine the present status of the Diptera fauna there was considered a priority. As far as I know there had not been any further Diptera recording at Windsor since 2010, except that Buglife have been surveying for the cranefly *Gnophomyia elsneri* (at its only British locality), which Alan Stubbs and Sarah Henshall were successful in finding during 2014 (Buglife September News).

Fourteen visits were made from 16 April to 15 November, only missing a second May visit due to wet weather at the time (so there was a 4 week gap in recording between 13 May and 11 June). These visits were usually for 2-3 hours from mid-afternoon onwards, only the autumn visits being made earlier in the day to enable sufficient time to be spent in daylight. Attention was concentrated on the vicinity of the stream, where fungus gnats were numerous on most visits. On the first visit in April there were swarms of gnats in flight, taking advantage of shafts of sunlight reaching the streambed; 44 species were recorded on that occasion. Otherwise they were mainly around overhangs and fallen trees, which are numerous in the vicinity of the stream. During the summer the streambed had largely dried up, but provided a humid refuge, since it follows a meandering course between steep slopes. On each visit a section of the stream and its tributaries were covered, so that during the year the entire length from Badger's Bridge to the northern edge of the Forest north of Darkhole Bridge was sampled.

Altogether 161 species of fungus gnats were recorded, the greatest number (71) on 25 June, while the number of individuals was greatest on 7 August (sample comprised 646 gnats of 46 species). Both figures fell off in the autumn visits, probably due to low fungus numbers following earlier drought, and dispersal of gnats from the stream after recent rain. On the latest visit gnats were only found away from the stream. Terrestrial fungi had only started to appear in numbers by November and species developing in terrestrial fungi were sparsely represented throughout.

Of these 161 species, 23 are new records for the Windsor Forest and Great Park area (hectad SU97), bringing the total of fungus gnat species recorded for this hectad to 249. Previous records have yet to be fully collated, so I can't at present say how many other species have previously been recorded for the Highstanding Hill area within the Crown Estate, or how many species found in 2014 are new to that part of the Estate. The most recent previous visit on which fungus gnats were recorded in the same area was during the DF field meeting on 23 May 2010, when only 34 species were recorded, but including 8 species not found in 2014. Most of those 8 were common species that would have been expected to occur, e.g. *Neuratelia nemoralis* and *Tetragoneura sylvatica*. The gap in May recording in 2014 may have been responsible in part for the discrepancy. In 2010 *Platyura marginata* was numerous both in this area and in Cranbourne Park, visited on 22 May 2010, but only one male was seen in 2014, on the 13 May visit.

Noteworthy records among the additions include *Neoempheria bimaculata* (4 males 25.vi, 2 males 9.vii, 2 females 7.viii), *Dynatosoma cochleare* (1 male 3.ix), *Mycetophila caudata (*1 male 23.vii), *M. lastovkai* (35 males, 9 dates vi-xi), *M. sigmoides* (1 female 18.ix) and *M. sublunata* (1 male 3.ix). A male of *Mycetophila lubomirskii*, which I had previously found there in 1999, was recorded on 13.vi. Males of *Allodia foliifera*, which I had recorded there on 22.vi.1971, were found on 20.viii and 2.x.

It is hoped to extend recording to other areas of the Forest and Great Park in subsequent years.

Other recording in 2014

Ivan Perry made 7 visits to the **Warburg Reserve** (SU715879), from 21 June to 19 October, and recorded 165 species, continuing to add to the inventory for this rich site. With 24 additions, this brought the total for his visits from 2010 onwards to 234 species. New 2014 records included *Mycomya insignis*, *Synplasta rufilatera* (previously found at this site in 1972: Falk & Chandler 2005), *Dynatosoma cochleare*, *Mycetophila hetschkoi* (another easterly extension to its range), *M. lastovkai* and *M. sigmoides*. As related above both *Mycetophila stylata* and *M. stylatiformis* were recorded here, and both members of another species pair, *M. stolida* and *M. freyii*, were also found in 2014. Among species also recorded by Ivan in previous years were *Greenomyia mongolica*, *Neoempheria bimaculata*, *Allodia foliifera*, *A. westerholti*, *Mycetophila caudata*, *M. sublunata* and *Sceptonia tenuis*.

Some of Ivan's finds at Flitwick Moor, Bedfordshire and Lynford Water, Norfolk are reported elsewhere here. He also had a successful week in Scotland in September. Different climatic conditions to the south had resulted in a profusion of fungi, with the benefit of fine weather every day. He recorded 180 species. These include *Macrocera estonica* and *Mycetophila lubomirskii*, discussed elsewhere here. Other noteworthy records were *Mycomya ornata* (Creag an Lochainn, NN592411, 10.ix),

Anatella pseudogibba (Ben Lawers, NN612785, 10.ix), *Brevicornu foliatum* and *Rymosia acta* (both at Carie, Rannoch, 12.ix), and *Phronia caliginosa* (Carie, Rannoch, 8.ix).

Rob Wolton ran a Malaise trap from 1 April to 17 November at **Scadsbury Moor**, Rutleigh (SS516023), Devon. A considerable catch of gnats, supplied in three samples (April-June, July-August and September-November) comprised 141 species. These included the second British record of *Epicypta fumigata* (see below). Also found were *Leia bilineata*, *Leptomorphus walkeri*, *Mycetophila eppingensis*, *M. strigatoides* and *Rymosia britteni*. This site is now part of Locks Park Farm, for which Rob published an inventory of species recorded at a hedge (Wolton *et al.* 2014). In the previous newsletter (newsletter 7, p. 4) the results of trapping in a small copse on this farm were reported. The combined result for the three trapping sites provide records of 204 species of fungus gnats for Locks Park Farm.

Batches of flies from several sites examined for Keith Alexander, Colin Plant, Scotty Dodd, Chris Dutton and Andrew Foster provided gnat records, some of which are detailed below.

Keith's samples from **Swinmore Orchards**, Herefordshire, included 47 species. Material from various sites around **Bredon Hill**, Worcestershire examined for Chris Dutton included 33 species. Both sites produced *Sciophila interrupta* and *Cerotelion striatum*. Also from Bredon Hill were *Keroplatus testaceus* (this and previously mentioned species at SO948402), *Mycetophila sigmoides* (SO937392) and *Acnemia amoena* (SO968405). The last mentioned species was also trapped by a fallen beech at Betchworth (TQ216525), Surrey on 19.viii.2013 by Scotty Dodd. These records are additional to those cited by Alexander (2014), who summarised knowledge of the distribution of *A. amoena*.

In addition to the fieldwork mentioned above, I made one visit to Oxwich Wood on the Gower peninsula and ten visits to **Bushy Park**, Middlesex. Dry conditions still prevailed at Bushy Park, with gnat numbers still low compared to the visits in 2011 and 2012, but showed some increase over 2013 with 75 species recorded, of which 5 were additions, bringing the site total to 166.

I also attended two Bioblitz days in the garden at **Highgrove** (ST9791), organised by the Royal Entomological Society as part of National Insect Week and a follow up to the similar event at Clarence House in 2012 (see Bulletin). It was not expected to be rich in fungus gnats and the first visit in June produced only 13 species, so it was pleasing to record 30 species on the August visit, bringing field records to 38 species. The stumpery, a wooded area with upturned stumps forming a fern garden, and the arboretum produced most records. *Cerotelion striatum*, from the contents of the catchment tray of an insectocutor in the gardeners' mess room, was an addition to the list. Other finds were *Mycetophila hetschkoi* and *M. mitis*.

In September 2014, I began to visit the **Fleet Pond** Nature Reserve, Hampshire, which includes a diverse range of woodland and wetland habitats overlapping the 1km squares SU8154, SU8254 and SU8255. Six afternoon visits were made from 9 September to 3 December, so it was a good introduction to the autumn fauna of the reserve.

This site has been the subject of several entomological surveys; those by Matthew Oates (1987-8) and carried out jointly by Mike Edwards and Peter Hodge (1997-8, 2003 and 2008) have contributed Diptera records. These surveys didn't identify any fungus gnats, of which the only previous records are of 6 species from two earlier visits I have made, on 20 August 1966 with Alan Stubbs (2 species) and a brief lunch stop on 15 July 1990 (4 species).

In 2014, I recorded 75 species of fungus gnats, including 2 of the 6 species found earlier. The records of *Greenomyia mongolica* and *Mycetophila lastovkai* are discussed below. Other species found included *Mycetophila caudata* (Sandhills Wood, SU8255, 1 male, 22.x), *M. deflexa* (Coldstream Wood, SU8254, 1 male, 28.xi), *M. sigmoides* (several areas, 9.ix, 11.x, 22.x) and *Keroplatus testaceus* (Brookly Wood, SU8254, 1 male seen in flight, 28.xi). The lower lying woodland areas had become flooded by November, reducing the potential for gnat recording. On 18 November *Mycetophila luctuosa* were gathering around a colony of *Clitocybe nebularis*, a known host of this polyphagous species, in Brookly Wood.

Other significant 2014 records

Epicypta fumigata The first British record was of a male found by Rob Wolton at Rutleigh Wood (SS521009), Devon by sweeping, in the period October to November 2013 (newsletter 7, p. 3). Rob has obtained a second male from a Malaise trap catch from a nearby location, Scadsbury Moor at Rutleigh (SS520015); *E. fumigata* was from the material collected from 1 September to 17 November. A male and female of the related widespread species *E. aterrima* were also found there in the July/August sample.

Exechiopsis seducta Flitwick Moor NR (TL046352), Bedfordshire, 15.ix.2014, 1 male (I. Perry); Clumber Park, Aviary Wood (SK625732), 17.x.2014, 1 male (P.J. Chandler).

In the previous newsletter a 2013 Surrey record was added to the two previously known sites in Suffolk.

Greenomyia mongolica Warburg Reserve (SU715879), Oxfordshire, 1 male, 26.vii.2014 (I. Perry); Sandhills Wood, Fleet Pond (SU8255), Hampshire, 9.ix.2014, 1 male swept from heather (P.J. Chandler); Morning Springs Wood (SK495492), Nottinghamshire, 16.x.2014, 1 male and 1 female at ivy *Hedera helix* flowers (P.J. Chandler); Peterborough, garden (V.C. Northamptonshire), 2014 (A.E. Stubbs); Ferry Meadows (W side of Peterborough: V.C. Huntingdonshire), 2014 (A.E. Stubbs).

Records of this species are still relatively few but it is clearly now widespread. This very distinctive gnat was first found in Britain in 2006 by Graham Collins. Evidently a recent arrival; first described from Mongolia, it has spread across most of Europe in recent decades. I found it numerous on hogweed *Heracleum* flowers in rides of a conifer plantation at Stock Hill Forest, Somerset on 25 July 2010, but didn't see it again until 2014, when the above records were made from Hants and Notts (exhibited at the BENHS Exhibition and the DF AGM in Carlisle).

It was known from 7 hectads when a map was published in Newsletter 4 (Spring 2010). It has since been recorded from at least a further 14 hectads, with the most northerly record in Lincolnshire (SK876645, 26 December 2011, Janet Rowley) and 6 records are from houses or gardens. Decayed wood, and compost containing fungal mycelium, are probably the main development sites. Adults are often recorded as flower visitors and a wide range of flowers appears to be visited. The wide

scatter of records and occurrence in several entomologists' gardens suggest that it may well be found anywhere in S England.

Manota unifurcata Betchworth (TQ2152), Surrey, flight interception trap by fallen ash, 10.vii.2014, 1 female (S. Dodd); Coedydd Aber (SH6671), N Wales, 1 male (C.M. Drake).

This species was discussed in some detail in the previous newsletter, with reports of new records from Oxwich Wood and Aston Rowant, including a distribution map showing that it is known from scattered records in S England north to Cambs, and in S Wales. It was mentioned that it is possibly too secretive in behaviour to be detected more frequently. The new record from N Wales is thus a significant extension to its range.

Mycetophila lastovkai The distribution of *M. lastovkai* was summarised by Alexander (2014), indicating a recent increase in records and an easterly spread from its previously mainly south-western distribution. Records from Bushy Park (2012-2013) and Windsor Forest (2014, see above) were cited. Since that was written I have also recorded it at Coldstream Wood, Fleet Pond, Hants (SU8254, 2 males, 1.x) and Ivan Perry has found it at the Warburg Reserve, Oxfordshire (see above), supporting this trend. Also Roger Morris found it at Loamhole Dingle (SJ6605), Shropshire on 20 June 2014.

Mycetophila lubomirskii Linn of Tummel (NN911606), 13.ix.2014, male in wooded ravine (I. Perry).

This was recorded as new to Scotland from a specimen collected at the same site by Ivan on 15 July 2013. The previous most northerly record was from Sherwood Forest (Pittance Park in Edwinstowe Center Parcs, 13.vii.2008, D. Gibbs). It otherwise has a scattered distribution in SE England with 10 hectads recorded by 2011 (see above regarding records from Windsor). Jakovlev (2011) reared it from rotten spruce logs bearing the fungi *Steccherinum luteoalbum* and *Asterodon ferruginosus*.

Mycetophila sublunata Flitwick Moor NR (TL046352), Bedfordshire, 30.ix.2014, 1 male (I. Perry); Warburg Reserve, Oxfordshire (SU715879), 1 male, 19.x.2014 (I. Perry); Wytch Heath (SY9784-5), Dorset, 16.v.2014, 5 males (P.J. Chandler); Arne (SY9787-8), Dorset, 18.v.2014, 1 male (P.J. Chandler).

Three records from Surrey in autumn 2013 were the first records since it was added to the British list from 5 sites in 2011. The 2014 records from several sites, including the Warburg Reserve where it was recorded in 2011, confirm that it is now well established in England.

Phronia portschinskyi Flitwick Moor NR (TL046352), Bedfordshire, 15.ix.2014, 4 males in wet alder carr (I. Perry).

It was reported last year as obtained from the same site by Ivan on 6.x.2013. Previous British records are from wetlands in Wales and East Anglia.

Rymosia affinis Warburg Reserve, Oxfordshire (SU715879), 4.x and 19.x.2014, males swept over leaf litter in beech woodland (I. Perry).

Ivan's previous records of *R. affinis* from this site in 2011, 2012 and 2013 were the first in Britain since 1980 (see Newsletter 6, p. 2 and Newsletter 7, p. 6).

Sciophila nigronitida Isle of Grain (TQ 877756), East Kent, Malaise trap (M. Ashby, T. Bantock and C.W. Plant); Lynford Water (TL826948), Norfolk, males on five visits, 15.iv, 12.vi, 23.vi, 7.vii and 14.viii.2014 (I. Perry).

On Ivan's first visit to Lynford Water large numbers were found amongst gorse and broom bushes that are invading the grassland areas of this site. On subsequent visits only a few were seen. No females were noted on any occasion. Ivan notes that the habitat was similar to his previous find of the species at Cavenham Heath, Suffolk in 1994. It is widely distributed in Britain, but very local (with these new records it is now known from 30 hectads, of which 12 post are 1990, with none in common with pre 1990 records), and the larval biology is unknown. Some sites are broad-leaved woodland, but it is also found on open bogs, and there is a record from Gannet's Combe, Lundy Island.

Sciophila plurisetosa Loch Morlich, pine woodland on shore (NH9608), 5.vi.2014, 1 male (P.J. Chandler).

As pointed out by Alexander (2014), the rearing record from Holne Wood NNR, Devon, attributed to this species by Chandler (1987) and Falk & Chandler (2005), has been found to correctly refer to *S. baltica*. Consequently the only previously confirmed British records are from Keith Porter's Malaise trap at Wychwood, Oxfordshire in 1989, and three old ones from Scotland (Kilmun, Argyllshire 1911; Nethy Bridge 1914; Arran 1919). It has been reared abroad from *Auricularia auricula-judae*.

Acknowledgements

I thank all those who have provided records and specimens for examination, and in particular Keith Alexander, Scotty Dodd, Martin Drake, Chris Dutton, Andrew Halstead, Geoff Hancock, Roger Morris, Ivan Perry, Chris Spilling, Alan Stubbs, and Rob Wolton for the opportunity to include their records here. I am grateful to Vladimir Blagoderov for providing the photographs of the genitalia of *Mycetophila stylata* and *M. stylatiformis*, and to Erica McAlister for the photograph of *Macrocera propleuralis*.

I am indebted to Colin Gray and Rachel Jones for enabling me to begin surveys at Fleet Pond, for providing copies of the previous survey reports for the Reserve and other information about the Reserve.

I thank Natural England and the Crown Estates for permission to survey Windsor Forest. I am also grateful to Helen Roy and Bjorn Beckmann for supplying me with the archived data on Diptera from Windsor Forest and Great Park.

I also continue to benefit from the cooperation of the Royal Parks ecologists in my visits to Bushy Park, and thank Julia Clark and Samantha Wilkinson for enabling me to attend a fungus foray there on 8 November.

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Peter Chandler

Cranefly News

Dipterists Forum Cranefly Recording Scheme
For Superfamily Tipuloidea & Families Ptychopteridae & Trichoceridae

Newsletter No 29 **Spring 2015**

Editor: **John Kramer**
Sub-editor: John Dobson

Tipula trifascingulata (non-UK sp.) (John Kramer)

Workshops in 2014

There were four Cranefly Recording Scheme workshops in 2014; at BENHS, Dinton Pastures, 22-23 March; at Pitsford, Northants, 25 May; at Yarner Wood, Devon 6-7 Sept; and with the Sorby Naturalists at Wardlow, Derbyshire on 27th September. We were able to do some fieldwork at Pitsford and at Yarner Wood.

Examining specimens at Yarner Wood, Devon
(L-R: *Dave Boyce, John Kramer and Rob Wolton*)

Recording

Thanks to recorders who sent in some interesting records during 2014. Martin Drake sent 880 records which included *Nephrotoma quadristriata* from Anglesey; *Tipula selene*, *T. pierrei*, *T. pruinosa* and a number of other Notable and RDB species. Phil Brighton sent nearly 500 records from his patch in Cheshire and South Lancashire, recording *Nephrotoma crocata* and *N. dorsalis* as well as the rare *Neolimnophila carteri* and *Molophilus bihamatus*. Both Martin and Phil sent in a good list of Trichoceridae and Ptychopteridae. Richard Dickson sent in an interesting list from South Hampshire, which included a specimen of *Geranomyia bezzii* from Fareham. The specimen was caught in a light trap situated about 200 yards from the upper tidal limit of the Wallington estuary. He also recorded *Tanyptera nigricornis* and *Tipula alpium*.

Any remaining records would be gratefully received.

John Kramer

Craneflies and Ecology

In the previous edition Alan Stubbs, with reference to our Caernarvonshire field meeting, referred to the paper published by Barnes in the Journal of Ecology 13, in 1926. Titled 'The ecological distribution of adult craneflies in Carnarvonshire ', it was perhaps the first paper on the ecology of British Craneflies. Barnes worked in the Entomology Lab. at Bangor University.

He listed 16 different habitat types. Some of them like Coniferous Woods (4), Peat areas (13), Open mountain (a) bracken areas (8), are relatively uniform. However, type 1 was 'The immediate neighbourhood of lakes, streams and rivers ....' and each of these has a different range of environmental factors and consequently a different community of insects associated with it. Today we might want to separate out species found in each one of those type 1 habitats and even sub-divide according to the surrounding vegetation. Absence of a species may well correlate with the lack of a key habitat requirement.

In addition to features of the macrohabitat such as geology, soil type and plant cover, it is worth recording the wetness of the soil, the degree of shade, and the rate of flow of any water mass. Adult flies may disperse and so their presence may be misleading, but often they lay eggs near to where they emerged and indicate the habitat requirements of their larvae. This is indicated by both of the reports above.

Once larvae are found, some can be allowed to develop and others dissected to reveal the gut contents; this may reveal more detail about their ecological niche and the role they play in the soil community. High-resolution food webs can also be constructed.

John Kramer

Contents

Field Work Reports

Craneflies in Moth Traps at Pitsford Water, 2013-2014

Pitsford Water Nature Reserve is managed by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire in Northamptonshire. The staff and volunteers run two MV moth traps throughout the year. Although the traps are set up to monitor moth presence at the site, there is a by-catch of other insects, including diptera. Amongst the diptera, craneflies form a significant component and this article summarises the findings over the past two years. The results cannot be claimed to represent all species occurring as the by-catch is not always collected by the volunteers, although the rate is improving. When collecting is carried out both traps are collected so comparisons between traps are feasible. However the collecting effort between years is different so comparisons cannot be made over time.

The two traps are placed within 100m of each other but in different biomes. Trap 1 is on the shore of the reservoir. To the North and West there is a substantial area of open water, making the trap visible from at least 1km away.

John Showers

Trap 1: Shore of the Reservoir

The extent of the draw-down is dependent on local Summer rainfall but also on topping up with pumped-in water by Anglian Water.

On the landward side is a grassy ride backed by mixed plantation woodland with dense bramble understory. The woodland was planted in the mid-1950s when the reservoir was constructed and forms a significant part of the site's land.

Continued.

John Showers

Trap 2: Woodland Clearing

Table showing numbers of cranefly species recorded at each MV trap in 2013 and 2014.

TIPULIDAE	2013 Trap 1	2014 Trap 1	2013 Trap 2	2014 Trap 2
Nephrotoma appendiculata	1	1	1	1
N. flavescens	25	2	2	
N. quadrifaria	2		4	1
Tipula fascipennis		1		
T. lateralis	5			
T. lunata	1		1	
T. obsoleta	3	7		
T. oleracea	9	3	2	1
T. pagana	1	2		
T. paludosa	3	3		
T. scripta			1	
T. subcunctans		1		
T. vittata		1		

LIMONIIDAE	2013 Trap 1	2014 Trap 1	2013 Trap 2	2014 Trap 2
Austrolimnophila ochracea	1			
Helius pallirostris		1		
Limonia nubeculosa				1
Molophilus appendiculatus		1		
Ormosia nodulosa			2	3
Phylidorea ferruginea	2	2		
Pilaria discicollis			1	
P. fuscipennis			1	
Rhipidia maculata	1			2
Symplecta stictica	1			
Trimicra pilipes		3		2

The shoreline consists of some areas of bare mud with other areas of dense reed and reed sweet grass. In late Summer/Autumn there can be a significant draw-down zone of mud populated by opportunistic plants, including mudwort (*Limosella aquatica*).

Trap 2 is situated further inland in a woodland clearing with little exposure to open countryside. The woodland is again mixed Scots Pine with Oak, Ash, Sycamore and Poplar nearby. Table 1 shows the numbers of species recorded at each trap in 2013 and 2014.

After only two years of intermittent recording it is too early to say whether there is a significant difference between the two traps. 19 species were recorded from Trap 1, and 12 species from Trap 2. This could be due to the greater visibility of Trap 1 but also to the wetter and more diverse surrounding habitats. Recording will continue in 2015.

I hope this short note will encourage other dipterists to contact local moth trappers about collecting the Diptera by-catch.

My thanks go to Sarah Gibbs, Senior Reserve Officer and Mischa Furfaro, Reserve Officer for supporting the recording of diptera at the site and to Mischa and the various volunteers who collected craneflies whilst checking the moth traps.

John Showers

Pitfall-trapping - a very productive collecting method for moorland crane flies

During 2013 and 2014 the author was contracted by Natural England to carry out a sample survey of invertebrates across the West Penwith Moors of West Cornwall. Standardised sampling techniques were to be applied to predetermined sampling stations, the sites having been selected by David Heaver in consultation with Andrew McDouall. The techniques are detailed in Drake et al (2007 Natural England Research Report NERR005) and included pitfall trapping, sweep-netting and suction sampling. The objective was to collect standardised data on the species presence and abundance which can then be repeated periodically and provide an evidence base for monitoring. In reality, sweep-netting proved difficult to apply due to strong winds for part of the survey periods and was replaced by beating where feasible.

Although only a restricted range of crane fly species were found and the numbers taken are also relatively low, the data does provide some intriguing pointers. The most striking feature of the data set is the value of pitfall trapping for moorland crane flies, in comparison with more typical sweep-netting. The largest catches by far were from the lines of pitfall traps, and three limoniid species were detected solely by this methodology. I have never considered pitfall trapping as a useful technique for crane flies previously and I suspect that few readers will have either, so this is a very significant conclusion. In exposed moorland situations crane fly activity might be expected to keep low in order to avoid being swept away; also female activity will necessarily be low while seeking oviposition sites. The latter does seem to be the most likely explanation however as gross male numbers in pitfall traps were broadly comparable with those taken by sweep-netting – see table below:

Species	Pitfalls		Sweeping		Beating		Suction		Most productive
	f	m	f	m	f	m	f	m	
Dicranophragma nemorale	1								Pitfalls
Euphylidorea meigenii	1		1						
Limonia dilutior	7	1							Pitfalls
Molophilus occultus				1				1	
Phylidorea fulvonervosa			1	2					Sweeping
Pilaria discicollis	1								Pitfalls
Tipula confusa	1	1		4					Sweeping
T. fulvipennis			1	1					Sweeping
T. melanoceros	3	11	2	10				1	Pitfalls
T. oleracea				1					Sweeping
T. paludosa	81	21	3	7	1	1			Pitfalls
Totals by gender	**95**	**34**	**8**	**26**	**1**	**1**	**0**	**2**	
Grand Totals	**129**		**34**		**2**		**2**		

Table showing cranefly catches using various techniques

Of course one needs to bear in mind that the numbers across the various techniques are not directly comparable as the sampling effort varies considerably – the lines of 9 pitfalls each on the 26 sampled sites were operating 24 hours for seven days, whereas sweep-netting and suction sampling were carried-out over about 30 minute periods during the warmer part of single days. The catches were also dominated by a single common species. The data is really only worth printing here to emphasise the curious pitfall-trapping results.

Keith Alexander

Species Notes

A new Species of limoniid cranefly, *Pilaria nigropunctata* (Agrell,1945) added to British List

In Dipterists Digest 2014, Vol. 21 No. 2 184-88, there is an important paper by Martin Drake and Alan Stubbs: '*Pilaria nigropunctata* (Agrell) (Diptera, Limoniidae) in Britain.' It reports the addition to the British list of this species, with drawings of identifying features and details of its locations and habitat.

John Kramer

Photo (right): ***P. nigropunctata*** – Aedeageal Complex

John Kramer

New Papers in Dipterists Digest

A number of interesting papers relating to Craneflies have appeared in the Dipterists Digest during 2014.

In Vol. 21 No. 1 there were:

- Ian Sims: *Ctenophora ornata* Meigen (Diptera, Tipulidae) at Jealott's Hill, Berkshire.
- G. H. Green: Old traditional apple orchards as a development habitat for *Ctenophora pectinicornis* (Linnaeus) (Diptera, Tipulidae) in Worcestershire.
- David Heaver: Further observations on the ecology of *Ellipteroides alboscutellatus* (von Roser) (Diptera, Limoniidae) in England and Wales.
- John Kramer: A second record of *Tipula (Pterelachisus) trifascingulata* (Diptera, Tipulidae) Theowald in France.

The paper by Rob. Wolton *et al* on the Diversity of Diptera associated with a British hedge contained many references to craneflies. 70 species were recorded, including 26 species captured by simple emergence traps over soil. Seven of these species belong to the genus *Molophilus*, which gives some indication of the importance of this genus in the soil community.

In addition, the report of the 2013 Dipterists Day Exhibits contained many interesting records including *Tipula truncorum* from Sandwell Valley near West Bromich. A total of 58 species of craneflies were recorded from Sot's Hole Local Nature Reserve in the Sandwell Valley (SP011923) by Mick Bloxham. There was also another display of interesting craneflies from Birmingham and the Black Country where a number of larvae were found by S. Falk and S. Lane. These included larvae of *Dicranomyia lucida*, in a rich mud seepage, the aquatic larvae of *Dicranota bimaculata* in stream beds and margins, and of *Metalimnobia bifasciata*, found in fungi in open woodland.

Martin Drake and Alan Stubbs's article (Vol. 21 (2)) *'Pilaria nigropunctata* (Agrell) (Diptera, Limoniidae) in Britain.' is discussed separately at the top of the page.

John Kramer

A New Fennoscandian Limoniid

Jukka Salmela in Finland has described a new species in the genus *Dicranomyia*, subgenus *Idiopyga.* Follow the link to read the very impressive paper. http://bdj.pensoft.net/articles.php?id=4238

John Kramer

Pedicia (*Crunobia*) *littoralis*

Andrew Cunningham

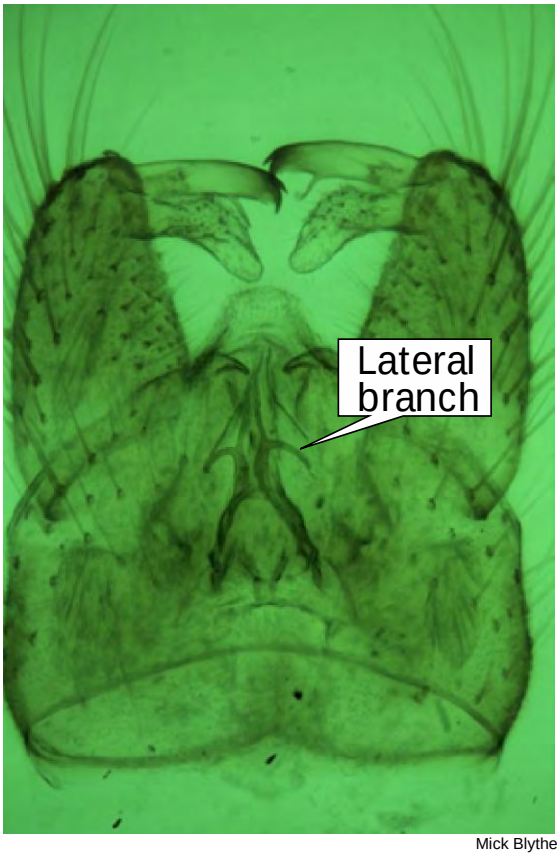
This photo was sent to me by Andrew Cunningham, The specimen was captured from the margin of a small river in North Devon. I have never seen a specimen of *P. littoralis* with such short wings and, without any indication of scale, it has the proportions of a mycetophilid.

John Kramer

The Genus *Paradelphomyia*

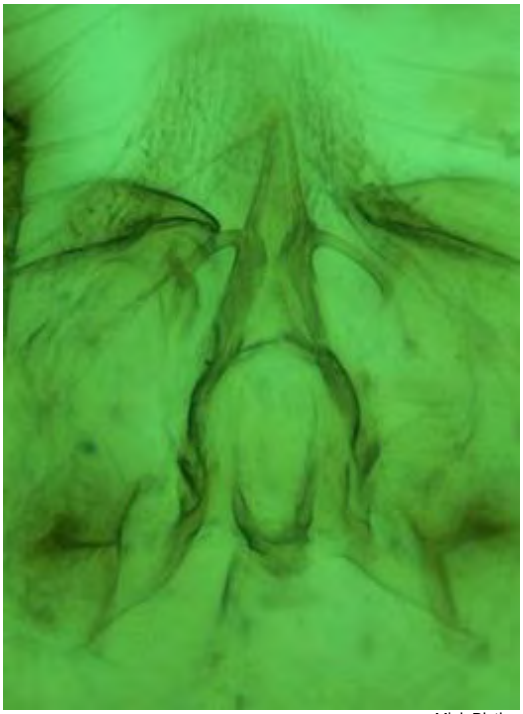
Small limnophiline craneflies belonging to the genus *Paradelphomyia* are relatively easy to identify due to the dark pleural stripe and hairs on the wings. Identification to species level however has been more problematic, especially for the rarer ones.

Problems with the identification of *Paradelphomyia dalei* (Edwards, 1939) have been caused mainly by lack of illustrations. Firstly, the genital apodeme is similar to that of *P. ecalcarata*. Edwards (1939) writes: 'A small species resembling *O. ecalcaratus* Edw (*P. ecalcarata)* in [....] the presence of a pair of sharp-pointed processes extending laterally about the middle of the ventral fork of the male hypopygium. (See photos on p. 5).



Mick Blythe

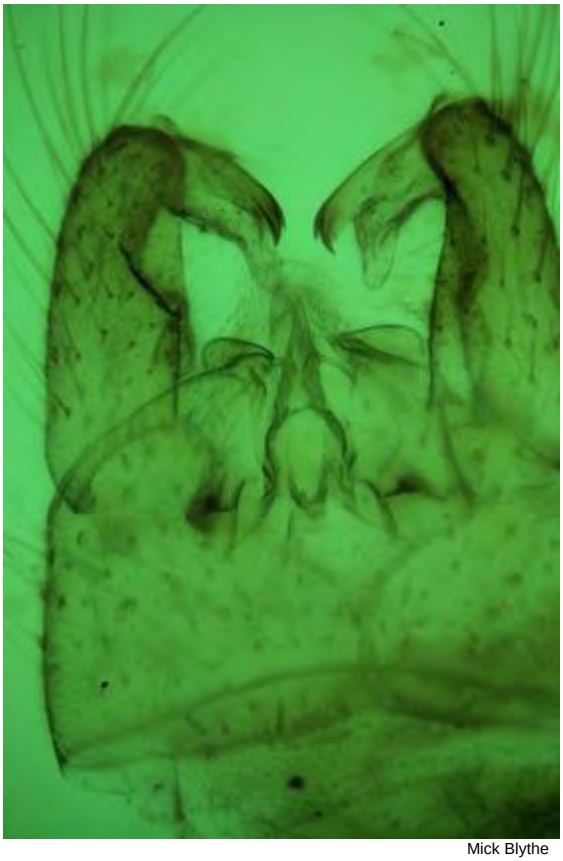
Photo 1: *P. ecalcarata* Edwards
Ventral view to show the genital apodeme.



Mick Blythe

Photo 3: *P. dalei* Edwards
Magnified view of genital apodeme (ventral).

Apodemes are internal skeletal components, and the genital apodemes are involved in the function of the genital muscles which are attached to them. In the males this has to do with the expulsion of sperm from the sperm sac during copulation. In females, the genetic apodemes, or genetic plates, have to do with egg-laying and perhaps with the transfer of stored sperm from spermatheca to eggs.



Mick Blythe

Photo 2: *P. dalei* Edwards
Ventral View to show the genital apodeme.

NB. These fine lateral branches can be missed with poor lighting, poor resolution, or a poor specimen. Since the genital apodemes are so similar, how can we distinguish *P. dalei* and *P. ecalcarata*?

Edwards lists a number of ways:

1. The top of the thorax (prescutum) of *P. dalei* has four darker longitudinal stripes when viewed from above, more obvious in life.
2. Hairs on wings almost confined to the part beyond the discal cell. None in the discal cell or basal cells of *P. dalei*.
3. Hypopygium differing from *P. ecalcarata* chiefly in the length of the penis, which in *P. dalei,* is almost twice as long as the ventral fork, and bent instead of straight.

Criterion 2 has been found not to hold true since hairs have been found in the discal cells of specimens with prescutal stripes and the *dalei*-type genital apodeme.

So two features are needed; if you have a *Paradelphomyia* with 4 prescutal stripes and a genital apodeme with lateral processes, call it *dalei*.

Preserving specimens of *Paradelphomyia* in ethanol causes contraction of the thoracic muscles so that a pale median line of transparent cuticle appears down the thoracic dorsum. This is an artefact and not useful for identification. It is hoped to present a paper on the Genus *Paradelphomyia* in the next Dipterists Digest.

John Kramer

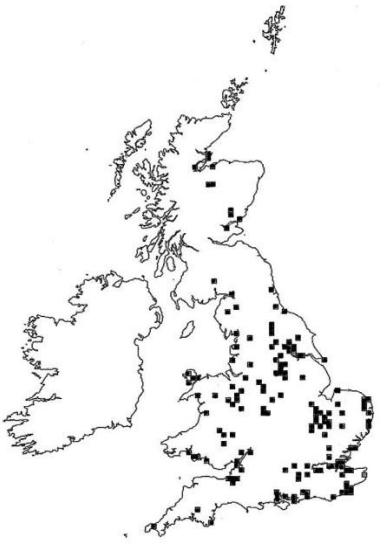
Next Copy Deadline
The author's deadline for the Autumn 2015, issue 30, of Cranefly News is **17 July 2015**

Distribution Maps for Species discussed in Cranefly News 29, Spring 2015 *© NBN*

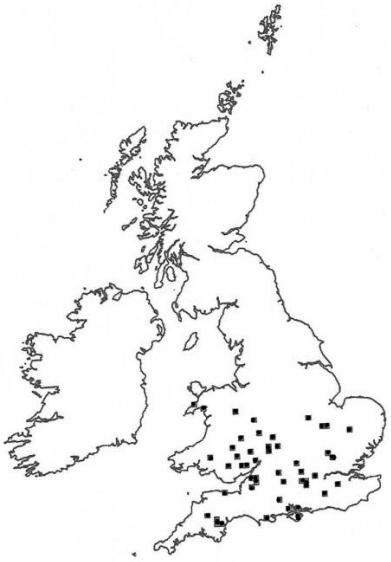
Distribution maps of the following species appear in earlier editions of Cranefly News:
Neolimnophila carteri (**27**, Spring 2014), *Nephrotoma quadristriata* & *Molophilus bihamatus* (**28**, Autumn 2014).
No map is available for *Pilaria nigropunctata.*

Nephrotoma crocata

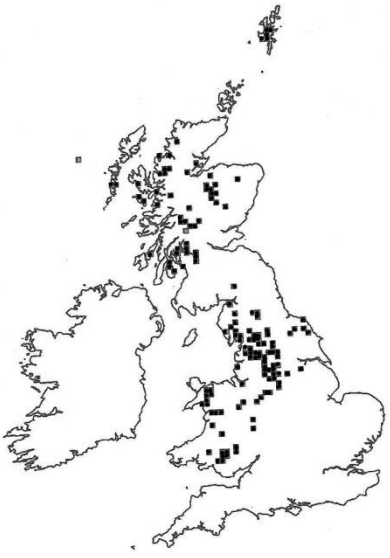
Nephrotoma dorsalis,



Tipula pierrei



Tipula selene



Tipula alpium

Gonomyia bezzii

County Recorders

Scotland

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

Ireland

- CEDAR (Ulster Museum)

North West England

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

Wales

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

West Midlands

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

South West England

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

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

North East England

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

East Midlands

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

East of England

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

Greater London

- Greenspace Information for G. L.

South East England

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

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

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

Darwyn Sumner

Dipterists Forum

ALERC Association of Local Environmental Records Centres

Recording Schemes & Study Groups

Sciomyzidae - Snail-killing Flies

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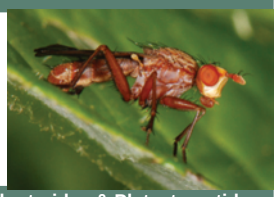

Conopidae, Lonchopteridae, Ulidiidae, Pallopteridae & Platystomatidae

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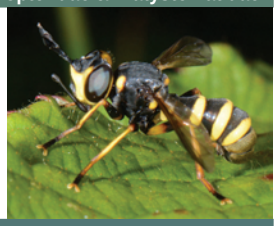

Tachinid

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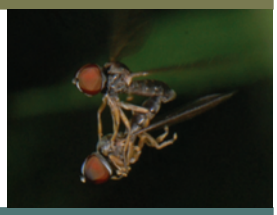

Anthomyiidae

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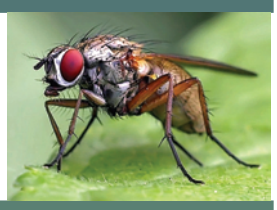

Scathophagidae

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Website http://scathophagidae.myspecies.info/

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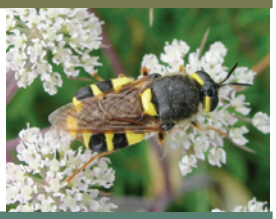

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Dixidae & Thaumaleidae

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

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

iRecord