

# Dipterists Forum

Bulletin No. 94

Autumn 2022







# Bulletin No. 94

#### **Autumn 2022**

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Deposits for DF organised field meetings to be sent to the Treasurer

#### **Conservation**

Mark Welch m.welch@nhm.ac.uk

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Erica McAlister e.mcalister@nhm.ac.uk

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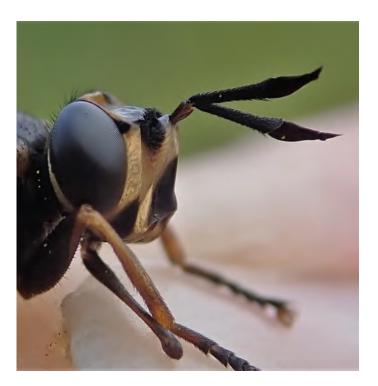
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John Showers Showersjohn@gmail.com

to whom all enquiries regarding delivery of this Bulletin should be addressed



#### **Meetings**

Please use the Booking Form downloadable from our website

#### **Field Meetings**

Now organised by several different contributors, contact the Secretary.

#### **Workshops & Indoor Meetings Organiser**

Zoe Adams zoeadams@warpmail.net

#### **Bulletin contributions**

Please refer to guide notes online (or in Bulletins) for details of how to contribute. Send your material to **both** of the following, with the word "Bulletin" in the title.

#### **Dipterists Bulletin Editor**

Darwyn Sumner Darwyn.sumner@ntlworld.com

#### **Assistant Editor**

Judy Webb judy.webb@virgin.net

# **Dipterists Digest contributions**

#### **Dipterists Digest Editor**

Peter Chandler chandgnats@aol.com

# **Recording Scheme Organisers**

Listed on the back page of this Bulletin

#### Website

Dipterist Forum Website www.dipterists.org.uk

#### **Website Manager**

Martin Harvey kitenetter@googlemail.com



Photographs: Front cover Chrysops ?relictus, Darwyn Sumner, above Conops strigatus, Ian Andrews

Images selected from our Dipterists Forum Flickr group. 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. Front cover must be upright (portrait) and have an aspect ratio of 6:7 (or be croppable to that ratio)





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# Bulletin 94 links https://tinyurl.com/2p8cm6z6

includes an interactive pdf Recording Scheme brochure; the back pages of this Bulletin **Recording Schemes iNaturalistUK** https://tinyurl.com/yrd28des

iNaturalistUK projects to many Diptera Recording Schemes

Copies of this Bulletin are mailed to Dipterists Forum members. A PDF version is available on our website (members only.)

Back issues may be obtained at www.micropezids.myspecies.info/node/301 where guide notes for potential Bulletin contributors may also be found.

Online membership is now available on our website www.dipterists.org.uk/, alternatively a membership form may be downloaded from there.

Other items such as full details of training courses, workshops and meetings may also be obtained from our website.

# **Editorial**

### **Good Natured**

Roy Crossley, Dipterists Forum's first Chair, kindly complimented me on the Bulletin this time. He tells me it gets bigger and better by the year. That's a tough target; as long as I can continue to entice good writers, steer away from politics, find relevant stories and keep it all good-natured.

By the time April had arrived we'd one article from the irrepressible Donald Smith and three good news threads to unravel and provide context: biodiversity loss from New Scientist's Graham Lawton, the GCSE in Natural History from its proposer Mary Colwell and another book on Trespass from artist/writer Nick Hayes.

And so the Bulletin evolved, with many new books which will keep me occupied for some time, a few new tricks of the trade that readers might appreciate, progress with various conservation initiatives in which Dipterists Forum are involved and letters from two new members.

#### **Open Data - update figures**

Dipterists Forum's Open Data are publicly accessible species occurrence records that you'll readily find on NBN Atlas. Our data partner page is on their site at https://registry.nbnatlas.org/public/show/dp172 and where you'll find the number of datasets has risen from 17 to 21. Half of them are Recording Schemes and the other half are compilations from our Field Weeks. Two of the new ones are Recording Schemes, empty as I write but just awaiting transfer from iRecord.

There was a lot of activity there in 2021 and the records have again increased since the last Bulletin.



Dipterists Forum Open Data records increase on the DF NBN Atlas since 2020, 6 month intervals

This is all your work of course. Records sent to our Recording Schemes and through other systems are now playing their part in conservation & research and are available for you to play around with via NBN Atlas.

# **New image collection**

Bulletin editors have been collecting appropriate images for many years. I've got it pretty well organised in iMatch but have to say it's a whole mish-mash of material - as you'll see from all the images I've used in this Bulletin.

We've now got a **Dipterists Forum Flickr group** (https://tinyurl.com/y65ryktt) which anyone can take a look at and any Flickr user can link an image & caption to. As Paul Brock said when he linked some amazing images of *Xylomya maculata* and *Mallota cimbicoformis* to the group "*That sounds a good system - anything to make life simpler*". By the end of June when it had been up and running for a couple of weeks it only had fly pictures posted, by the time you read this who knows what will be on there, maybe some choice snaps from our field meetings too. Show your appreciation by "fave"ing the ones you like.

# **Biodiversity targets**

Readers have suggested to me that this Bulletin needs to continually present the news regarding Biodiversity Loss. Unlike some of the popular publications we don't have teams looking out for stories, we've just one or two, relying on our limited sources but more than happy to receive stories from our readers.

We've summarised the topic well in recent Bulletins but new readers may find the article written by Josh Davies of the Natural History Museum back in 2020 adequately filled with dire warnings. Titled "UK has 'led the world' in destroying the natural environment" you'll find this at https://tinyurl.com/2p94p4e4

Rob Walton tells me that the UK's "30 x 30" targets which intends to start to address those problems are actually commitments made by UK government back in 2020 (https://tinyurl.com/4xz826bt) so that's not new news either. However New Scientist's Graham Lawton took a look at these earlier this year (April 16 & 23 https://tinyurl.com/48bdnrv8). The targets were promises to protect 30% of UK land by 2030. Lawton brings us up to date with what is happening with these and worldwide targets (and gives me an excuse to do another version of the cartoon):



Taking aim at a whole new set of targets: Kunmig 2022

If you'll recall, biodiversity/habitat targets are set every 10 years and we were due to have another lot set in 2020 but those got delayed due to a pandemic affecting one of the at-risk species. They're going to get set later this year (November) in Kunmig (China)

Lawton reports that "extensive ecological restoration will have to be carried out in nations such as the UK that have little intact biodiversity left." Though UK government announcements were pretty upbeat, the perspective Lawton provides is rather less optimistic.

In order to protect biodiversity and all the benefits it provides to us it's reckoned that about 50% of the planet should be set aside for nature. Some studies cite a higher figure but none go lower than 30% - we in the UK are in the bottom 10% of nations and the worst in the G7 countries.

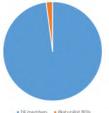
### **British Diptera Identifiers (BDI)**

The beady-eye (BDI)



Scattered throughout this Bulletin are several appeals, statistics, comments and stories regarding Diptera identification.

A high priority is our need for verifiers on iRecord and identifiers on iNaturalistUK (see chart.) Readers of this Bulletin have a wide range of identification skills and could usefully deploy them more widely in order to share their expertise with others.



Historically we have a strong tradition of support, from key-writing (see DF website) through workshops and courses to close help from Recording Schemes. Embracing recent technologies more extensively will draw new dipterists into our BDI circle by raising their confidence and skills.

An ideal testing ground for novices who think they know a bit (see p7) or wish to learn more (see Matt Vosper's letter) is via **Diptera projects on iNaturalistUK** (examples on the iNaturalist profile below.) You can have a stab at confirming someone else's best guess there by the simple press of a button, indeed two schemes do just that, Matt Smith (Tachinidae) and Barry Warrington (Agromyzidae) have each identified thousands of fly pictures posted by others with no need to post any of their own. It is possible though to add images/records of your own without having to type a single letter (see p23.)

We have two verification systems available to us in the UK. The panel of verifiers on iRecord essentially belong to an *academic* system. Takeup is patchy (see list in Bulletin 93), the figure of 40% verified records from our Stirling field week perhaps gives some indication. Recording Scheme organisers also belong to this group, managing their collated data to a high level of quality control. The second is a *citizen-science* methodology as used in iNaturalist. Comparisons of the two systems are extensively discussed on the iNaturalist and other forums.

The lower stringence of the iNaturalist verification system could be considered a strength - it means you can do little or no harm but your simple button press will allow the work of others such as the organisers of Recording Schemes, to pass along the trail. Firstly to iRecord where they are scrutinised again by various experts (see our verifier list in the last Bulletin, updated on p13) who will add them (or not!) to BRC's systems and thence to the growing list of Open Data records on NBN Atlas which are so valuable for conservation research.

All iRecord verifiers also get to process records bunged on iNaturalist too. But only the ones that have been raised to ResearchGrade (i.e. the ID has been checked there.) Scheme organisers will find it useful to check iNaturalist records before an iRecord verification session - as it would appear Matt and Barry do.

So do sign up to either system if you've any level of identification ability, you'll need a thumbs up from the Scheme organiser for iRecord but not for iNaturalist. It's not just quality control, it's also a fascinating way to find out what's being discovered in your own area of interest. Become a BDI.

Darwyn Sumner (https://www.inaturalist.org/people/202372)

Rather than responding to a planetary emergency, the Museum is tragically descending into irrelevance [Nagg, 2022] see Reviews

# **Dipterists Digest & Bulletins**

#### - free to good homes

I have been storing the accumulating mountain of past issues of Dipterists Digest and the Bulletin for years. As DF moves towards open access and almost everything can be downloaded from the website, there is no need to keep this pile of old paper. The Committee has agreed that just a small number of each issue is retained for those who ask for them. But before I take the excess to recycling, would anyone be interested in runs of old issues, for the cost of postage? These include most Digests from 2003 to 2019 (after that date, DF charges, as stated on the website) and a miscellany of Bulletins. Please let me know but don't wait too long as I'm looking forward to seeing the wall that they have covered up for 8 years.

I am very pleased to announce that Anthony Bainbridge has taken on the job of posting the journals and bulletins that go out between the major mailings. Anthony now keeps the reduced stock of past issues, and he is the person to contact should you want them after my paper mountain has been recycled (DG Second Series only and Bulletin).

Martin Drake martindrake2@gmail.com [cf Anthony F. Bainbridge afbainbridge@gmail.com]

#### **Videos**

The most desired outcome for budding film producers seems to be a Youtube video. Gather several of them together and they can be arranged onto a Youtube channel.

**Tanyptera project** (https://tinyurl.com/2p8rnx4d): A most pleasantly organised channel, with their presentations split into categories. A particular favourite of mine is the one on Lancashire & Cheshire dragonflies by Tony Parker as I used to organise that recording scheme with Dick Askew back in my Manchester Entomological Society days.

**North American Dipterists** (https://tinyurl.com/2h2vc8ub): Only six so far, there's a delightful one on the peacock fly and other photogenic diptera.

**Dipterists Forum** (https://tinyurl.com/mj2sp8fk): Whilst many arise from talks at our AGM there are two recent presentations of great interest: instructions on how to modify a hand held vacuum for use in the field and details of Syrphnet by Roger Morris, Ioannis Sofos & Andy Murdock. Explore these presentations for other good stuff like the Rhinophoridae Recording Scheme.

Victoria Burton set up and manages our DF Youtube channel.

#### **Guide to making Youtube videos**

There seems to be a wide range of different ways that people have set about doing this. People owning laptops and are regular Zoom users seem to have a head start on figuring it out whereas the desktop PC + monitor crew like myself struggle as they lack both microphone and video camera.

I read however that one can turn a Powerpoint presentation into a Youtube video and by the looks of some of the above examples that's how others have done it. There are numerous guides on the internet explaining how to do this. My attempt is in the Technology section.

# Other news

#### **New UK Beetle society**

Bringing together the interests of all the Coleoptera recording schemes, the new Coleopterists Society of Britain and Ireland (ColSoc) was formed earlier this year. Read about it on their website at <a href="https://www.coleoptera.org.uk/news/colsoc-new-beetle-society-launched Register your interest there to get news of their planned field meetings.">https://www.coleoptera.org.uk/news/colsoc-new-beetle-society-launched Register your interest there to get news of their planned field meetings.</a>

# More than once

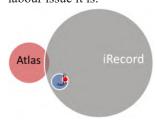
The recorder: I met a fellow entomologist on a site in Leicestershire recently. He'd been studying the coleoptera there for some time, even got a number of traps there. I mentioned my Longhorn record from the previous set up, I couldn't remember its name so naturally he couldn't say if he'd already got it on his site list (Stictoleptura scutellata as it turns out.) Bless me I found another one this year at the same site (Stenocorus meridianus.) I put them both on iNaturalist within days of snapping them as all I have is pictures. So the puzzle is, how do these records make their way to his list? Pretty soon after I'd uploaded them to iNaturalist they'd been confirmed by one or more people who I presume know what they're talking about, in which case they've joined the iRecord queue awaiting verification by some Coleoptera expert. I've little clue as to the mechanisms they've got in place to do that, what little I know is from meeting the organisers of the Longhorn Recording Scheme, Wil Heeney & Katy Potts a few times (https:/ /www.coleoptera.org.uk/recording-schemes)

Maybe they've set themselves up as verifiers on iRecord and are sending them through to NBN Atlas the same as several of our Diptera Recording Schemes do.

As a photographer there's no point in submitting the record more than once, adding iSpot, iRecord and Naturespot to the task would simply be duplication of effort - and certainly more effort than the simple drag and drop system that iNaturalist employs. It also uses AI to make a good stab at an ID - great for groups you are not familiar with (frequently erroneus though.)

The verifier: At the other end of the chain sit the verifiers. When iRecord announced that they were about to take on the iNaturalist I asked them, through their "Forum"\*, what the consequences would be for verifiers, outlining a possible situation where a verifier might end up performing the same task several times. By a bit of contrivance I got the answer to 5 times but once iNaturalist came live it reassuringly dropped to a maximum of 3 if the same record were submitted twice (first on iRecord, second on iNaturalist and thus a further once on iRecord to let that one through.) A record only needs be verified twice if just iNaturalist is used, one time there to achieve ResearchGrade and one time on iRecord - which uses a much more stringent set of rules.

Ironically the question of labour costs to verifiers in the case of records being submitted twice (once through each system) was then asked of **me**. A Venn diagram should show how much of a labour issue it is:



A poor Venn diagram using Excel. It shows the scale of the issue though. These are the figures for the Sciomyzidae records in 2021. A big backlog on iRecord for verifiers to work through - they should then pass onto the Atlas. Blue circle is all UK Scios on iNaturalist but only the tiny red dot are those queued up to go into the Atlas as they are the only ones which have been verified (29)

A tiny proportion of even these 29

may be duplicates of those sat on iRecord already. Scale the actual numbers up for other Recording Schemes (well, only those that verify) and I estimate that the time I spent fiddling about with that diagram on Excel far exceeds the total effort they will expend.

Verification video at https://micropezids.myspecies.info/node/339 As for duplicates appearing on NBN Atlas, Paula Lightfoot explained in 2014 that this was not a problem (Bulletin 81)

Darwyn Sumner

# **Copyright issues**

#### Open Data & copyright©

The University of Westminster have produced a very concise introduction to this topic at https://libguides.westminster.ac.uk/copyrightresearchers/opendata

The concept of copyright licensing of Open Data is discussed from their perspective as a publicly funded body. Such funding councils now mandate that this data is released openly. UK government policy¹ now mandates this, as in the first "Yes Minister" episode: *Open Government*.

Organisations in receipt of such funding are obliged therefore to actively seek to ensure that data they manage in any way conforms to a CC-BY licence, meaning you only need to acknowledge the original creator. That's the most wide open license of a suite of possible licenses known as Creative Commons licenses.

In practise, in our world of biological recording, the creators of such data may not be so keen to release it all in that way. The range of attitudes varies immensely, from recorders who would sooner destroy a lifetimes work than see it made public, through those concerned to ensure high levels of quality control, those who wish to protect sensitive sites, those with their own commercial interest & investment (photographers) to those who simply do not wish to see their efforts exploited by commercial interests.

A veritable minefield of potential conflict then, which has been extensively discussed over many years, particularly acute since the internet made dissemination of such data more feasible.

You'll come across these CC licenses all over the place, an example of the most stringent and protective of the creator being Flickr's standard "All rights reserved" as some photographers use this platform to earn their living. At the other end of the scale you'll find the UK Government<sup>1</sup> mandated "CC-BY" on, for example, BRC datasets and on NHM's Scratchpad default (where you may have to change it if you've negotiated the loan of a photograph or other image from its creator)

The middle ground is occupied by the "CC-BY-NC" license which simply specifies that use by commercial interests is not permitted (NC = non-commercial.) iNaturalist have that set as their default² so as to offer some protection to the images. This doesn't hinder legitimate use of the data but may offer some reassurance to creators that due care will be given to their material. Thus for example it's no hindrance to LERCs which are all **not-for-profit** (https://www.alerc.org.uk/), researchers and publishers of non-profit media such as this Bulletin. It's nice to ask though.

The NBNt have produced a guide: Guidance on the definition of non-commercial use at https://nbn.org.uk/news/guidance-definition-non-commercial-use/ (also see Bulletin 93 p6) if you want any further information about the "CC-BY-NC" license either as a potential user or a creator. It's the default used by many Recording Schemes, you'll find it as a little badge on NBN Atlas datasets, we trust that it's sufficient to reassure contributors that their efforts may not be exploited.

- 1. UK government don't see copyright as a "right", they see it as a "framework". Royal Photographic Society interpreted that as *legalised theft of digital artworks* See Bulletin 76, p12 + many other blogs, articles & petitions.
- NBNt are currently negotiating with iNaturalist to separate the record from the image in terms of copyright, reducing it from CC-BY-NC to CC-BY. They are also seeking to improve their tracking of data use in respect of commercial downloads of NC records.

Crede sed cave mustelis

Darwyn Sumner

GBIF Biodiversity Open Data Ambassador & ALERC Co. Sec. (ret.)

<sup>\*</sup>Functionality much reduced and most messages now redacted. Not a forum in the accepted sense.

# **Feedback**

A pen in a case is like a bird in a cage (R.P.Falconer)

I guess I'm as addicted as most people to feedback on the internet in the form of "reads". Social media afficionados will know more but the following areas stand out.

#### Youtube



You Videos get "views". I've not produced any yet but if you check out Dipterists Forum's Youtube channels you'll find some remarkably popular ones.

Notable is the Introduction to Hoverflies by Roger Morris & Stuart Ball with 652 views. It's 90 mins long so that's like getting a free book or a Netflix movie. They did it using Powerpoint (see guide.) For recorders keen on hoverflies you should also check out the Syrphboard video by Roger Morris, Ioannis Sofos and Andy Murdoch

#### ResearchGate



ResearchGate is something a few of us are familiar with. I've uploaded a handful of articles there in the form of "proofs". I've barely any citations - which are

the true scientific feedback but I get a fair number of "reads" and you get a congratulatory badge when particular numbers of reads are achieved. I'm fond of badges too.

That "Deadwood and Diptera" piece I did for the Bulletin in 2019 is on there for example, it's risen to 190 reads now. Interest is shown by some curious countries. My last weekly report from ResearchGate told me that the above article was read by folk from UK, Hong Kong, Serbia, Brazil, Colombia, Syria and Slovenia.

The rest of my material there is rather specific, of interest only to workers in taxa related to my Recording Scheme. Anyone uploading something of more broad interest and my numbers seem paltry. Steve Falk did something on Pollinators and got 1,000+ hits in a day.

Several other Dipterists Forum members upload to ResearchGate, making their papers Open Access. It's well worth browsing for diptera-related topics and of course if you're one of these authors with tales to tell, let us Bulletin editors have your stories.

#### Flickr

This is a picture site that gets you "views". I guess flickr your scores depend on how you use it. The free version lets you post up to 1,000 images and you can "follow" others and others can "follow" you. People use their site differently, Andrew Cunningham shoots scenes of expeditions and sends me a link to choose illustrations for the Bulletin, general naturalists just upload what they find, stackers like to upload their final images, recorders use it alongside iNaturalist (make sure to add your Flickr link on your iNaturalist profile) and collectors build albums (though albums are not viewed very much regardless of how extensive.) Build up a collection of images effectively and comprehensively and you might approach the popularity of Steve Falk's site.

"Nice" or "artistic" doesn't get stuff viewed, "rare" is slightly better especially if it's in a popular category, "popular location" works better than the subject of the image and "popular title" & popular tags work best of all.

Joining Flickr's groups seems to be the way to ensure your pictures are seen, a little like joining a club. More detail about this in our Photography section.

In addition to simple "views" viewers occasionally "fave" an image. Those are very much appreciated, thanks.

#### **iNaturalistUK**



An odd one to expect feedback from because it's to do with recording. The whole world gets to see the pictures you submit for identification however and confirmations can come in from just about

anywhere. If your submissions are in a particular group of diptera then it's possible to make contact with people of similar interests. I count 21 different diptera projects now, join those that interest you and you'll soon meet up with them if you post

An important aspect of this initiative concerns the support you provide. To an extent you get back what you put in. UK diptera identifiers are few in number but freely give of their knowledge. In the Diptera of Europe list, our top UK identifier is Sam Rees with 39,707 to his credit, followed by Matthew Vosper {32,696), Ian Andrews (20,034) and Chris Raper (15,965) - all in the top 10. I'm at a lowly 73<sup>rd</sup> position but getting close to my first 1,000. I only do the handful I know, perhaps you know a handful of diptera yourself, if so then we'd all appreciate your input.

#### Scratchpads



I installed a visitor widget with map on my "What's New" page a long time ago and it died so I forgot about it. Surprisingly it revived at the end of June telling me how many visits had been made to my site recently and showing where these

people were on a world map. Mostly UK of course and France I can understand, but Colombia? Maybe it'll have died again next time I open it up; 588 since April 2019 in case this is the only chance I get to write it down.

https://micropezids.myspecies.info/node/339

#### **Acknowledgements**



If you've been to the trouble of submitting records through various schemes and they end up as Open Data on NBN Atlas then sadly you're least likely to find your favoured group named in acknowledgements in published reports. "On the

NBN Atlas" might be the only sign, "Dipterists Forum" is a neat way of acknowledging all our Recording Schemes and expeditions. If a specific Scheme worked closely on such a report then you might be able to track your contributions back to that Scheme.

Rest assured that the effort you make in submitting all your records is valued and appreciated. Keep it up and keep supporting our Recording Schemes with your observations.

Free Clipart from Clipground at https://clipground.com/acknowledgement-clipart.html - thanks

Darwyn Sumner

#### Well bred lords & ladies

If you've an interest in rearing diptera then look out for any Arum maculatum (Jack in the pulpit, Cuckoo pint) tuber you could prudently dig up this winter. It featured in a BSBI paper:

Lack A.J. & Diaz A. 1991. The pollination of Arum maculatum L . - a historical review and new observations. Watsonia. 342: 333–342. (http://archive.bsbi.org.uk/Wats18p333.pdf)

on which Phil Withers was diptera consultant for the owl midge, Psychoda phalaenoides.

It's a fascinating account and because the plant producs a smell which attracts flies, there might be other saprophagous species associated with it. Rearing tips are to be found in our Diptera Handbook and larval descriptions in K.G.V. Smith's An introduction to the immature stages of British flies (hint: fig. 355)

# On first reading through Dipterists Digest

(with abject apologies to John Keats)

Much have I travailled in the realms of gold,
And many stunning gnats and dolis seen;
Round many Northern lands have I been,
Which flies in riches uncharted hold.
Oft of one learned tome had I been told,
That deep-browed Peter ruled as his demesne.

Yet never did I drink of its pure stream
Till given Dave Robertson's hoard of old.
Then felt I like some watcher of the flies
When a new species swims into his ken;
Or like Stubbs or Drake when with eagle eyes
They stared at pooter haul – and lesser men
Looked at each other with a wild surmise
Silent, upon a field in Drymen.

I have spent very little of my fly time in museums – slightly scared by the history and fragility of their collections as well as the overpowering physical embodiment of Dipteran diversity something I have still some way to go in grappling with. However, with the excuse of gathering records of kelp flies for the newly established Recording Scheme, I braved a trip in to the National Museums of Scotland collection Centre at Granton in Edinburgh. Let loose upon the cabinets by Ashleigh Whiffin, I met my first *Helcomyza ustulata* (Helcomyzidae) – a fearsome beast of sandy shores – as well as the more familiar kelp fly species I had already encountered.



Helcomyza ustulata [Steve Falk]

Just as I was leaving, Ashleigh asked if I would like to look through some Diptera-related duplicate books taking up valuable space in a cupboard. Disappointingly, most of the RES identification guides I had already – though a younger me would have gobbled them up. But next to them on the shelf was a broad swathe of the distinctive blue covers of Dipterists Digest, dating back to the very first issue of the first series. These had been given to the Museum by David Robertson's widow along with his fly collection and were mine if I could use them! I thought I possibly could ...

When I sorted them out at home, I found that they almost exactly complemented my own copies, with just the odd issue missing and a three volume gap from 2010 to 2012. That very night there began an ecstasy of fly-related reading, though I was careful not to overindulge, eking them out n strict order. I should say that pdfs of the First and Second series can be downloaded from the Dipterists Forum website (dipterists.org.uk/digest) — although I find it much more satisfying to read them in the flesh.

How I enjoyed seeing the Digest develop from its quirky beginnings (pooter improvements, an article in French, syrphs galore) to its current calm diversity and authoritativeness. Some articles were overwhelming in their scope – Peter Skidmore's accounts of flies of the Western Isles (15:99-194 (2008)), Robert Wolton's productive Devonshire hedge (21:1-36 (2014)), and Peter Chandler's patient enumeration of the diversity of Bushy Park (23:69-110 (2015)) and of Windsor Forest and Great Park (Supplement 28: 1-232 (2021)). I felt sparks of jealousy at those who found striking new species (and genera) such as Ian MacGowan's Okeniella caudata 22:1-3 (Scathophagidae, 2015)), Anthrax (Bombyliidae, 23:225-6 (2016)) and the very odd looking Cryptochetum iceryae (Cryptochetidae, 26:71-721 (2019)). Always of interest were accounts of past Dipterists - notably Ethel Pearce and her three volumes of "Typical Flies" (16:117-146 (2009)), Francis Jenkinson (14:49-73 (2007)), John Henry Wood and Colonel Yerbury (21 Supplement (2014)), as well as Alan Stubbs' history of the Diptera Recording Schemes (First series - 6:2-6 (1990)). I did not read every word of every issue, saving the descriptions of the many new species of agromyzids and chironomids for a time when I can make some sense of them. And I was thoroughly lost at some of the taxonomic contortions described - still having to get my head around the terminology. Yet once in a while there was a moment of recognition when I thought - hang on a minute – I know that fly! And then I understood a little more of the beast and its life.



Cryptochetum iceryae from the NHM [David Notton]

But most of all I enjoyed coming across one of the many short notes tucked into the spaces left on the page at the end of longer articles - a sweet treat after a hard read. There were reports of range expansion for species that have now made it up Scotland such as *Ditomyia fasciata*, (Ditomyiidae, 16:13 2009) and *Chetostoma curvinere* (Tephritidae, 5:107 (1998)), the long-missing *Piophila caesei* (Piophilidae) found in a Catford Stilton (12:169 (2005)), moments when flies did something unexpected and were meticulously observed doing it like the aggregation of *Sepsis fulgens* (Sepsidae, 27:229-30 (2020)) or columns of army worms (*Sciara militaris* (Sciaridae, 12: 21–27 (2005)), and rearings of odd species from eagle pellets (25:139-141 (2018)) and from toad (2:12 (1995)) and swan droppings (25:218 (2018)). Each snippet a gem – and a chance to relive second hand, that day, that place, that sweep of the net, that break in the weather and that careful eye that brought one of our number eye to eye with fly.

**Donald Smith** 

# The photo-dipterists

Getting to know our audience is an important step in furthering our Dipterists Forum objectives - and determining who we're addressing in this Bulletin. Not simply our membership list, it would be tricky to analyse the range of interests and techniques even in that small group, but the entire range of people who show even the mildest interest in Diptera.

Chris Raper gives us some idea of that huge range, observing that the vast majority of the 32,000+ annual diptera records on iNaturalist are just casual "what's this" enquiries. After an identification (maybe) there's a quick "ugh" and most move on, it's not the flood of interest that those figures might suggest.

They do however represent a key proportion of our engaged target audience, dipterists who focus on photography to pursue their interests. You'll find them too, posting images on iSpot, iRecord and Flickr (though that one doesn't record)

These photo-dipterists are themselves a varied bunch. They range from experts who balance net + pooter with camera (e.g. Steve Falk on Flickr) through experienced iNaturalist users (and iRecord verifiers) who do their best to ID from photographs alone to novices who hope to use their methods to develop field craft and pursue an interest in Diptera.

Roger Morris addressed this issue of identification from photographs alone in his British Wildlife article "Take nothing but photographs ... time for a reality check?" (Vol 32, No2, Nov 2020)<sup>1,2,3</sup> His approach there was to advocate the use of lethal collection methods in insect recording but it works equally the other way around - what do you miss if you only take photos. Briefly, photographers miss >1/3rd whilst collectors miss 1/10<sup>th</sup> add to that the estimate that <10% of Diptera can be identified from photographs alone. This can readily be checked by looking at the identification "doughnut" rings in the Stats section of any of our iNaturalistUK projects; between 10% & 40% reach Research Grade at best. Balanced against this may be that photographers, with their patient observation skills, may learn more about habitat, life history and behaviour than techniques such as mere sweeping. It's the development of those observation skills, field craft that takes time and experience.

Reading the books and keys and attending field meetings and workshops are useful background pursuits for the novice. Photography books are scarce, I've only ever found 2 that cover field craft at all - Thompson (Reviews) & Harnischmacher<sup>4</sup> though many of the modern guides use photography well and might even give tips.

Some of our Recording Schemes will also give tips on how to identify from photographs. It's not always straightforward, for example it may be necessary to photograph from peculiar angles - to attempt "depiction" rather than "art".



A poor photo but it took 20 shots to get this exact angle to show the darkening around the base of the arista. *Psila fimetaria* [D.Sumner]



Tetanocera punctifrons [Steve Falk]

Steve Falk has a number of such tips on his Flickr site (e.g. Sciomyzidae), Roger Morris covers hoverflies in great detail where it's feasible (e.g. see his latest piece on Eristalis in British Wildlife) and I did a couple of photograph guides to the Psilidae in my last Newsletter. Indeed the newsletters from all the Recording Schemes are worth collecting for that very reason. Look for them on our website.

#### From photo to specimen

Taking the plunge from taking just photos to grabbing the odd specimen or two needn't be expensive. The first thing you'll need is a net<sup>7</sup>. If your memory is fair then you can use Steve Falk's technique (see above) of holding the specimen in one hand and camera in the other. Clear plastic boxes<sup>9</sup> can be handy



Ctenophora pectinicornis by Chris Raper (from our Oxford iNat project)

Next would be a good hand lens, again with a fair memory you can identify a fly and let it go. No specimen or photo so you'd need a notebook. You'll now have to submit records via iRecord (or scheme organiser) as you've no photographic evidence for iNaturalist. Perhaps storing your own records in a biological recording application such as Recorder or MapMate or maybe just a simple spreadsheet.

Losing that photographic evidence will be a wrench as pictures contain the 4Ws (Who, What, Where, When), especially so if you've invested in a good organiser like iMatch<sup>10</sup> (the latest version of which now lets you geotag by dragging and dropping the thumbnail images onto a map)

The final step involves tubes, some form of killing agent and a home setup that lets you work on the corpse. If you take that

step then you're beginning to enter the realm of the collectors. Unless the specimens you take are few and your identification turnaround time is fast at home then you'll want to pin and save for future identification sessions. This leads into all sorts of equipment and techniques, from pins and storage boxes (I've seen a child's shrimp net, shirt pins, polystyrene foam + shoeboxes used) through microscopes and lighting and even to the fascinating worlds of stacking photography and photomicrography (down a microscope.)

The best guide to most of this stuff is our Dipterist's Handbook<sup>5</sup>. Various additional tips, tricks and techniques from experienced engineers, microscopists, taxonomists, writers, illustrators and other professionals have also appeared in this Bulletin<sup>6</sup> over the years.

#### A weighty question of balance

Getting the balance right between carrying both collecting and photographic gear can be tricky. Focussing on the best camera gear, despite recent weight reductions in modern mirrorless cameras, can impose restrictions on mobility. Many dipterists have achieved a good balance by carrying smaller cameras (notably the Olympus Tough<sup>8</sup> - check Flickr sites to see what they use.) Binoculars are an idea but it's easy to lose balance and difficult to track a moving fly (dragonflies easy) I doubt very much I'd have been able to spot the character in my photo above using binoculars. There's only one brand (still) that offers adequate close focus - the Pentax Papillio.

#### Resources

- 1. Back copy of British Wildlife at https://www.britishwildlife.com/article/volume-32-number-2-page-118-124
- 2. Ask the author for the full text of this through ResearchGate at https://tinyurl.com/2p8rhcm4
- 3. Minus figures and photos on Roger's blog at https://stamfordsyrpher.blogspot.com/2017/08/take-nothing-but-photographs.html
- 4. Cyrill Harnischmacher: The complete guide to Macro and Close-up Photography,
- 5. Chandler, P. (Ed. . (2010). A Dipterist's Handbook (2nd Edition). A mateur Entomologist. DF website in the About section
- 6. Back copies of this Bulletin also on our DF website
- 7. Try Paradox for collecting equipment (http://insectnet.eu/index.php) they're based in Cracow and once turned up at the AES exhibition (another good source). They do the telescopic fibreglass handles which means you can carry a decent length pole, collapsed down, in a small shoulder bag. You'll need one of their frames and bags too as they're metric (M6) unlike our imperial threads.
- 8. Try a second hand TG-5, I've seen them as low as £225 but they are popular 9. A can of worms. Boxes and tubes that is. We've mentioned them briefly in the Bulletin before but it's time we had a good look around. Any ideas please to the Bulletin editors. Chris's shallow box that you can photograph through looks intriguing.
- 10. Photool's iMatch is the naturalist photographers default "digital asset manager" (https://www.photools.com/imatch/) Feature are too extensive for a comprehensive review but we've looked at a few features in past Bulletins. If you collect photos rather than specimens then it's about the price of a couple of storeboxes (="physical asset managers")

The above is a brief account in response to questions from a novice member getting to grips with techniques used by many of us. What Wikipedia would call a "stub". Perhaps others would care to expand on it in future Bulletins, Dipterists Forum's first objective after all is "To foster the study of Diptera ...".

Darwyn Sumner

# **iNaturalistUK**

Quality control on diptera records made available as Open Data is a difficult task. It was perceived as such long before BRC set up iRecord. Traditional Natural History Societies had their panel of experts going back centuries and Local Environmental Records Centres

going back centuries and Local Environmental Records Centres set them up even as they began to constitute themselves. In fact good models from those groups were used to set up the systems in iRecord as it is today.

The more tricky the identification, the fewer are the reliable experts. The steep decline in educational standards in recent years, to the point where 2/3rds of the UK population are unable even to name a robin, means that that pool is steadily shrinking. Hence our support for the GCSE in Natural History.

All is not lost however, we can use the very tools that deeducators use (those who replace natural history words in dictionaries with computer words) to fight back.

Far less stringent verification systems are used in iNaturalist. This can be the training ground for future verifiers who will gain the expertise and skills to do the job properly - on iRecord. Simply sign up to iNaturalist, find a group you are interested in (some groups may already have a project) and have a stab at identifying those that others have uploaded.

The quantity of that material may give you considerable practise, for example the UK records of *Rainieria calceata* may drift in at the rate of one or two per year but because I've set my scheme up to cover Europe, I've identified 151 from photographs in the space of a couple of years. Certainly that's an easy one but there are others where you might like to flex your ID muscles. For example Sam Rees has one on **Flatfooted flies**. Only 58 UK records but 25% have been identified and there's a nice gallery of the 12 species people have snapped.

It doesn't matter too much if you can't identify because, depending upon how individual Recording Schemes are set up to confirm these IDs, they'll all get a final check before wending their way through iRecord and onto NBN Atlas.

There's plenty of scope for exploring or testing your own skills, for example there are no (adopted) groups yet for Scathophagidae and even highly popular ones like Soldierflies. You'll also likely get help from others, for example I frequently link my answers to the species' page on my Scratchpad site or to visual keys I've put together.

#### Hone your ID skills

- 1. In iNaturalist select the Explore tab.
- 2. Select UK for the region and a group that interests you for species (e.g. *Eristalis* there are 8446 of those, so plenty to practise with)
- 3. Grab a good key (e.g. Roger's 2022 key to Eristalis in British Wildlife)
- 4. Have a crack at them one by one. Just click on the picture and choose Agree if you do. It doesn't matter if it's already ResearchGrade. Read Roger's 2020 article first.
- A couple of dozen and your confidence in your field skills should improve markedly

The one-person schemes who use iNaturalist would value a "buddy" to help them raise records to ResearchGrade, thus allowing records to pass to iRecord for full verification. Chris & Matt do this effectively for Tachinidae. Browse the 21 or so Recording Schemes on our project page below then choose a scheme and start helping:

#### https://www.inaturalist.org/projects/ dipterists-forum

Read more about the UK version of iNaturalist at https://uk.inaturalist.org/

#### Post from an iNaturalistUK user:

After penning the above I went hunting for UK users on iNaturalistUK, well those who I guessed might be Dipterists Forum members. Not a simple task as I don't know who are members and many who register with iNaturalist just use avatars (usernames). I guessed Matt Vosper might be so I contacted him using their forum, here's his reply:

Hello Darwyn, good to hear from you. I am a member of Dipterist's Forum, but a very new one.

I actually got into hoverflies for the first time quite a few years ago just for my own interest, but for various reasons didn't get involved in recording properly. I started taking it more seriously around the start of the pandemic, and discovered iNat in mid-2020, which gave me a chance to put my ID skills to the test in various groups. Through that I gained some confidence that I knew what I was doing in my groups of interest, and since then have learned an enormous amount (far more than I could have imagined at the start), made some contacts and discovered the facebook groups and DF etc. So I guess I've journeyed in the opposite direction to what you want current DF members to do. More members of DF active on iNat may well help more people like me to get involved in the national recording effort - I think iNat is one of the most highly accessible entry points for people.

# Many of our schemes are now using iNaturalist effectively to collect records and promote recording of Diptera

When I first discovered iNat I put the app to the test by going for a short walk with a new camera that had just been handed down to me. One thing I found was a shiny little orange fly on a dog poo which I photographed as best I could (my wife's been mocking me about it ever since!) I spent quite a while trying to ID it from my almost non-existent knowledge base in the Acalyptrates. (I searched mainly in the Heleomyzids as I recall). I failed to find a match and uploaded it as 'Acalyptratae', not expecting much response. Within minutes 'Ophrys' (Who I now know is Ian Andrews) had identified it as Dryomyza anilis, and I could quickly see why this was right! I think that contributed a lot to me getting hooked.

Your focus may be on the UK I guess, but one of the remarkable things I've found is the contribution any careful person with a bit of knowledge can make in places where recording is much less well established (people who are comfortable with scientific literature even more so). I've been able to learn an enormous amount (about hoverflies particularly) from around the world - which helps the proper/local experts focus on the harder stuff. In the process I've uncovered quite a few 'first living photos' of species, and all sorts of obscure and otherwise cool things.

Another way in which DF members can share knowledge using iNat is sharing high quality observations of their own. There are so many species that are impossible to find good images of - although you can determine a few details from published keys, that often doesn't tell you what the species generally looks like! Species are so much easier to recognise when people can see what they look like. (Here's my attempt at Chironomus tentans for example https://www.inaturalist.org/observations/112719472). I think that getting more pictures 'out there' really serves to advance other people's knowledge and make even some of the more obscure groups more accessible (and therefore more recordable!).

I hope some of the thoughts in that stream-of-consciousness are of use to you! Very happy to talk more.

Matt

[Matt is using the Journal feature on iNaturalist, it's packed with keys - Ed]

### A profile makeover

The July heatwave prevented fieldwork for a few days and so I took to tinkering with my iNaturalistUK profile. Not an obviously useful thing to do but it proved in the end to be quite valuable.

First tip if you wish to improve it comes from Martin Harvey who points out that you should make sure their "Display name" is your real name, thus ensuring that iRecord credits you as recorder.

Second tip is to tidy up any text you've got there. There's quite a bit of control available using Markdown (https://www.markdownguide.org/basic-syntax/) which are a simple set of rules allowing you to do a variety of things such as Headers, bold, italic etc. Particularly useful is the way in which you can link urls to text rather than having to display the full url. This means you can put links to your favourite iNaturalist projects (and other urls) on your profile page. So much so that I'm using it now as my launch page to iNaturalist projects that interest me. The Markdown guide also led me to an emoji site meaning that you can incorporate those onto your page. What fun.



My iNaturalist profile with links to projects and scheme website

My best find however was the iNaturalist Statistics widget. It's a kind of Annual Report of your posts in graphical format. The last interactive part of which provides endless amusement.

Get your own by opening someone else's then registering one to yourself. Then put a link on your profile.

For a list and links to iNaturalist projects related to Recording Schemes and Dipterists Forum expedition reports see our umbrella project at

# https://www.inaturalist.org/projects/dipterists-forum Visual key appeal

There are a few visual keys kicking around, designed to help identify from photographs. I've done a few, successfully for some groups in my scheme but unsuccessfully for the *Tetanocera* (see Bulletin and FSC key) and Martin Harvey has some on his website. A few more would help, for example I keep snapping *Sarcophaga* but reading the key makes me think that they are just not doable from photos. But maybe there's one simple character that would make it possible to at least pick one out definitely.

With so many images kicking around there are surely some that can be resolved, Steve Falk's Flickr has several examples. Do you have ideas for any more?

# Dipterists Forum objectives

- a. To foster the study of Diptera, including linking with other disciplines where there is a relationship with other animals and plants.
- b. To promote the recording of all aspects of the natural history of Diptera, including the advancement of distribution mapping.
- c. To promote the conservation of Diptera.
- d. To encourage and support amateurs in harmony with professionals in museums, institutes and universities.
- e. To organise indoor meetings, workshops, field meetings and other relevant events.
- f. To disseminate information through newsletters and publications.
- g. To focus on the Diptera of the British Isles whilst maintaining an interest in those of continental Europe and elsewhere.

# Snail's pace

In some areas of conservation the time between the making of the observation and its becoming available for use (e.g. as Open Data) is critical. The turnover rate for bats for example is extremely high due to planning regulations and the high level of protection that bats enjoy. Surveys in support of this kind of work are usually plant-based together with any protected species such as great crested newts or water voles. Other than in exceptional circumstances, invertebrates are rarely considered.

Part of the reason for this is the slow turnaround of such records from observation to availability. Local specialist groups are key to such speedy turnaround times (e.g. Judy Webb working with TVERC) but regular stuff from recording schemes may be so slow as to be irrelevant.

It is getting faster though. The speediest might be an iNaturalist photograph sent as a record to GBIF within a week of its being raised to ResearchGrade - though no LERC checks GBIF regularly. Keen-eyed naturalists monitoring iNaturalist posts might spot something important in their region though. iNaturalist Bioblitzes come close but the ideal would be for County Recorders to simply monitor a place (local LERC methods or an iNaturalist project) and see what turns up.

Our regular systems are rather slow though, a record processed to the level of verified on iRecord might take several months before it gets onto NBN Atlas (Open Data); long enough for it to have its habitat felled, bulldozed, mown or grazed to death. Some processing, such as our backlogs can be as long as decades; sites destroyed long ago.

For example the scarce wasp spider (*Argiope bruennichi*) I found, so sensitive to its need for undisturbed tall vegetation, will be trampled by cattle within a week of my finding it due to Natural England's management regime at Castor Hanglands, along with all the nice nectar sites loved by Tachinidae.

A fast-track processing and notification mechanism as good as that for bats would be most useful.



# **Conservation**

#### **Habitats**

#### Water

#### **Ponds**

Just days before we set off for our Norfolk field week, the June issue of British Wildlife landed on my doorstep. An article by Carl Sayer, Juliet Hawkins & Helen Greaves regarding Norfolk (mostly) ponds (*Restoring the ghostly and the ghastly: a new golden age for British lowland farm ponds?*) seemed timely. They'd even mentioned Diptera biomass captured in emergence traps at a restored pond<sup>1</sup>.

So where were these ponds? With only 5 days to go and our site list hot off the press, what was the fastest way to locate those that were within easy reach of the sites we were to visit?

Some marvellous leaflets from Norfolk Wildlife Trust and UCL but no sign of a map. Natural England's MAGIC site is an obvious place to look - coloured dots on an online map showed pond positions but this wasn't much help, though it was useful to show where the reedbeds are.

Fortunately I'd converted Tony Irwin's site list to a Google Earth file. Can't beat an ariel view to see which sites you fancy visiting. I then went looking at the GIS data that Natural England make available free to GIS users<sup>2</sup> and on one of their download pages spotted an "ARCGIS Earth" file - smashing, it downloaded a kml file which could be loaded straight into my Google Earth. So ponds were now displayed alongside our proposed sites.

Not as comprehensive a list as I'd hoped though, nothing shown at Corner Farm pond (Honing), Scottow Pond (near Swanton Abbot) or Whitwell Common. So I guess they've not all been mapped yet. A nice big one at Upton Broad though, several at our Hickling Broad site and an intriguing little one at the Lower Wood site in Ashwellthorpe.

So I tried a third method from the Freshwater Habitats Trust site, they've crowdsourced information via citizen science projects. They've a map on their site<sup>3</sup>. Interesting stuff and a worthwhile project but again not comprehensive and not available so's I could view it on my Google Earth.

An interesting exploration that was a little help. But looking for ponds in Norfolk Broadlands is like looking for a needle in a needlestack.

#### References

- 1. https://norfolkpondsbig50.org/pondscapes/ (domain expired)
- 2. https://data.gov.uk/dataset/7237bc7a-f267-473b-a300-a90881f9c699/os-priority-ponds-with-survey-data-polygons
- 3. https://freshwaterhabitats.org.uk/research/priority-ponds/priority-pond-portal/provisional-priority-ponds-map/

#### Streams, Rivers & drought

Alan Stubbs' Wildlife Report in the February edition of British Wildlife focussed on aquatic species of diptera. Habitats ranging from intertidal faunas through exposed riverine sediment to sediment traps. Alongside concerns about pollution (more on this topic in British Wildlife, notably Jeremy Biggs Freshwater Life column and Sue Everett's regular stories), Alan emphasises our need to further explore the natural history and distribution of fly guilds that require watercourses in their various forms.

Watch out for reports on this year's drought, Europe's worst in 500 years according to New Scientist. We've mention of it here by Judy Webb and Alan Stubbs but there will be more, let us have your stories please.

[Eds.]

# **Conservation Officer report**

# Garnock estuary and Ardeer peninsula, Ayr coast



A proposal is in preparation by NatureScot to make a case for the designation of Ardeer peninsula and adjacent Garnock estuary on the Ayr coast as an SSSI. I submitted a letter of support on behalf of DF to Francesca Osowska (CEO). Numerous NGOs including Buglife are involved. The peninsula is currently under threat from a major development by the Scottish Government in the form of a "masterplan including coastal tourism and recreation destination, residential community, associated education, Energy Centre, retail business and industrial/logistics uses, and green space/ourdoor recreation" (https://tinyurl.com/4hcehs57).

Ardeer peninsula, one of the largest sandspits in Britain, is now a post-industrial "brownfield" site where ICI's explosives and chemical laboratories were located. The business was sold to Inabata who then sold it in 2005 to the current owners Chemring (explosives) who employ 300 people on the site. Habitats include an extensive sandhill system, dune slacks, heath, acid grassland. The Garnock estuary behind the peninsula comprises wetlands, saltmarsh, scrub, woodland and grassland. The two areas have very rich Coleopteran and Lepidopteran faunas. The fly fauna is poorly known, although the few species recorded so far include the hoverfly *Eumerus sabulonum*, stilt-legged fly *Micropeza lateralis* and beefly *Phithiria pulicaria*, all pNS (provisionally Nationally Scarce) species.

An excellent article in *British Wildlife* by Bruce Philp summarises the landscape, history and wildlife of this remarkable site:

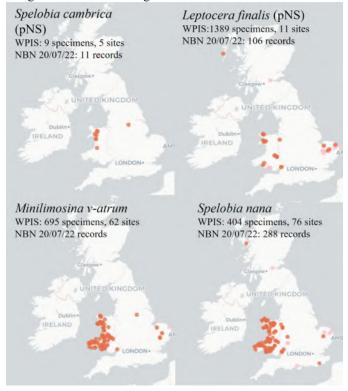
Philp, B. 2020. Ardeer – Ayrshire's overlooked gem. British Wildlife 31(5) 332-340.

I wonder if DF would consider an ad hoc 4-day field trip to Ardeer next year by a small "hit-squad"? I would envisage setting static traps as well as using manual methods. Please contact me (m.welch@nhm.ac.uk) if you are interested and I will provide more details.

# The Welsh Peatlands Invertebrate Survey: what might it tell us about species' coverage and status?

This major survey carried out in 1987-1989 by the then Nature Conservancy Council provided a comprehensive picture of the invertebrate fauna associated with peatlands for a substantial part of Wales. Flies were well represented and included many species that currently have pNS status and a few that are pNR. Given the dire state of funding of NE, we will probably not see the likes of this survey again. The WPIS had 300 trapping stations covering 118 peatlands throughout Wales. Water traps and pitfall traps were used. My interest in this survey has been

to think about its possible implications for species' status designations and recording.



As a first step I looked at records of lesser dung flies in the NBN database, as this family was studied in detail during the survey (Holmes et al. 1991; Dipterists Digest 8, pp 7-12). Over 10,000 specimens were identified by John Valentine. The survey obtained five new-to-Britain LDFs and one new-to-science (Minilimosina baculum). The four species shown in the maps above raise some interesting questions. The two pNS species (Falk et al. 2016, NECR217) appear to be genuinely uncommon as there were few WPIS records and almost none outside Wales. The two undesignated species were abundant and widespread in the WPIS, but have only a handful of records each outside Wales. In their individual species descriptions, Falk et al. (2016) refer to the WPIS frequently. It can be seen as a kind of "benchmark" of what intensive and extensive recording effort can reveal. Please let me know if you have an thoughts about WPIS (Welsh Peatlands Invertebrate Survey).

Knowing of his interest and expertise in analysing records within the context of quantifying biodiversity, I emailed Phil Brighton about the WPIS to get his perspective on it. Following on from his recent work on biodiversity analysis for a wide range of well-recorded flies (Brighton 2022, Dipterists Digest 29(2) 127-150), Phil is now evaluating the utility of the WPIS data for refining models of species richness.

As we are unlikely to see a major survey like the WPIS repeated, it is left to the footsoldiers, like DF members, to "fill in the gaps" and steadily build a more complete picture of species distribution, diversity and conservation status. In the case of lesser dung flies, Dave Brice is collating records for a national database and has over 13,000 records to date. In due course, it will be interesting to see how these records add to our knowledge of Britain's sphaerocerid fauna.

# Rebooting Adopt-a-Species

After contact with a number of DF members over the past 6 months, it is clear that there is interest in promoting the AaS, despite the dwindling correspondence over recent years, with some notable exceptions such as stalwart Judy Webb. I am hoping that there is a collective will to provide annual updates on as many AaS species as possible. Below is a table of current Section 41 species. I'd be very grateful if individuals associated with one or more of these species as AaS "reps" would let me know if they wish to continue in this role. I can then let other interested parties know if vacancies become available. It is not only Section 41 species that are of interest for AaS; pNS species would be very good to know about, and there are plenty to choose from! Please let me know if you are interested in taking on a pNS (Nationally Scarce) - you can suggest one yourself or ask for advice. Regular visits to sites known to host such species would be good to have news about.

Amiota variegata	Variegated Fruit-fly
Asilus crabroniformis	Hornet Robberfly
Asindulum nigrum	Black Fungus Gnat
Bombylius minor	Heath Bee-fly
Callicera spinolae	Golden Hoverfly
Campsicnemus magius	Fancy-legged Fly
Chrysotoxum octomaculatum	Broken-banded Wasp-hoverfly
Cliorismia rustica	Southern Silver Stiletto-fly
Dolichopus laticola	Broads Long-legged Fly
Dolichopus nigripes	Bure Long-legged Fly
Doros profuges	Phantom Hoverfly
Dorycera graminum	Picture Winged Fly
Dorylomorpha clavifemora	Clubbed Big-headed Fly
Empis limata	English Assassin Fly
Eristalis cryptarum	Bog Hoverfly
Gnophomyia elsneri	Royal Splinter Cranefly
Idiocera sexguttata	Six-spotted Cranefly
Lipara similis	Cigarillo Gall-fly
Lipsothrix errans	Northern Yellow Splinter
Lipsothrix nervosa	Southern Yellow Splinter
Lipsothrix nigristigma	Scarce Yellow Splinter
Myolepta potens	Western Wood-vase Hoverfly
Neoempheria lineola	A Fungus-gnat
Odontomyia hydroleon	Barred Green Colonel
Phaonia jaroschewskii	Hairy Canary
Potamanthus luteus	Yellow Mayfly
Rhabdomastix japonica	River-shore Cranefly
Salticella fasciata	Dune Snail-killing Fly
Thyridanthrax fenestratus	Mottled Bee-Fly

#### Latest reports:

Some of the above feature in recent Newsletters, *Salticella fasciata* in Sciomyzidae Newsletter 7 for example, others in the Soldierflies & Hoverfly Newsletters etc.; tell the scheme organisers if you find anything unusual.

You will also be able to find recent sightings of some of the above using iNaturalist, either set up a filter of your own or look for them through the Recording Schemes' projects. The big obvious ones are definitely there (Asilus crabroniformis, Rainieria calceata, Salticella fasciata). NBN Atlas searches will find them too but those might be a bit older. The appeal is open to anyone, regular visitor to likely sites or just enthusiast. All our Recording Schemes will be more than happy to help and suggest candidates.

(Ed.)

#### **Adopt-a-Species news**

#### from Judy Webb

Here in Oxfordshire 2022 gave us reduced rainfall in winter and drought seemed to be well setting in by April. This lack of rain has continued and at the time of writing (26.07.2022) all wetlands in Oxon are in dire straits, fens drying out and shallow pools all dry to the bottom. This adverse climate change for wetland species has meant fen re-wetting by blocking historic drainage channels is now at the forefront of my mind, although this year is indicating that this action alone may be insufficient to keep healthy water levels in this region of the UK.

#### Milichia ludens (Milichiidae)

This small, secretive black fly breeds in the nests of the Jet Ant *Lasius fuliginosus* inside the 'carton' nest of chewed wood (similar to a wasp's nest) that the ants construct inside hollow trees, usually in the base. In Cothill fen NNR, the host tree is a dying ash on the fen margin. This year Ash Dieback has finally completely claimed it and the remaining monolith will have to be reduced for safety as a priority this autumn, to prevent it falling and exposing the Jet Ants nest (I have observed the nests do not survive this). This year the only observation was of two newly emerged flies seen sitting on the bark above the ant's entrance at the tree base on 6th May 2022, a little later than last year, although earlier visits were not possible.

Triogma trisulcata (Cylindrotomatid cranefly)
Odontomyia argentata Silver Colonel
(Stratiomyidae) Stratiomys chamaeleon, Clubbed
General Soldierfly (Stratiomyidae) and
Odontomyia angulata, Orange-horned Green
Colonel Soldierfly (Stratiomyidae).

These rare species all depend on short fen wetland or shallow fen pools for successful breeding as they have aquatic/amphibious larvae. In Oxon they prefer calcareous, alkaline tufa-forming spring-fens but as many of these are not in ideal condition due to lack of management, most of these rare species are now restricted to Lye Valley SSSI fen or Cothill fen SSSI/SAC. Shallow marly pools and runnels plus sheets of Chara stonewort algae or waterlogged moss mat, seem key habitat features for all of them.

Soldierfly larva feed only on bacteria and unicellular algae on mud surface with a water film in warm sunny conditions. Or they burrow through wet sloppy marly mud eating as they go and digesting bacteria and algae. They do not need any vegetation but perhaps benefit from Chara stonewort algae, shallow water and warm conditions to speed larval development. In a drought they can burrow into damp mud and just wait until the site wets up again. It would be good to find out how long they can tolerate this dried-out mud situation and also how much heat is bearable.

Triogma trisulcata – this early cranefly usually flies in April but this year none were swept at either Lye Valley or Cothill fens in visits at the right time.

In Cothill Fen (NNR section and Parsonage Moor section) I welcomed the visit by the Dipterists Forum on their Spring Field Meeting on Friday 20th May this year and I was pleased to see that the first large soldierfly on the wing seen by some attendees was as usual the flecked General Stratiomys singularior and the first small soldierflies were Pygmy Soldier, Oxycera pygmaea. Single individuals of the commoner species Black Colonel Odontomyia tigrina, Common Green Colonel Oplodontha viridula and Ornate Brigadier Odontomyia ornata were seen in early June along with the specific chalcid parasite of Stratiomys sp, larvae, the Red-legged Big-thigh Chalcis sispes.

Not as rare, but nice to see a newly emerged female Golden Horsefly Atylotus fulvus on 4th June and on 16th June the first record of one of the site rarities - the Orange-horned Green Colonel Odontomyia angulata (a male). This species continued to be seen as odd individuals and the most recent sighting was of a female on 22nd July. I was very interested to see Martin Harvey's tweeted film of O. angulata feeding on the flowers of Tubular water-dropwort Oenanthe fistulosa seen on the DF summer field meeting to Norfolk. I have never found O. angulata feeding on any flowers at Cothill. The now relatively common Banded General Stratiomys potamida (single individual) was seen on 15th July.



Atylotus fulvus

Again despite visiting at the right times (when hawthorn flowers out) in April and May, I found no silver colonel *Odontomyia argentata* adults in Cothill fen.

The very rare Clubbed General soldierfly *Stratiomys chamaeleon* appears to be having a very poor year (if you judge by individuals found in fen vegetation, maybe they are all elsewhere looking for nectar). None so far seen at drying down Cothill fen (NNR and Parsonage Moor) despite lots of sweeping; the only individual seen so far this year (pictured below) was at Dry Sandford Pit (old limestone quarry with spring fed proto-fen) nearby on 16th July. Here one female was seen flying slowly around a shallow open water pool.

Oxfordshire and the larvae of all these wetland flies are desperate for rain. This year could be worse than 1976 because the current drought is combined with higher temperatures than 46 years ago.



The Dry Sandford Pit female Stratiomys chameleon



Mark Welch adds: I couldn't resist including a photo here of Judy prospecting for soldierfly larvae - with some success - at Parsonage Moor on the DF Spring Field Meeting (taken from the DF Twitterfeed - thanks!)

# **Local Nature Recovery**

# **Strategy Briefing** 21/3/2022 Zoom Conference

Following an invitation from Natural England to Dipterists Forum, I attended this Zoom conference. The following are notes from that meeting. We were told that the slide presentations would be forwarded to us following the meeting but so far nothing has arrived.

#### **Notes from Conference**

The Local Nature Recovery Strategy (LNRS) has come out of the Environment Act of last year and is aimed at local planning authorities and interested land owners. Its aim is to make clear the local responsibility for improvement in biodiversity and associated benefits that has to be built into local development plans. At this point in time, DEFRA are still developing the rules for doing this and it is expected to be launched in the Summer of 2022.

The challenges set for responding to this are:

- alignment with planning boundaries (usually county or unitary council areas)
- it must be locally led
- wider environmental benefits must be taken into account as well as biodiversity recovery (eg effect on climate crisis)
- it will require spatial planning including opportunity mapping; identification of protected areas and species; river basin and catchment management and green infrastucture.

It must map the most valuable existing sites for nature, make proposals for improving habitats and agree priorities for nature recovery. The strategy must be evidence based!

The two main outputs will be:

- Statement of biodiversity priorities
- Local habitat map

The main needs for conducting this work are:

- Clear leadership and transparency of process
- Clear governance
- Making use of existing networks of interested parties.
- Resources: local expertise backed up by Natural England, Environment Agency and others
- Strong and credible information about local biodiversity
- · Strong guidance on scope of data needs
- Data licencing and GIS expertise

Partners involved in the process could be:

- Local Nature Partnerships (if they exist)
- Environmental Non-governmental Organisations (eNGOs), eg RSPB, National Trust
- Wider partners such as farmers, major landowners and estate managers
- It is not clear if parish councils will be involved. They were in the pilot but no clarification since.

It is recommended that preparation for this process should start immediately by building relationships with national eNGOs, local environmental groups, regional networks and recorders.

Financial support is supposed to come from DEFRA. It is building a hub to give details to responsible authorities of the LNRS process and give access to government owned relevant data.

It is anticipated that the first iteration of the LNRS will identify local data needs. Having local biodiversity data available will be essential for evidence.

#### **Action for Dipterists Forum**

It is not clear that DF as a body needs to do anything at present other than inform members and particularly recording scheme organisers that the process is about to start and that their data may be valuable input at a local level.

John Showers

# Fly-fishing

If you are interested in supporting Dipterists Forum's activities or engaging in projects of interest, this section summarises various wants and appeals:

#### A. Rob Wolton:

# Is anyone interested in documenting the Diptera of a site?

This appeal from Bulletin 93 is still outstanding.

Contact Rob Wolton robertwolton@yahoo.co.uk

# **B. Bulletin editorial team requests: Bulletin 95**

- Brief reviews of books. I'll still be ploughing through books I've obtained early this year but intend to seek out Wilson's **The Theory of Island Biogeography** (£41!) and Thomas Lovejoy's, **Climate Change and Biodiversity**. Do tell us of any you discover, old classic texts on diptera, conservation, biogeography etc. that novices might find useful.
- More help with periodicals. I can't afford to buy them all. Do you subscribe to BQ (Bees and other pollinators quarterly)? it's not going to be hard to report on all the fly stories in that.
- More from our ecologists please. Articles relating Diptera to various habitats. It would be good if we featured more habitat-specific articles.
- Well we asked to know more from museums about archives and collections. Thanks to Adrian Pont we learn about "The tragedy of the Natural History Museum, London" - see Reviews
- Choose a presenter at our Annual Meeting to write about. The Youtubes are good but written accounts can be amazing.
- Photographs. Start a free Flickr account then add selected images to the Dipterists Forum group. Or just email them to us.
- Feedback on any Bulletin topic
- Keys tell us about any visual keys you've done
- A budget. A costly task when you add up all the software, books etc., it'd be nice to be able to commission art work too.
- Stories from the Recording Schemes and others. Start a newsletter now even though you may not finish it for a long time.
- The Bulletin editorial team is looking for a features editor/journalist to help investigate, report, compile, collate etc. Contact us to discuss areas of interest to you.
- Copy Judy Webb into all Bulletin submissions & messages .

#### C. Recording team:

Our list of requests are:

- Anything the Recording Schemes are looking for.
- Site datasets for publishing as Open Data to NBN Atlas (e.g. Diptera of Windsor Forest) as requested by Judy Webb, Mark Welch and others.
- Records from Summer Field meetings particularly Epoch 3.
- How to record in the Channel Islands your stories please
- The Steve Falk digitisation project.
- Stories arising from your use of Open Data (e.g. maps from NBN Atlas) be the context regional or taxonomic.
- Additional experts to sign up to verify groups on iRecord
- Additional novices and experts to sign up to verify groups on iNaturalist - the Recording Schemes really need everyone's help with this, without you some of their work is stalled

We continue to address Field Meeting records, Rob Wolton observes "Many thanks for the way you continue to press ahead with all this. It's so important, as you say, that field meeting records should be collated and made publicly available through the NBN" We had no further contributions following the appeal in the last Bulletin so we'll have to go with what we've got. Perhaps we'll have some progress to report in the next Bulletin.

Darwyn Sumner, Editor

The less information there is, the more the risk.
Martin Sorg, Krefeld Entomological Society

# Recording

The main features in this Bulletin are:

- An appeal to support the efforts of the Recording Schemes
- Latest on Recorder 6
- iNaturalistUK list of projects
- · Recording methods
- Orphan Families summary
- Smaller Acalypterate Families as projects
- News about various Recording Schemes

# **Recording Scheme support**

Feedback to the Recording Schemes is important. The organisers have put an immense amount of effort into their specialist groups and they rely on responses from those with similar interests to respond to them in various ways.

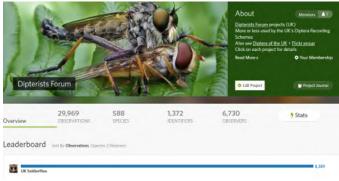
One way that these organisers tell us about the responses they get is through newletters, some are extremely popular and clearly get a lot of feedback, others are able to pop the occasional note in this Bulletin whilst others, particularly the one-person shows see very little. They especially would like to hear from you, one brief story of an interesting find would be most encouraging and some reward for their efforts and expertise. So do have a look through the range of stuff you found this year and after you've told your stories of nice catches to the big 5 schemes, take a look at what you've got remaining and quiz those smaller schemes about them.

One useful way you may be able to help them is by taking a look at their iNaturalist projects to see if you can confirm any images posted there. We expect the successful identification rate to be poor because only a small proportion can be identified from photographs. Ian Andrew's Helomyzid Flies has achieved 13%, my Micropezid & Tanypezid 37%, Donald Smith's Kelp Flies 12%, Soldierslies 60%, Sam Rees' Flat Footed flies project 25%, Conopidae 62% and UK Diptera as a whole 49%

# iNaturalistUK links

Print media have the perennial problem of how to provide links to internet-based resources. Shortening them via Tinyurl or similar is one method but it only works for the occasional link. Readers are only likely to type out one or two so a big list is out of the question. Combining several onto the one web page and giving that as a link is something we've attempted recently and continue to do so in this issue..

For our many Recording Scheme iNaturalist collection of links we've come a little closer to success using their "umbrella projects". Sadly their current implementation of these treats the collection as a competition\* in the form of a "leaderboard". However it does provide links to our Recording Scheme projects and other diptera groups of interest and can be maintained and updated by Schemes themselves if they choose to add projects of their own or take charge of existing ones.



https://www.inaturalist.org/projects/dipterists-forum

All schemes in the following accounts with the green birdie symbol have iNaturalistUK projects that are to be found at the above site. Just scroll down past the soldierflies and click on the tiny icon. Bear in mind that they are merely filters on existing records and have not necessarily been set up or adopted by the respective Recording Scheme. Twenty-one of them are listed, there may be more to come.

In addition to **Recording Scheme projects**, all the **Dipterists Forum Expedition projects** are linked on one of the Journal pages. Membership is rapidly increasing - do join us.

The above site augments the information on the Bulletin back covers.

# **Recording Methods**

# Recorder 6

#### **Newsletter 3**

Issued in July this year by the Recorder6 Steering Group (https://tinyurl.com/bdeu2nkh), Claire Blencowe began a thread on the NBN Forum to ask users for summaries of outstanding issues. I outlined all mine (https://tinyurl.com/59en74tw). Many of our schemes have for some considerable time been using Biological Recording databases effectively to collate & manage records and promote recording and conservation of Diptera. They have a complex history and been the victim of much trash-talk:

"Recording is moving towards online data capture, with a phasing-out of desktop systems, such as Recorder, which will eventually be replaced by open-source programs such as Indicia" Helen Roy (Biological Records Centre) - Bulletin 81

"Online data capture is not data management, centralised databases are not local" Tim Corner, BRERC

Recorder and similar databases perform that collation and management function in part. This is one of the key activities of Recording Schemes (and LERCs.) Without such desktop tools to collate and manage, in the space of a year my contribution would be poorer by about 40,000 Open Data diptera records (nearly half the doughnut on p1), a Status Review, Atlases and several other biogeographical publications. Unimaginably more for other schemes.

Darwyn Sumner

# iRecord + iNaturalistUK

#### Initiatives

The iNaturalistUK initiatives go from strength to strength. In Dipterists Forum we've seen a large increase, with 32,312 diptera records entered on iNat last year.

Log on to iRecord and you'll find them queueing up to be verified alongside regular iRecord records (well, you will if you're a verifier.) A short video at

https://micropezids.myspecies.info/node/339

shows verifiers how to deal with all those.

For those not familiar with iNaturalist there is an excellent set of professionally-produced **videos** at

https://www.inaturalist.org/pages/video+tutorials

which will lead you through it all. First in their list is a guide to using their mobile phone app.. I guess that's why such a lot of the stuff I see there is so difficult; after scrutinising  $\sim$ 750 in my scheme a crisp DSLR macro shot is a special treat.

Martin Harvey produced an iNaturalist/iRecord analysis for our spring committee meeting: https://tinyurl.com/5n83dx8m

The <u>survey-based</u> iNaturalist projects are proving useful to us.

The Oxford fens and meadows project is at https://www.inaturalist.org/projects/oxford-fens-meadows

though showing a wide range of taxa in addition to diptera, is a good record of what the photographers were finding on those days. It also represents a valuable piece of collaboration between Dipterists Forum and a local environmental records centre, in this case TVERC (Thames Valley Environmental Records Centre), Judy's local LERC, who kindly provided the site polygons.

Our <u>regular</u> iNaturalist projects are a little simpler: essentially filters on a Family or group of Families for the UK (or broader) and not restricted to a date range. These are set up to help Recording Schemes verify iNaturalist postings in their groups using the iNat system ("research grade"), to show us what is being found day by day and to help experts show recorders how to identify things.

We've quite a long list of these now, more or less paid attention to by Recording Scheme organisers (it depends on how busy they are or how big their scheme is) but certainly of interest to anyone curious about particular groups or indeed able to confirm identifications there.

**Join**: Once you've located a Recording Scheme's iNaturalistUK project that interests you, then **join** that project. Your future postings will show that they are contributing to the Scheme and you'll be registering an interest in the work that the organiser is carrying out (e.g. Donald's Kelp flies.)

The latest three Diptera ones are Conopidae, Chloropidae & Small Acalypterate Families: The rest are listed on our Dipterists Forum umbrella site above.

Darwyn Sumner

#### **Homes found for Orphan Families**

Though many records of Diptera Families have found their way onto the NBN Atlas through a variety of routes such as our Field Week datasets, national surveys such as the Invertebrate Site Register and via regional experts we'd still a long list of Families lacking in that particular focus that Recording Scheme organisers bring.

That long list published in the last Bulletin has become a good deal shorter now. We've a new Recording Scheme for Bibionidae and the resurrected Small Acalypterate Families Recording Scheme allows us to make progress with several Families.

The following table shows our progress since we reported on orphan Diptera Families. Families highlighted in green are up and running:

and running.						
Family	spp	iNat	SJF	BRC	NBN	Scheme
Bibionidae	18	2613	ś	4562	11398	Full - Siobhan Hillman
Acartophthalmidae	2	0	0	11	74	Project
Asteiidae	8	6	131	132	655	Project
Aulacigastridae	1	1	1	1	47	Project - Darwyn Sumner
Braulidae	2	1	0	4	6	Project - Darwyn Sumner
Camillidae	5	1	141	20	151	Project
Campichoetidae	2	0	1	98	407	Project
Canacidae	11	1	19	20	238	Project
Carnidae	13	0	0	23	364	Project
Clusiidae	10	23	201	177	1267	Project
Diastatidae	6	2	262	233	1115	Project
Dryomyzidae	3	118	228	428	1284	Project
Milichiidae	19	6	0	23	192	Project
Odiniidae	9	1	0	13	97	Project
Periscelididae	4	0	0	1	21	Project
Pionhilidae	16	8	154	0.4	520	Project - Nigel Jones

Columns show number of species in the Family (spp), iNaturalist records as images (iNat), Steve Falk's pre-2014 records (SJF), BRC's "not necessarily verified" records already added to NBN Atlas (BRC) and NBN Atlas totals (NBN).

Numbers on pale red give some indication as to the volume of records awaiting attention, those on pale green are already Open Data.



# **Recording Scheme News**

#### **Smaller Acalypterates Project**

We began this project in the last Bulletin and hopefully, as time goes by, some valuable insights will emerge. The following are what we have so far:

#### 1. Recording Schemes + iRecord verifiers

Martin Harvey seemed to be pretty definite that BRC only designate iRecord verifiers when approved by Recording Scheme organisers. Good quality control. Curiously this group, the smaller (numerically) acalypterate Families was proposed as a Recording Scheme in 1999 (Bulletin 47) by myself. Shortly afterwards I narrowed the field down to my current Stilt & Stalk Recording Scheme but the 23 year old notice of mine is still there, that of a Small Acalypterate Families Recording Scheme.

BRC's partner page on NBN Atlas lists 66,746 records in their "Diptera records from iRecord for families not covered by a recording scheme", about 25% of which are from these Families and many are acknowledged as being unverified. All the boxes therefore seem to be ticked to make better progress with some of these now.

#### 2. An iNaturalist project

Milichidae

Photographs of members of these Families. Adding Opomyzidae into that mix gives us 476 records. The most popular turning out to be:

Neuroctena anilis (as Dryomyza anilis) - Dryomyzidae Geomyza tripunctata - Opomyzidae Clusia tigrina - Clusiidae Opomyza florum - Opomyzidae Asteia amoena - Asteiidae

It's fair to assume that these are amongst those most readily identifiable. iNaturalistUK has its own forum too so it's possible to discuss identifications etc.

#### 3. Steve Falk's records - 2014

I extracted the records from these Families earlier this year, a total of 2837 occurrences from all of his folders. Both he and I have the spreadsheet list now but Steve quite rightly advocates caution due to outdated nomenclature (and keys) so they'll not be uploaded to iRecord or NBN Atlas any time soon. The verification processes will take some time and may be carried out Family by Family in the future. [The first two of his folders were also digitised by BRC some years ago, the status of those on the iRecord silo has yet to be investigated]

Steve makes the suggestion that each year we have something like a 'Project Camillidae' [etc.] ensuring that we all have up-to-date working test keys and nomenclature to ensure we are all on the same page, and can submit data in a more unified manner.

Thus whilst some Families may currently be delayed at the moment, others are perfectly doable. For example Steve himself reviewed the UK **Dryomyzidae** and gave us keys in Dipterists Digest in 2005 (V12, p 7-12) - downloadable from our website.

#### 4. An NBN Atlas dataset

A Small Acalypterate Families Recording Scheme dataset has now been set up on the Dipterists Forum page of NBN Atlas. The three Families in the accounts below now also have verifiers so that records submitted via iRecord will enjoy that level of quality control. Don't expect to see a lot on there initially, either there are barely any records or new verifiers are just finding their feet - and may be very cautious.

https://registry.nbnatlas.org/public/show/dr2704

#### **Project Aulacigastridae**

In the UK this Family is represented by just one species: *Aulacigaster leucopeza*. More are to be found in Europe and elsewhere.



Aulacigaster sp. from Hungary [Flickr, Walter Pfliegler - thanks]

**Distribution**<sup>1</sup>: NBN Atlas has 47 UK records, add to that 1 each from Steve Falk and me (Old Sulehay photo below)

Habitat: Breeds in sap runs. The adults may also be caught using beer traps. For casual recording, examination of sap runs is recommended. Less easily disturbed than other sap run species (e.g. Brachyopa) but very much smaller. Spotting those stripey eyes be possible using binoculars or a hand lens. For photographers the real prize is a good head shot: take your best close-up equipment.



**Identification**: Very distinctive so identification shouldn't be a problem. Eye stripes fade substantially in preserved specimens. Always check the characters against that of *A. pappi* - just in case.

**Recording**: Photographs may get a confirmed ID on Diptera.info but not on iNaturalist. At the moment iRecord submissions simply pass into BRC's non-recording scheme Diptera dataset but I've submitted a request to become verifier and future material will go to Dipterists Forum's Small Acalypterate Families NBN Atlas dataset (as above)

#### References

Roháček, J. (2013). The fauna of the Acalyptrate families Micropezidae, Psilidae, Clusiidae, Acartophthalmidae, Anthomyzidae, Aulacigastridae, Periscelididae and Asteiidae (Diptera) in the Gemer area (Central Slovakia): supplement 1. Časopis Slezského Zemského Muzea Opava (A), 62, 125–136. https://doi.org/10.2478/cszma-2013-0014

Hagenlund, L. K. (2017). First record of Aulacigaster pappi Kassebeer, 2001 from Norway (Diptera, Aulacigastridae). (December), 2013–2016.

Rung, A., & Mathis, W. N. (2011). Revision of the Genus Aulacigaster Macquart (Diptera: Aulacigastridae). (July 2015). https://doi.org/10.5479/si.00810282.633

#### Issues

1. Publication quality maps to be resolved by NBNt

#### **Project Braulidae**

This project begins with hardly any records, members are asked to give some thought to this Family and how we might discover more. All I've got at the moment is one fascinating set of images on our iNaturalist project at

https://www.inaturalist.org/projects/smaller-acalypterate-families



Braula caeca from the OMNHS lantern slide collection. Labelled as "Flatters Preparer, Longsight" presumably the forerunner of Flatters & Garnett, the company in which Peter Skidmore spent part of his career.

BRC has just one record and the NBN Atlas total is 6. The two species are bee parasites of course so if you know any bee keepers then ask them about these.

#### References

Dobson, J. R. (1999). A "Bee-louse" Braula schmitzi (Diptera: Braulidae) New to the British Isles, and the Status of Braula spp. in England and Wales. British Journal of Entomology and Natural History, 11, 139–148.

Parmentier, T. (2020). Guests of Social Insects. (December 2019). https://doi.org/10.1007/978-3-319-90306-4

#### **Project Piophildae**

Nigel Jones effectively began this in Bulletin 89 (p14) as a guide on how to discover Piophilidae in the field.



Parapiophila vulgaris by Dick Belgers (from Diptera.info)

**Recording:** Nigel says he will have a crack at verifying Piophilidae data in iRecord, but is not sure it will be possible to verify many records conclusively. He'd begun this job by the end of June.

Steve Falk's records amounted to 154 and the BRC Atlas dataset has 94.

#### References

Stubbs, A. and Chandler, C. 2001. A provisional key to British Piophilidae (Diptera) and Parapiophila flavipes (Zetterstedt, 1847) new to Britain. Dipterists Digest 2001, 8, 71-78



Females of two species found investigating a well decayed and cleaned (by scavengers) ewe carcass on the Long Mynd - 17 May 2016. Left: Stearibia nigriceps Right: Allopiophila vulgaris Nigel Jones

#### 5. The Scratchpad possibility

Scratchpads were devised for exactly this purpose, as an online resource for taxonomy, nomenclature, keys, publications etc.. From my experience with mine I'd have to observe that though this could be readily begun by a single individual, such a site would need to involve several contributors. For example I've kept on top of the bibliography on my site (~230 papers) and would reckon this to be critical in this case. I've no such collection for these other Acalypterate Families. There's an understandable skills gap between expert/keen taxonomist and Scratchpad site developing/editing but hopefully Rob Davies is working to narrow that gap (it hasn't put Donald Smith off.) Offers from anyone prepared to assist would make a Scratchpad feasible as a team effort.

#### Resources

If you attended the 2015 workshop (Bulletin 79) presented by John & Barbara Ismay + Alan Stubbs then many of the above Acalypterate Families may be familiar to you, particularly if you have the handouts. An important key is Stuart Ball's "Key to families of British Diptera" which members can obtain from our website.

This project got a mention by Alan Stubbs' in his column in British Wildlife (May 2022): A new Smaller Acalypterate Project covers 22 Families, including many that are popular with recorders because they include distinctive species; recording schemes may develop in the future. The initiative is to be part of the iNaturalistUK project and aims to identify about 5% of photos.

[Currently 15% - Ed.]

Finally, let us know if you are passionate, competent or just curious about any of those Families and don't forget to bung some records on iRecord and iNaturalist if you have them.

Darwyn Sumner, Steve Falk, Peter Chandler, Martin Harvey, Nigel Jones, Ian Andrews Alan Stubbs & Sam Rees so far



#### Chloropidae Recording Scheme 🦖



The Chloropidae chapter in the Manual of Afrotropical Diptera has been published and we are very grateful for Ashley Kirk-Spriggs's and Brad Sinclair's support and hard work. Our chapter (jointly written with John Deeming, Cardiff) contains an overview of Chloropidae worldwide and shows you what a wonderfully diverse family we are working on. It is a very large family worldwide and includes everything from primary stemborers over saprophagous species to kleptoparasites. Here in Britain they are mostly found in wetland including saltmarsh and dunes and grasslands or fens and only a few in woodland. They are an important group when it comes to assessing grasslands – unimproved grassland is a habitat that declined severely in the last 60 years.

We are now focusing again on the British Chloropidae, as well as continuing our research abroad. We have decided to make the study group a recording scheme. As we are only two of us and not very tech savvy, we ask you to bear with us and if necessary re-send an email if you have not got an answer within a fortnight.

We could use some help with processing some of the data – so if anybody out there feels that they would like to learn more about Chloropidae and also like to input some data at the same time and are more tech-savvy than us, then please email us. We will train you in identifying Chloropidae while progressing with this project.

We would very much like to receive your records for Chloropidae. Our preferred format is an Excel spreadsheet for your records each year - we are already getting this from some of you and are very grateful for this. We also accept records via iRecord and iNaturalist. Ideally, it would be helpful if you could state if the record is from an adult, a larva or a gall and which gender it was.

There is now an iNaturalist project which will show any images people have uploaded there (Ed.)

Some of you have asked if we are still planning to create a handbook of British Chloropidae, now that Emilia Nartshuk's very comprehensive book on Chloropidae is published. The latter does not include all British species and it does not have photos, so we hope that the handbook will complement this book. We have started to work on this again, albeit slowly as also some work abroad had been put on hold.

John and Barbara Ismay, schultmay@insectsrus.co.uk

#### Conopidae Recording Scheme



David Clements has begun a project on ResearchGate at https:/ /tinyurl.com/bcjy274k

In it he states the goal of "Distribution and ecology of British species" and that he has over 15,000 records to date.

The NBN Atlas Conopid Recording Scheme dataset is at https://registry.nbnatlas.org/public/show/dr2707

There's also an iNaturalist project of which 62% have been identified.

I've joined the crew verifying Conopidae records as best I may (I'm as cautious as Nigel - above) so expect the Open Data to grow gradually. There is currently a backlog of 3639 to work through. Potential verifiers with expertise and an interest in this group should contact David Clements (dave.clements1@ntlworld.com)

(Ed.)

#### Bibionidae Recording Scheme **NEW**



Awaiting advice. Look for details on the iNaturalist project Siobhan Hillman

#### Tephritidae Recording Scheme 🦫



Laurence Clemons has been assisting with the Tephritidae Review. He's not the lead on this though. John and Barbara Ismay have been contracted by Natural Resources Wales (Mike Howe) to carry out the analyses and write up the report. with the help of Matt Harrow.

In the meantime, there's an iNaturalist project for any images you want to upload.

iRecord will take your regular records and Scheme Organiser, Laurence Clemons may be contacted for enquiries.

Laurence Clemons laurenceclemons 56@gmail.com

### **Anthomyiidae Recording Scheme**



#### Progress towards an Anthomyiidae Handbook

Further to Rob Wolton's appeal in the last Bulletin, an Anthomyiidae Handbook Working Group has been formed. The members are Ali Shuttleworth, Nigel Jones, Phil Brighton, Sam Thomas, Siobhan Hillman and Steve Crellin. Tanyptera Project at World Museum Liverpool (Steve Judd and Gary Hedges) has kindly agreed to provide overall project management, as well as practical facilities for sharing files and Zoom hosting. Two meetings have been held to establish the outline of the book and to decide on individual roles and responsibilities. The work to forge Michael Ackland's materials along with the data from the recent upsurge in recording into a form comparable with Peter Chandler's new fungus gnat handbook has been split into three main tranches: a) biology, life-history, collecting etc led by Ali Shuttleworth; b) identification led by Sam Thomas; c) distribution, phenology and recording led by Phil Brighton.

As part of this effort we have been able to resume verification of Anthomyiid records on iRecord, of which there is a considerable backlog. We have also transcribed over 7000 records from Steven Falk's pre-2014 notebooks as part of the digitisation project reported in the last Bulletin.

Phil Brighton helophilus@hotmail.co.uk

#### **Soldierfly Recording Scheme**



An iNaturalist project has been set up as an aid to tracking anything you may have contributed (*Ed*.)

#### **Hoverfly Recording Scheme**

Newsletter #72 in this Bulletin

David Iliff davidiliff@talk21.com

#### Hippoboscidae and Nycteribiidae Recording Scheme

Now at 192 records on our NBN Atlas page. Send more via iRecord to

Denise Wawman & Erica McAlister

#### Kelp Flies Recording Scheme



Following Donald Smith's presentation at our Annual Meeting he sent us the above article and also set up an iNaturalist project.

Scheme Organiser: Donald Smith KelpFlyRS@gmail.com

#### Stilt & Stalk Fly Recording Scheme



I would really appreciate some iNaturalist user confirming some of the IDs, especially my own. I did some easy pictorial keys. Unless they're confirmed they won't reach the iRecord verifier or the scheme dataset at https://registry.nbnatlas.org/public/show/dr940

Darwyn Sumner www.inaturalist.org/people/202372

#### **Cranefly Recording Scheme**



Newsletter #39 in this Bulletin

John Kramer john.kramer@btinternet.com

#### **Lesser Dung Fly Study Group**



Newsletter #3 in this Bulletin

Mark Welch m.welch@nhm.ac.uk

#### **Empid & Dolichopodid Recording Scheme**

Newsletter #27 in this Bulletin

Martin Drake martindrake2@gmail.com

#### **Muscidae Recording Scheme**

Since making an enquiry regarding the status of this scheme back in 2021 we've received no responses.

Please treat this scheme as moribund - or up for grabs

#### NBN Atlas 🧸

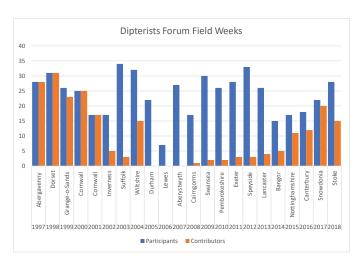
#### Partner pages

Chatting to NBN's Sophie Ratcliffe recently as I sent her our latest dataset I happened to mention the alphabetically sequenced list of datasets on Dipterists Forum's partner page (19 of them at https://registry.nbnatlas.org/public/show/dp172) and how it was becoming increasingly difficult to assign a title to a dataset without disrupting the sequence and making stuff hard to find. I suggested that BRC might also appreciate some filter or organising tools on their partner page too (47 datasets at https://registry.nbnatlas.org/public/show/dp77)

Sophie replied that NBNt have plans to improve these pages. It may take a while as their staff are currently involved in some technical aspects of the Atlas itself but partner page improvements are on their schedule together with "publication quality" distribution maps.

[She also indicated that they plan to improve tracking of data use.] Hopefully then we'll be able to progress work on our outstanding Dipterists Forum expeditions by uploading everything we've got. With no further progress to report on that it's a topic for the next Bulletin and any work that might be carried out during the winter. In the meantime the following is a reminder:

#### **Contributions**



# **Expedition iNat Projects**

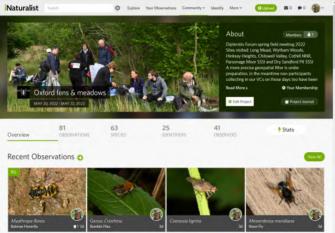
We've set up iNaturalist projects for our field meetings on a few occasions previously. A prerequisite of course is that attendees post some photographs onto iNaturalist. The projects then, as iNaturalist themselves are at great pains to point out, are simply a filter.

So this is a step-by-step account of how one can be set up. You might wish to do one of your own, for example I've set one up for my personal interest and use for the wildlife I've seen in Norfolk.

#### Step 1

Dates and place are the most obvious. The first was easy for our Spring Field Meeting - May 20-22. Places straightforward too once I realised that most of our sites were in VC22 and only one in VC23 (Vice Counties are included in iNat's inventory)

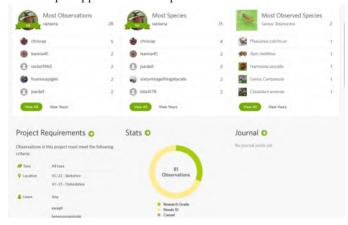
After that just a title, picture and a bit of descriptive text and up popped the following:



Some bad IDs from me maybe but there's time to fix them.

#### Step 2

One problem encountered was that those two VCs were popular places for other camera-wielding naturalists on those days so I needed to tweak the Users filter by excluding some until me and Chris Raper appeared at the top:



Not an ideal method, excluding folk one by one is a bit tedious.

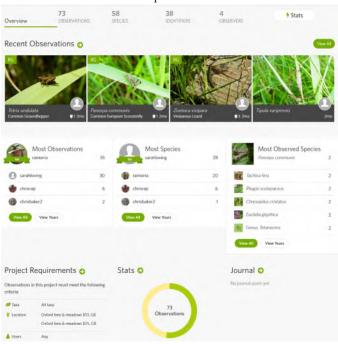
#### Step 3

Perhaps it can be improved by being more precise about the places, Vice Counties are rather large and there were many folk taking photographs on those days. There's a set of instructions on how to make your own polygons (e.g. you can write them using Google Earth)

In this case I asked TVERC for polygons of our sites. Local Environmental Records Centres do a lot of GIS work so they're likely to have the shape files of such sites. (Natural England make such files available free too, but you'd need decent GIS skills to extract those.) TVERC were very helpful and sent me the files I needed, so I replaced the VC polygons with theirs, you can see them in the map on the iNaturalist project.

#### Step 4

Once Sarah Loving had uploaded her images (p 6) and a few more had been added we finished up with this:



Mixed taxa of course but mostly flies. The project only ends when people stop posting images. I've perhaps one or two and I'm sure I spotted other folk with cameras.

#### Step 5 (best practise for future expeditions)

For bigger projects such as our Summer Field Weeks, the use of polygons is unfeasible as there are just too many of them. So we're back to using Vice Counties.

The solution in this case is for attendees to make iNaturalist postings then **join the project.** The project admin then just checks the "Project Members Only" box. It'll then show just the posted images from those who've joined.

That's how I've set up the project for our Norfolk Field Week.

#### Conclusion

Though our interest might primarily be Diptera, other taxa were not excluded. I did dragonflies, Chris did flora on his phone and I hope someone snapped those sedges that Judy showed us.

All in all a fascinating pictorial record of our expedition that's easy for anyone to view. Join in and let's see what you did with those cameras.

https://www.inaturalist.org/projects/oxford-fens-meadows

Both TVERC and NBNt have shown a lot of interest in this project. We might get a bit of good publicity out of it if we get into their newsletters.

Worries about duplication are unfounded (see p3), the big ones might crab, the little ones are delighted as are non-diptera groups. Full list at:

https://www.inaturalist.org/projects/dipterists-forum

# **Technology**

#### **Making videos**

This seems second nature to some, going by our DF Youtube channel and the online presentations set up for our various meetings recently. Check those out if you want to see who know their stuff (Zoe Adams & Roger Morris for example)

I had an enquiry though, plus I had a need to do one myself, so I had a crack at it as follows:

#### **Powerpoint method**

#### 1. Powerpoint

Outline your story, bringing in interesting graphics and images (camera-shot videos even)

Construct it as you will, there are many online guides. High visual impact on the first slide is a good idea. Watch instructional Youtube videos to decide upon a style that appeals to you or that may prove popular to others.

The only essential for this method is that you use the Notes to each slide to compose your narrative.

At this point you already have something useful to yourself or your friends.

#### 2. Sound recording

A microphone is essential of course. Laptops may have all you need. For desktops you'll need a separate mic, mine's a Samson Go Mic USB Microphone (~£45) and I used the free version of **VideoSolo** to record; you've already got a recorder in Windows 10 (just type "Voice Recorder" in the search box on the bottom left corner.)

Copy each short audio file to the project folder you are using for your Powerpoint presentation then give it a more recognisable name.

#### 3. Powerpoint + sound

In Powerpoint navigate to the relevant slide and select **Insert** | Audio, choosing the appropriate audio file.

An additional tab "Playback" is now revealed. In the Audio options choose for it to "Start automatically" and "Hide during show"

In **Transitions** choose a timing for each slide that's just a little longer than your audio file (you can check the duration of each audio file in Windows explorer by using the "Add columns".) Don't forget to uncheck the "On mouse click" box and check the "After" box there for each slide. Perhaps allow enough extra time to allow for you to improve your audio file later, for fadeins and outs or for reading on-screen text. If you've added a video from say, a camera, onto the slide too, don't forget to leave enough time for it to play out.

Select Slide Show. To help you review your work more easily, select "Set up slide show" and change the show type to "Browsed by an individual (window)".

**Duration**: Typically the narration of 100 words will take a little under a minute. Average that throughout a 10 slide presentation and you've something that is at the short end of the duration range.

The minimum would be two slides, one for title and author and the second containing an embedded video and an audio narrative file.

#### 4. Powerpoint to video

Before you do this make sure you've carefully reviewed your presentation.

In Powerpoint choose File | Export | Create a Video - whereupon it just turns your presentation into an mp4 file (after

choosing the resolution) that can be run by your usual player. The middle resolution is optimum, an mp4 file for a 6 minute

You can see why scrunching them down to a smaller format that can be shared more easily has become popular (e.g. Youtube format.) Fortunately we needn't enter that world of conversion, downscaling and uploading because Dipterists Forum has a committee volunteer who'll do that for us ...

#### 5. Video to DF Youtube channel

video was around 90Mb.

Victoria Burton organises our Youtube channel. Vicky also tells me "Video files can be emailed to me direct if less than 50MB or by a fileshare service (WeTransfer etc.) if larger, plus a title and short description. Alternatively I can give you access to the channel to upload them yourself'

Victoria Burton vburton@outlook.com

There's potential for a good deal more interesting material landing on our Youtube channel. I've been discussing this at length with Vicky and categories + playlists will appear there gradually as more items are submitted. For example we've 4 Recording Scheme introductions there presently and can expect more.

Dipterists Forum Youtube channel at https://tinyurl.com/mj2sp8fk

My 6 minute effort is at https://tinyurl.com/4j5zszjt on the topic of **Verification in iRecord** (includes iNaturalistUK records).

Darwyn Sumner

The **Zen method**, as pioneered by musician John Cage (4'33") is to affix contact microphones to a sheet of parchment as you write on it, then, erm ...



"David Attenborough on the phone. He wants you to do some underwater filming."

# **Photography**

### Flickr groups

Flickr groups may be of interest if you are a user. The **British Flies** one was formed in 2007 and has 341 members and over 20,000 photos. That's a heck of a lot of fly photographers and images. Well worth browsing those images, the one of hoverfly *Sphiximorpha subsessilis* there is stunning but not British sadly. If you join it you can select your best Flickr fly images and add them to the *group*.

For taxonomists there's another one on Diptera, Animal Taxonomy - Diptera the idea of this one is to post images for the purposes of discussing taxonomy (read their conditions: only accepted pictures with taxonomy comments). There are some other specialist Diptera groups that you can readily find using Flickr's "search groups" function. Several others too such as British Beetles if you do those and general-purpose ones such as British Insecta & other Arthropods.

The most entertaining one for Diptera that I've come across is **Europe's Diptera**, this one seems very disciplined with mainly excellent images of diptera. Well worth browsing.

The limitation I find with most of these *groups* is that they follow the blog system i.e. one long string of images with the latest postings at the top and no means of filtering (see *tags* below.) This means of course that you should avoid assigning your images to *groups* all in one batch as they will soon slip down the *group's* list where few will see them. Best to add them in ones and twos over long time periods in order to sustain interest in your work.

In addition to nice pictures they're valuable if you want to find other photographers posting images of diptera on Flickr.

For a short time after adding one of your Flickr images to a *group*, they come to the attention of other members of that *group*, thus generating interest in your pictures. For example I added a bunch of my dragonflies to the **UK Dragonflies** *group* which immediately generated many "views". The BDS appear to use their **British Dragonfly Society Pool** *group* to augment the activities of their Recording Scheme, they've thus got a gallery of sorts.

Finally, it's possible to set your own *group*. Observing how that seemed to work well for BDS I set up a **Dipterists Forum** Flickr *group*:



The editorial interest is primarily in images suitable for use in this Bulletin. I observe that several of our Diptera Flickr users post large numbers of diptera images. This group is for their <a href="remarkable">remarkable</a> ones and I've specified UK-only. If Flickr users would be so kind as to flag images of that kind amongst their collections by joining our <a href="group">group</a> and adding it to <a href="selected">selected</a> images this would greatly help us put this Bulletin together. I started with just 5 of mine which you've seen before. We look forward to seeing new ones from you. Please keep it small, I don't want to have to scroll through hundreds. I've got some admin controls but I'll start with a light touch and see how that works out.

On your own Flickr site, if you've thousands of images then choosing and using *groups* might be a big job to tackle. Best first step if you haven't already done so is to set up *albums* and/or the next tier up, *collections* (e.g into Diptera Families).

Anyone finding your image in *groups* will at least be able to locate similar material on your site.

**Tags** are a useful means of exploring Flickr and perhaps finding groups. For example put "Chrysops relictus" as a tag on your picture, click on it and you'll be shown all Flickr images with that same tag.

Filters in Flickr are rudimentary at best, for example there's no means of determining which of your images aren't in an *album*. A good habit therefore is to place them in an *album* of any kind at the time you upload them. Treat them like tidy-boxes, you can always reassign later. No need to get as wonderfully organised as Steve Falk is on his site but at least you'll be able to find your own stuff on yours. Now where did I put those fungi pictures?...

Darwyn Sumner

(https://www.flickr.com/photos/darwyn-sumner/)

#### **Olympus Tough talk**

I saw at least five of the TG-4/5/6 cameras at Norwich in the lab. this summer. Steve Falk and Ian Andrews also use them for images on their Flickr as do others; add mine and the one Judy tells me she got and that's an awful lot of them used by us dipterists.

In terms of skills with it I'm pretty low down the list, perhaps I'm too focussed on mirrorless DSLRs. Nonetheless I did try to use it in the UEA lab at Norwich, mithering everyone on a couple of occasions for specimens they may have caught. Cheered on by other owners I made a dog's breakfast of snapping their finds, returning home with dozens of images for each shutter press. Judge for yourself with the two *Loxocera* images on our Field Week's iNaturalistUK project, just about identifiable though thanks Martin & Steve (H&C.) John Mousley however saved me from total embarrassment by handing me an envelope packed with his finds at the end of the week.

Back home and mindful of Ian Andrews method in Bulletin 90 p12 I rummaged around for LED ring lights and headed for the cool of the shed. First discovery was that the weak battery powered gear for cameras wouldn't do, the proper microscope ring lights are what are needed (typically just over £100 - but you have one of these already don't you)

Raise the lit ring up and down and it becomes clear that there's a certain height at which the light pools evenly on the specimen. The ring needs to be supported firmly at that height. The shed's the place for serendipity, a 4" connector for a dust extractor did the trick, just the right height and a very snug fit for my LED ring light (a length of 4" soil pipe would probably work.)



Take a shot of the label first then arrange the specimen on a gray card (see Ian's tips.) They're not pinned so you'll have to use some ingenuity to balance them in the desired orientation, try oasis, clay or plasticine.

Camera settings then: Microscope mode with stacking option selected. All camera lighting turned off and any auxiliary light fixtures removed. Use the zoom lever to its maximum. These models can't use remote shutter releases so you have to hold the camera pressed down firmly as you press the shutter button.

### **Scanning**

Affordable digital cameras began to be a thing for naturalists to carry around by around 2002 (Bulletin 91) and the last laboratory to process Kodak transparencies closed for business in 2006: there's actually a movie about it somewhere. Consequently if you did any insect photography 20 years or more ago then chances are you've a few boxes of transparencies somewhere.

With the advent of iNaturalist, iRecord and even Flickr if the images are good enough, there's now an opportunity to get them seen and identified and for you to turn them into open data records.

#### Scanning pre-digital photographs

If you think there are some worthwhile transparencies in your collection then it might be worth having a crack at digitising them.

There are a number of ways of setting about it, but if you've now got a decent digital camera and an appropriate macro lens then re-photographing them over a light box is a method that's hard to beat; avoid cheap scanners or you'll finish up doing it twice.

Detailing the techniques and variants would be really too complex for this Bulletin so the following is a typical setup:



Sturdy benchtop tripod + macro focussing rail - Nisi (dual use for any stacking work); this combination is much cheaper than a dedicated copying stand. DSLR body with live screen - download cable and remote shutter affixed, macro lens (105mm to achieve clearance height; 50mm may be too close), slide/negative holder (Kaiser FilmCopy Vario; pixl-latr is cheaper), LED light box (Agptek, recent ones are magnetic). It's also worth having a torch, air duster, notepad and camera battery recharger (with spare battery) handy. Transparency cartridges and storage boxes are scarce, hang on to what you have. If you ever find the Photax Fiesta boxes (400 slides) then tell me.

Outcomes are highly variable of course, a reflection of your contemporary gear, skills, filmstock and potentially deterioration over long time periods. You've hopefully some gems though, here's one of interest:



Authors of the famous Holden Clough Report, the first ever of its kind, at Holden Clough Pond July 1977. Naturalists Alf Dawes, Leonard Kidd (Dipterist), Bert Hodson and Dave Hallett. The latter was my school biology teacher, clearly his influence extended to pipe-smoking too. [D.Sumner]



Dated June  $3^{rd}$  1905 and titled "Field meeting with L&C Ento Society", a joint meeting with Oldham Natural History Society, perhaps eminent Oldham naturalist James Nield is amongst them. From ONHS collection of 2x2" lantern slides. [D.Sumner]



Ashdown Forest 1979: Keith Alexander, Ian and Christine McLean, Jane Stubbs, Peter Chandler, Alan Stubbs, Ken Merrifield, Betty van Peperzeel [M.Pugh]

Mike Pugh has been digging through old photographs too, here's a couple of his finds from Dipterists Forum field trips (with thanks to Peter Chandler for some people-identification):



Cornwall 1983: Standing: Austin Brackenbury, Joan Morgan, Ian McLean, Alan Stubbs, Jon Cole, Andrew Foster, Peter Chandlere, Roy Crossley, Ian White, Keith Alexander. Seated: Eileen Thorpe, Christine McLean, Ken Merrifield, Bill Parker [M.Pugh]

Darwyn Sumner, Mike Pugh & Peter Chandler

### **Magic tricks**



# To Excel or not

In a conversation with entomologist Robert Mesibov of Tasmania recently. I expressed the opinion that most naturalists only had Excel available to them as a recording tool. Not Robert. There's a free ModernCSV that is like Excel but with none of its faults.

Take a look at https://www.moderncsv.com/

#### Changing dates in digital images

By the time you've taken your specimen home, pinned it then photographed it the date in the image file is out by several days. Its worth changing the image's date back to the day you caught it, not just for your records but also so's you can post it on iNaturalist with the correct date. You'll also want to put more accurate dates into scans of old photographs.

Some software will do this job quite nicely (e.g. iMatch, Lightroom) but the simplest free utility is **EXIF date changer** at https://www.relliksoftware.com/exifdatechanger/

Darwyn Sumner

# Curation

# Looking after your stuff

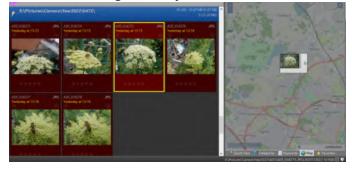
- 1. If the collector's specimens and labels are their "assets" organised and arranged (perhaps taxonomically) into store boxes or drawers in cabinets then that's the basis of their management system of physical objects. Museums do this using sophisticated "accession" software, individuals as best they can with spreadsheets.
- 2. The equivalent for photographers would be their images stored on hard disks and elsewhere. Labels and categories are achieved through a "digital asset manager" of digital objects.

For your collection of images, though there are many of these digital asset managers ranging from free stuff acquired alongside your camera to those which are features of image editors (£subscription), for naturalists the one recommended for our needs is photool's iMatch.

#### iMatch & geotagging

Until recently there were a number of methods that could be used in combination with images stored in iMatch to add the lat/long coordinates to those image files. Known as geotagging this is invaluable for anyone posting images to Flickr, iNaturalist etc. We outlined some techniques in Bulletin 93.

The most recent iMatch upgrade however introduced a new function which could be the simplest of all: **drag and drop**. From thumbnail images to a map that is:



Several other applications work in the same sort of way, Adobe's Lightroom (£subscription) and several free applications such as Microsoft Pro Photo Tools 2, Geosetter & Geolmgr. Mobile phones geotag images automatically of course

It's no substitute for the pinpoint accuracy obtained by reading from a hand-held GPS track but for places you visit very regularly or for some other reason left your GPS at home, this method is invaluable.

#### Why geotag?

Location is a key part of the curation of your own material, and for naturalist photographers one of the four "W"s. Professional photographer Robert Thompson (see review) also makes a strong case for it, apparently professional agencies and other archives demand it. So why wouldn't you?



Geotag the image first and an iNaturalist upload is reduced to a single drag and drop. No typing necessary; not even the identification if their Al/magic gets it right.

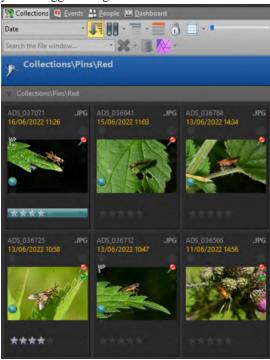
#### iMatch & posting images online

There are a number of methods you can use to categorise images, ranging from your own devised category labels to ways of using the collections markers (rating, coloured labels); iMatch author Mario Westphal says that no two people use iMatch in exactly the same way, however there's one very useful row of tags in the collections panel termed **Attributes**.



Sadly there are only 3 Pins in that Attributes row but you can see them easily on your thumbnails - and add or change them easily on those thumbnails too. I use the Red pin to indicate images I've posted on Flickr and the Green pin for anything posted on iNaturalist.

The handy thing about anything you've marked up using that Collections panel is that you can rapidly see every image you've tagged using the Collections tab:



Everything I've posted on Flickr, or intend to. I also use the Flag to indicate that a little work needs to be done before uploading (e.g. cropping, geotagging) The big blue circle at lower left of each thumbnail shows that they've been geotagged.



Once you've made your choices and tidied the images up a little then all that's left is to use this Collections tab to locate and upload the images to your chosen online application. iMatch will let you **drag and drop the thumbnail image** to either Flickr or iNaturalist.

If you are using this method to get material identified using iNaturalist (Chris Raper says that's why a lot use it - certainly I do for beetles) then it's easy to find the image in your collection again and perhaps add the identification to the image's Title.

Darwyn Sumner

# **Review**

# **Open Access**

We've addressed the issue of Open Access in this Bulletin on several occassions. There was a substantial introduction in Bulletin #87 (p20) and the topic also featured in Ritchies book "Science Fictions" which we reviewed in Bulletin #91

The issue has cropped up subtantially on ResearchGate earlier this year with a substantial announcement by their organisers that Wiley publishers have demanded they take down all articles posted there that are published by them.

# Reports Water

We've been flagging this as an important theme for some time in the Bulletin in the hopes that some diptera-related publication or report might crop up. The following may help readers explore these habitats:

- Alan Stubbs Wildlife Report in the February edition of British Wildlife focussed on aquatic diptera
- Costing the Earth BBC Radio 4 1st March 2022 (sewage)
- Photographers will find tips for photographing aquatic life in Robert Thompson's book, a nice messy job for the winter months.
- Useful reference is

Keiper, J. B., Walton, W. E., & Foote, B. A. (2002). Biology and Ecology of Higher Diptera from Freshwater Wetlands. Annu. Rev. Entomol., 47, 207–232. https://doi.org/10.1146/annurev.ento.47.091201.145159

# Blogs

#### The Lost Art of Looking at Nature

Rachel Reiderer, Dissent Magazine

https://www.dissentmagazine.org/article/the-lost-art-of-looking-at-nature An appreciation of Sir David Attenborough

# Journals New Hoverfly Journal

Jeroen van Steenis informs us of the start of a new journal on Syrphidae:



An invitation to submit articles for publication in the "Journal of Syrphidae". This is a new and completely free electronic journal (https://www.syrphidaeintrees.com/jvs/) launched as the Syrphidae Foundation (https:// www.syrphidaeintrees.com/syrphidae-foundation/). cover all aspects of worldwide Syrphid taxonomy, ecology and conservation. The articles, in English, will be published continuously and thus each article constitutes its own volume. A unique DOI number will be generated for each article and, if necessary, also registered with Zoobank to comply with the rules of the ICZN. The publications will be available at https:// www.syrphidaeintrees.com/ and via Crossref (https://

For more information, or to make a donation, please visit the JvS website or send an email to: infojvs@syrphidaeintrees.com

# BQ (Bees and other pollinators quarterly)

The spring issue occasioned comment by Peter Chandler who observed that it contained virtually nothing on Diptera. Given its seasonal timing an opportunity to cover bee-flies was also missed.

There's an article on managing hedges for pollinators, of course without mentioning flies, though it does say that more than 1500 species of insect have been recorded in them.

It includes Steven's promised article on solitary bees, followed by one about Richard Lewington's insect paintings. This has [an] introduction which curiously avoids mentioning Diptera. It isn't that he hasn't done any, as he illustrated a British Wildlife article on comb-horned craneflies, and he did the painting of Trypetoptera that the BENHS presented to Ian McLean on his retirement from the Society's Council in 2013.

I found this one of sufficient interest to buy it from W.H.Smith's shelves. The excellent article on the proposed GCSE in Natural History from its initiator Mary Colwell made it worth the cost.

The article on plants for pollinators was also of value, reminiscent of the article Judy Webb did for us a few years ago. My garden's stuffed with plants from that list now; together with old carrots rescued from a market stall bunch last year and thus in full flower quite early, I've replanted Borage & Honesty and a wide range of RHS pollinator seeds.

Peter is providing BQ with feedback as they've requested.

No flies in the next one I bought either (Issue 6) but conservationalists would be interested to read Dr Malcolm Smith's take on the new UK Government's Sustainable Farming Incentive, their new payment system for conserving wildlife.

[Ed.]

#### Other Open Access journals:

Functional traits and foraging behaviour: Avian vampire fly larvae change the beak and fitness of their Darwin's finch hosts

Philornis downsi is the culprit, a Muscidae accidentally introduced to the Galapagos.

https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2435.14061

Sent by Phil Brighton

# The tragedy of the Natural History Museum, London

Naggs, F. (2022). The tragedy of the Natural History Museum, London. Megataxa, 7(1).

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Abstract: The remit of the Natural History Museum, London, encompasses the whole of the natural world and places it at the forefront of global concerns about human impact on the biosphere. The Museum's stature as a world leading institution for storing and recording living diversity brings responsibilities, obligations and new prospects. In addition to revealing the genetic evolution of life in considerable detail, advances in molecular biology and cryogenics offer exciting new opportunities to extend beyond the Museum's traditional role as a storehouse for recording living diversity and to take a lead in biodiversity conservation.

In its strategy for the coming decade, the Museum has declared a planetary emergency for which we need an unprecedented response, asserting that we must act now, that we must act on scientific evidence and that we must act together. However, the Museum is no longer led by scientists; its relevant expertise and the prioritisation of its collection- based world-leading role is being rapidly dismantled. It has been taken over by an administrative structure and placed under a government Department that have no notion of the importance of this role. Much of the Museum's activity is no longer led by science intimately connected to its role as a collections-based institution and its public profile is dominated by journalistic presentations from sources that are widely available to a broad range of the media. Inappropriate leadership and recruitment have diverted its science base in directions that place much of its research within the activities of numerous other academic agencies, undermining the reason and justification for the Museum's existence. The move of about half of the collections and associated scientific staff to a location outside of London is a self-imposed act of institutional vandalism. It will mutilate a national treasure, not only inflicting a massive and permanent financial burden but also irrevocably damaging the Museum's, cultural identity and function as an integrated collections and research institution. Rather than responding to a planetary emergency, the Museum is tragically descending into irrelevance.

Circulated by Adrian Pont

**Megataxa** is an online Open Access journal for taxonomy begun in 2020. Check out all their articles at https://mapress.com/mt (Ed.)

### **Books**



Though the following range of reading material may appear wide-ranging beyond the immediate scope of diptera, I take it that readers are all naturalists and have an wide interest in many related subjects. As Stephen Jay Gould put it, the abstraction known as "the intelligent layperson" does exist - in the form of millions of folks with a passionate commitment to continuous learning. ("I have landed", 2002) Or in our case, 418 folk naturalists.

A substantial few months for new books ending with a batch I bought at the Rutland Bird Fair in late July. There I was lucky

enough to pick up a 2nd hand copy of the Dutch Zweefvliegen (=hoverflies) which we've mentioned before and build up my collection on the topics of biogeography and macro photography.

#### **Biogeography**

As I hunted through Blackwell's in Oxford for titles, this time on the topic of Biodiversity (see below) and allied topics the assistant suggested this one by an author I recognised. So I took the plunge, it seemed pricey for a very small book:

#### Biogeography: A very short introduction

Mark V. Lomolino (2020)

£12.99 (paperback)

Oxford University Press (www.oup.com/uk/vsi)

This proved to be terrific value. Something to fit in the pocket and rival any novel. A very concise introduction to the topic highly recommended for anyone wanting to get started on it all. Ideal present for any student you know.

# Habitats of the World: A field guide for Birders, Naturalist and Ecologists

Iain Campbell, Ken Behrens, Charley Hesse & Phil Chaon

£22 (paperback)

Princeton University Press

A nice companion to your Wildguide book *Britain's Habitats* but this one is to be dipped into to learn about places throughout the world you might have visited or would like to. After an introduction to Zoogeographic Regions and Biomes this book works through each region detailing habitat types within them. If you've ever looked at the wider distribution of species you are interested in then the superb maps and illustrations might give you clues as to why stuff stops abruptly half way up Finland or doesn't extend south beyond the Palaearctic hot shrub desert. Lots of fun to be had with this book in combination with a GBIF distribution map of your favourite taxa. A couple of puzzling spellings in here such as "varnished wasteland" Could do with a little polish.

# **Biodiversity & Naturalists**

In 2021 the world lost two of the world's top naturalists, Thomas Lovejoy and E.O.Wilson; you'll find a newspaper report at https://tinyurl.com/2y88abj9 [UK's James Lovelock of Gaia fame too, in 2022 - https://www.bbc.co.uk/news/science-environment-62322575]

Lovejoy began to refer to "biological diversity" in the late 70s and was a key worker in bringing habitat destruction to the world's notice. Wilson was an avid conservationist, often referred to as Darwin's successor, he set up the Encyclopedia of Life and is probably most famous for Island Biogeography

It's well worth checking through their published books to improve your library. Though Wilson's books were republished last year in the US, sadly our common UK bookshops don't stock either author so you'll have to go online (e.g. Blackwells https://blackwells.co.uk/bookshop/home/).

My exploration of Wilson's writings began with this one which I happened to possess:

#### Biodiversity

Edward O. Wilson (editor) 1988

£free (pdf) try https://nap.nationalacademies.org/catalog/989/biodiversity org £2.50 (paperback) from a charity shop

ISBN 0-309-03739-5

This is a series of essays by numerous authors, arising from a conference in 1986. It's one to dip into rather than consume from cover to cover. Wilson provides the foreword and the introduction *The current state of Biological Diversity* which is arguably your best (and cheapest) introduction to this author's writings on this topic. Other topics of interest include *Structural and Functional Diversity in Temperate Forests* (Jerry Franklin)

and Diversity in and among Grasslands (Paul Risser)

At Blackwells I found the philosophical *Consilience* and was told of their online service which resulted in my obtaining:

#### Biophilia, The Diversity of Life, Naturalist

Edward O. Wilson (2021) £26.50 (hardback)

An amazing book, not only for the price (\$44 in the US) but also for the superb quality of binding and production - it actually opens flat on a table or your knee.

Add to that the fact that you're getting three books in one, selected by a knowledgeable Wilson scholar to create a compendium of the man's works. This book would make a terrific gift for the naturalist in your life no matter what their specialism. I began with the third of the trilogy, **Naturalist**, as strongly recommended by Lomolino. This is in two parts, firstly an autobiography by this naturalist and secondly a sequence of accounts on concepts he'd devised, worked and collaborated upon. It's those concepts that are of considerable interest to us, they cover a wide range. If you were to devise a series of topics to address in a graduate course then this book would be your *vade mecum*. In fact, as a professional lecturer, Wilson's account covers just such a range.

For the lay reader of course you can pick and choose topics that are of particular interest to you. The chapter on Sociobiology perhaps not so much, DNA analysis possibly a little more, but Island Biogeography in these days of increasingly fragmented habitats perhaps a topic worth pursuing in greater depth.

**Biophilia** is a short (128pp) philosophical book packed with quotes from authors ranging from Picasso to Einstein, topics from poetry to sculpture. A valuable piece in here is a conversation between him and the mathemetician McArthur as they developed the ideas which led to their writing *The Theory of Island Biogeography*. Might be all you need, the book itself is hard sums.

The **Diversity of Life** is a collection of essays on a range of topics from the creation of ecosystems through extinctions, new species and the forces of evolution to threatened biodiversity.

Darwyn Sumner

#### Conservation

#### Tickets to the Ark: from wasps to whales how do we choose what to save

Rebecca Nesbit (February 2022) ~£12 (hardback)

Perhaps not what you'd expect from the title, rather than any kind of advocacy Nesbitt outlines a whole raft of dilemmas faced by conservationists. This is a compilation of stories, some perhaps familiar, many undoubtedly not. Naturally Nesbitt roams over a wide range of taxa to tell her stories. She doesn't get as far as diptera, perhaps the nearest is the story of the Guam rail, all of which were collected in the wild due to predation by introduced snakes. As they were collected they were all deloused, and the louse became extinct - oops. Most entertaining, I'm sure there are diptera parallels.

There is much to entertain and inform here. If your particular interest is in the conservation practises of Indigenous peoples and their subversion by Western farming ideologies then you'll find it stimulating. Her observation that our ideas of private land ownership is at variance with those Indigenous communities who hold their territories and resources collectively compares nicely with the case Nick Hayes (below) makes that we also are, or have, such communities in the UK.

Nesbitt argues that as biodiversity is not intrinsically valuable it cannot be our sole conservation goal. An enjoyable and provoking read, I guess that explains the title.

Darwyn Sumner

### **Diptera**

Details of Peter Chandlers book are in the Meetings section because he's leading the Preston Montford workshop on Fungus Gnats.

#### **Macro Photography**

Though this subject is popular in the photographic press their articles deal almost exclusively with moribund subjects rather than mobile ones. Good books suitable for us small game hunters are scarce.

# Close-up and Macro Photography: Its art and fieldcraft techniques

Robert Thompson FRPS £35

Thompson is a professional freelance natural history photographer and book author, possibly best known for his *Guide to the Dragonflies & Damselflies of Ireland.* You can see his other work at https://www.robertthompsonphotography.com/

Two innovations open up the huge realm of macro subject matter by allowing handheld shots to be taken of moving subjects on moving vegetation. The most recent is the stabilisation built into bodies and lenses of modern mirrorless cameras, the second is the use of macro flash. Published in 2018, Thompson's book just catches the advent of the former (update on his website) but provides a very comprehensive account of the latter. In fact his favourite piece of kit for mobile

use in the field is the one I acquired in 2007 (Nikon + macro + R1C1 flash.) which he describes as "one of the most versatile systems on the market at present" but of which he observes "... [Nikon] had a more comprehensive range of macro equipment in the pre-digital era but many of these accessories were never updated"

"Determine your objectives" is Thompson's first piece of advice. Hard to argue against any of his tips after that, even lugging heavy tripods around makes sense if you seek art for the purposes of illustration, publication and professional recognition. Though if the recognition you seek is simply the identification of your skittish quarry (i.e. us photo-recorders/collectors) then you'll need military physique to carry all the stuff he suggests - or choose a light-weight kit you can walk with.

Overall his tips are very sound. The book details all principles in a very concise and well-organised manner and in fact would make a very good augmentation to any camera-specific manuals you may currently be relying upon.

It's the mark of a good quality book that you feel the temptation to dip into it on occasion in attempts to improve your technique or gear. There are certainly several areas that I shall be doing so; to make more use of the histogram function perhaps, to improve my TTL macro flash technique, delve further into stacking and possibly find another lens, bellows or some such.

The rise in popularity of mirrorless cameras means that second-hand DSLRs can now be obtained relatively cheaply.

Darwyn Sumner

# **Countryside Access**

"Criminalising trespass would create a massive chilling effect on visits to the countryside" (Shrubsole.)



# The Trespasser's Companion A field guide to reclaiming what is already ours Nick Hayes 2022

£11.37 (hardback)

Another green book that tells you where you can and can't go. This is a follow up to the author's *The book of trespass*, the difference this time is that it is packed with stories gathered from a huge range of folk from travellers through singers and paddleboarders to ethnic groups. Lots of tips on how to navigate the English countryside and best practise as regards Countryside Codes. All this packed with Hayes' wonderful lino-cut illustrations throughout.

Though Hayes covered pretty well every aspect of access to the countryside in the book I noted the absence of disabled access, "Pay to Roam" as practised by National Trust and the closure by councils of countryside car parks due to drug dealing & sordid behaviour.



The above illustrates several topics in the book. Restriction of access with a "private land" notice, restricted access over the bridge - especially for disabled. The notice regarding Invasive Aquatic Species is aimed at the use of the river by paddleboarders and canoists just here (all very chatty - same as in the book) and they report that the River Bude is navigable over quite some distances, not fenced off like many UK rivers. Hayes also gives details of how to deal with the bag of dog shit hanging on the fence. Just email the picture to the local authority and include the co-ordinates (use what3words), too late for me to do it now but a mobile phone would have done the trick at the time. Council responsibility to clear it up of course. The little blue symbol acknowledges support from the European Agricultural Fund for Rural Development - whatever that was.

Hayes' research is thorough, he tells how the 1947 National Parks and Access to the Countryside Act and the more recent CroW Acts were both watered down by lobbyists. Seems that only wandering alone will save us amateur entomologists from being prosecuted under the 1994 Criminal Justice and Public Order Act designed against hunt saboteurs, travellers & ravers. Restricted access to rivers (97%) and woodlands (84%) could account for us knowing so little about these taxpayer-subsidised habitats in England. Reassuringly there's very little jeopardy in trespassing, all you think you know is in fact mere myth and blather. Use this book as a guide and get out there.

Darwyn Sumner

# **Members**

# **Membership Matters**

By mid-July 2022 we had 418 paid-up members and 361 subscribing to the Dipterists Digest. We have received new subscriptions from 28 people and have had 6 resignations so far this year. Renewals of subscriptions have been slow and I have written to all members who have not yet paid. That has produced 34 replies saying that the member would renew but at the time of writing I have not been able to check that the payments have been made.

It does help us greatly with planning print runs if members can pay their subscriptions in the first three months of the year. Subscriptions fall due on 1st January each year. Late payments after March do cause extra work for us in distributing back numbers. I am happy to answer any email queries about subscriptions if you are not sure you have paid.

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

103, Desborough Road,

Rothwell,

KETTERING,

Northants,

NN14 6JQ

Tel.: 01536 710831

E-mail: showersjohn@gmail.com

Membership and Subscription Rates for 2022 are unchanged:

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 only (includes the Bulletin): £14 pa

Dipterists Forum and Dipterist Digest: £25 pa.

We have decided to have an overseas Dipterists Forum membership without having to subscribe to the Dipterists Digest as well as we have had a number of queries about this from overseas.

#### BANKERS ORDER PAYMENTS

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

Dipterists Forum NatWest Bank Sort code 60-60-08 Account no. 48054615

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

International payments should use:

IBAN: GB56NWBK60600848054615

SWIFT: NWBKGB2L

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.

#### **OTHER PAYMENT METHODS**

Cheques should be made payable to:

"Dipterists Forum" and sent to the address above.

Unfortunately, PayPal do not recognise societies which are not registered charities or businesses. We have tried to discuss this with them but they never reply to our queries so now we cannot use them for payments. This is very inconvenient, especially for overseas members.

John Showers





www.buglife.org.uk/joinus•Savethe small things that run our planet

Treasurers	s R	ono	rt			2020		2021	
ii Gasui Gi	<b>3 17</b>				Expenditure	£	£	£	£
		2020		2021	Dipterists Digest 27.1	1,164			
Income	£	£	£	£	Dipterists Digest 27.2	1,208			
Subscriptions		8,954		8,536	Dipterists Digest 28.1			1,267	
Back issues	99		69		Dipterists Digest 28.2			1,267	
Donations	441		439		Dipterists Digest 28 Supplement			1,921	
Workshop – repayments	200				Digest postage and envelopes	1,115		2,569	
Training courses							3,487		7,024
Pooters			50						
WILDGuide Royalties	760		936		Bulletin 89	2,044			
Publishers Licensing Society	39				Bulletin 90	1,690			
		1,539		1,494	Bulletin 91			1,725	
Field Meetings - receipts from	particip	ants		•	Bulletin 92			1,550	
Falmouth 2021	1,000		9,331		Bulletin envelopes	527		755	
Norwich 2022	,		300		·		4,261		4,030
		1,000		9,631	Publishing software	101	,		·
		.,		-,	Postage for back issues	434		260	
Total Income		11,493		19,661	Website hosting	47		25	
		,		,	Bursaries & grants	105		207	
Income net of field meeting pay	ments	10,493		10,030	Muscidae Drawings			560	
meetine het et neid meeting pay	momo	10,100		10,000	Buglife Subscription	10		10	
					Dipterists Day	29			
					Committee expenses	50			
Movement of Funds		2020		2021	Insurance	138		138	
		£		£	Subscription refunds	100		20	
Opening balance (1st Jan)		21,544		24,222	Field Meeting expenses	54		635	
Net Surplus/Deficit		1,777		-2,878	rield Meeting expenses	34	968	000	1,854
Field meeting funds		900		3,877	Field Meetings payments on he	half of n			1,054
Closing balance (31st Dec)		24,222		25,221	Field Meetings - payments on behalf of participants				
					Falmouth 2021			5,753	
					Refund	100		-,	
							100		5,753
					Total Expenditure		8,816		18,661
					rotal Exponditure		0,010		.0,00
					Expenditure net of field meeting payments 12,908			8,716	
					Net surplus/deficit		1,777		-2,878

#### **Bursaries**

The Dipterists Forum holds an annual weekend course at the Preston Montford field studies centre near Shrewsbury. These courses cover selected families of flies in detail, and the 2023 course is expected to be about fungus gnats (Mycetophilidae). It will be held during February (10<sup>th</sup> to 12<sup>th</sup>).

The Forum also has annual residential summer field meetings lasting for one week. These take place at various venues around the country, and the 2023 meeting is expected to be based in Swansea, giving access to many sites in south Wales including the Gower peninsula. This meeting will be held in July. Attendees spend their days in the field collecting and observing flies, and evenings in a laboratory where they can identify their catches alongside other dipterists. Beginners are made very welcome and can gain valuable knowledge from more experienced members.

We offer a small number of bursaries for each of these events, awarded on a competitive basis. Bursaries for the Preston Montford course cover half the total cost of the course, including full-board accommodation for the two nights. Details of accommodation, meals etc. for the summer meeting are yet to be determined, but again the bursary will cover half the cost of the whole week. If you would like to apply for a bursary for either (or both) of these events please send your application by e-mail to me, Howard Bentley, jhowardbentley@gmail.com.

Your application should say what you hope to gain from attending, how you would expect to contribute to the Forum's aims of the study, recording and conservation of Diptera, and why you would benefit from financial assistance. If you are currently involved in a research programme please include brief details. We will be looking for evidence of enthusiasm and interest in flies. Preference may be given to those who have not received a bursary previously, but applications from previous recipients are welcome. Applications should not exceed 300 words. Successful applicants will be expected to write a short account of their experience for publication in the Forum's Bulletin.

Applicants must be members of the Dipterists Forum at the time of their application. The closing dates for applications are Friday, 18th November 2022 for the Preston Montford course and Friday, 17th February for the summer field meeting.

Howard Bentley

# **Eulogies**

#### Jon Cole 1929 - 2021

**Ivan Perry;** Although we lived fairly close to one another it wasn't until I attended meetings of the Diptera Recording Schemes in the mid 1970s, that I first met Jon. He moved to 2 Lenton Close, Brampton, nr Huntingdon in 1965 having previously lived at Goring-on-Thames, Oxfordshire. He had collected Diptera in the local area and his records were incorporated into an account of the Diptera of the Reading Area (Carter, H. 1978). At Brampton Jon found the local river valleys and gravel pits very productive for Diptera. He collected many rare species there, including several new to Britain such as *Pherbellia stylifera* (Cole, 2003), which I think still remains the only British record.

became the first treasurer in 1995, a post he held for 12 years. He regularly attended the summer field meetings, in fact I don't think he missed one in over 30 years, only stopping when his wife Rosemary had a fall and he had to return early from his last one. Although he was quite a bit older than many of us, this was never apparent on the field meetings, whether he was on top of the Cairngorms or trekking up Ben Lawers, he could keep up with the best of us. His wife's poor health prevented him from attending the summer field meetings anymore, however we still used to meet up occasionally for a day in the field. He liked to visit new sites and so he would come over to me and I took him a couple of times to the gravel pits at Lynford. Although I had visited there several times before, of course Jon added several new species to the list, including Notiphila stagnicola which I had never seen before anywhere. I did manage to find it there eventually, although I would probably have missed it, had Jon



John Cole & Megan Howe. DF Summer Field Meeting 2003, Wangford Warren, Suffolk. Photo Darwyn Sumner

When I started a long term survey of the Diptera of Wicken Fen NNR in the early 1980's, being inexperienced I relied heavily on various experts to identify some of the families. That still left a wide variety of Diptera that I was unfamiliar with and Jon kindly offered to look at what was left. Every November at the AGM in London, I would pass a large box of specimens to him, within a few weeks a long list of identifications would be sent to me through the post and the specimens returned at the summer field meeting. This went on for several years as I gradually gained confidence to tackle more families myself. The fact that when the Wicken List was published it was as comprehensive as it was, was in no small part do to Jon's expertise and support. He remained willing to look at anything I was having trouble with and when I got a *Medetera* with red basal antennal segments from Lynford, Norfolk in 2013, which I couldn't make anything of, I sent it to him. He soon got back to me to say it wasn't a Medetera at all, but a Thrypticus! In truth it was nothing like any *Thrypticus* I had seen before, but it did not fool Jon.

Jon was a staunch supporter of the Dipterists Forum and

not alerted me to its presence.

Jon's health deteriorated quite rapidly in the last few years of his life and he became profoundly deaf, which made communication difficult. He had to give up entomology and his collection went to Oxford, where it will be a valuable asset. I last spoke to him just before Christmas 2020 and it was obvious he was struggling with various health issues. However I'm glad I took the opportunity to thank him one last time for all the help he had given me over the years. Jon and his wife moved to a residential home in Cambridge on 15 October 2021, but unfortunately Jon had a fall on the same night. He was taken to Addenbrookes Hospital, but never recovered and died there on 25 November. Despite covid fears I was able to attend his funeral on 17 December at St Mary Magdalene Church, Brampton and there in a moving service, the eulogies given would have resonated with everyone who knew him. Jon was a very accomplished entomologist, a kind, quiet, modest person and a true gentleman.

#### References

Carter, H.H. 1978. Diptera of the Reading Area. The Reading

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Naturalist. Supplement to no. 30. The Reading and District Natural History Society.

Cole, J.H. 2003. Pherbellia stylifera Rozkosny, A Member of the Snail Killing family Sciomyzidae (Diptera) New to Britain from Cambridgeshire. British Journal of Entomology and Natural History 16: 10-12.

**Mike Howe;** Jon will be remembered as one of our greatest dipterists, a gentleman in the real sense of the word and always willing to help others when we got stuck! I have many fond memories of him on Dipterists Weeks although I think he mostly avoided the chaos that accompanied the Howe family during field trips. However, I do remember the visit to Wangford Warren. It was a very, very hot day (34C+ I think) and one of the few occasions Jon would have taken a break as nothing was on the wing. Megan would have been 6 and we would have had a baby Gwen with us too.

From a Welsh perspective, he provided the first UK record of *Sciapus basilicus* from the River Usk during the 1997 Abergavenny meeting (a species seemingly restricted to the Usk if the NBN is correct) and *Neurigona biflexa* from Newborough Warren during the 1987 Bangor meeting – my first taste of Dipterists Week – which remains the only UK record.

#### References

Cole, J. 1989. A new British Neurigona from Anglesey. Empid and Dolichopodid Study Group Newsheet. 7: 3.

Cole, J. 1991. A new British species of Neurigona Rondani (Diptera, Dolichopodidae) from Anglesey. British Journal of Entomology and Natural History. 4: 66.

Cole, J. 1998. Sciapus basilicus Meuffels and Grootaert (Diptera, Dolichopodidae) new to Britain. Dipterists Digest. 5: 79.

**Roy Crossley:** It must be forty years or more since I first met Jon. The occasion was a 'diptera recording schemes' visit to Teesdale and a few YNU entomologists had invited themselves along for a day. I was just getting hooked on dolichopodids at the time and Jon was very knowledgeable about them, and every other two-winged creature it seemed to me. In his quiet no fuss sort of way that I came to know so well over the ensuing years, he helped me with puzzling 'empids and dolies' from time to time.

Later, during the 1980's-1990's, when visiting family down the A14 Jean and I would call occasionally at Brampton to either pick up or drop off specimens for his opinion. This was always promptly and thoroughly given; his study upstairs was an inspiration of tidiness and good order, like the man himself. I have wondered since if his legendary neatness was in some part at least a product of his naval service as a young man.

When DF was formed, Jon took on the onerous responsibility of Treasurer, a position he served with efficiency for about ten years I think. In the initial years when I was Chairman of the fledgling body, I recall discussions about which building society to trust with our surplus funds and Jon always got it right; under his stewardship the capital of the Forum grew substantially.

I shall always remember Jon as a loyal friend, ever helpful and supportive, quiet and unassuming, but a stickler for high standards in himself and others; and a brilliant dipterist.

Many thanks to the above writers and others for their help in putting together this appreciation. Several other contributors have been in touch with Peter Chandler who is compiling a full obituary for Jon. Indeed the timing may well be that the Dipterists Digest item will appear simultaneously with this.

Darwyn Sumner

# **Contact us**

The inside front cover of this Bulletin has all the contact details you should need.

#### **Members**

See John Showers instructions above if you want to join and support us (and get copies of his Bulletin.) Don't forget we've also a Forum on our website where you can raise topics.

#### Logging on to the DF website

To log onto our website for the first time you need to use your e-mail address as the login username. The site will then send you a temporary password that you can use to log in. Once logged in you should change your password.

If you do not have an email address or if the one we hold is now out of date you will need to email me or Martin Harvey to set it up for you.

John Showers

### **Meetings**

Watch for announcements on our website. In particular, since some of them are to be held online, look for details of how to participate.

# www.dipterists.org.uk/

We invariably organise both a workshop in February and a Summer Field meeting each year. Occasionally, shorter Spring and Autumn meetings may be held too.

#### **Contributors**

#### **Bulletin**

For Bulletin related matters, information or sending articles for the next issue, then

#### email both Darwyn Sumner & Judy Webb

[Include "bulletin" in the title so's we don't lose them]

We'd also much appreciate your feedback.

Mark Welch wants to know about anything **conservation** related and Jane Hewitt needs to be kept informed about Diptera related issues in order to do her Secretary stuff.

#### **Deadlines**

Spring Bulletin - 31st December Autumn Bulletin - 31st July

#### **Dipterists Digest**

Contact Peter Chandler

# **Recording Schemes**

As for flies in particular, bring those to the attention of the Recording Schemes. Contact details for all 28 of them are on the back pages which can also be downloaded as an interactive pdf so that you can follow all their links to websites, recording initiatives and newsletters.

#### **Photographs**

Photographers may participate by uploading their images. Meeting participants will be emailed with details and our additional iNaturalistUK initiatives are summarised at

https://www.inaturalist.org/projects/dipterists-forum

# **Meetings**

# Regional Groups Northants Diptera Group

The group has met on a few occasions so far this year and more are planned. It has been fairly disappointing for flies so far with the very dry and warm conditions making finding flies hard work. Nevertheless, we have had one or two interesting species. The pond I mentioned in the previous Bulletin produced our first adult *Phalacrocera replicata*, a male on 5th May. This species has been a bit of an enigma as Graham Warnes has found the distinctive larvae at several ponds on Yardley Chase over the past few years but this is the first adult. The closely related damsel cranefly *Diogma glabrata* was taken on 14th July at Yardley Chase, this time from an almost dry stream bed in dense woodland.

Members of the group took part in a bioblitz organised by the local biodiversity records centre. This was a on a private estate and farm, which had a couple of woods containing calcareous seepages. Despite the hot, dry weather in early July, the seepages were still quite wet. One seepage produced 13 species of cranefly, including *Gonomyia recta* and the other 9 plus the hoverfly *Sphegina clunipes* and the Dolichopodid *Dolichopus signifer*.

The group are trying to encourage new people to take up invertebrate recording and have held two introductory workshops in collaboration with the Wildlife Trust for Beds, Cambs and Northants. We also held a successful field trip to Collyweston Great Wood National Nature Reserve and have been invited to return.

John Showers

# Reports Spring Field Meeting 2022 Oxford fens & Meadows

20th to 22nd May 2022



First reports from our expedition began to form within a few days. The above iNaturalistUK project was set up with the kind assistance of TVERC (Thames Valley Environmental Records Centre) who provided us with polygon shapes of the sites we

Centre) who provided us with polygon shapes of the sites we visited. Four contributors provided records across all taxa and pretty soon more than half of them had been identified.

Explore it at https://www.inaturalist.org/projects/oxford-fens-meadows and see what we found. Or use the master link site:

https://www.inaturalist.org/projects/dipterists-forum

Shortly afterwards we'd the following impressions from new member Sarah:

I'm not going to lie, but as a complete beginner I was a bit nervous when I signed up for my first Dipterists Forum field meeting in May. I got more nervous as the weekend approached, to the extent of nearly bottling out altogether the day before. I didn't have a net, I didn't have a pooter, I didn't even have collecting tubes. I was worried that I would get in the way or make a fool of myself. This was despite the fact that Mark Welch had been tremendously encouraging when I tentatively emailed him about it. 'Beginners are particularly welcome on our field meetings,' he told me. 'Everybody has to start from knowing very little. These field meetings are a great opportunity to learn a lot in a short time from more experienced folk. They are a friendly, enthusiastic and helpful bunch!' And as it turned out, this was a spot-on description of what I experienced.

I am the kind of person who can wow my friends by telling them that the big scary fly they've just found in their garden is not a super-mosquito but a harmless Dagger Fly. However, what I don't tell them is that I've only known that the Empididae existed at all for a few months. When I started two years ago in the first lockdown thinking that it would be a nice project to identify some of the invertebrates in my garden, I knew so little that I couldn't reliably tell a bug from a beetle, and I had only the vaguest notion of what Diptera encompassed. I joined the DF in December last year because I knew I found flies difficult and I wanted to get better at them. I think I had a sneaky hope that by joining I could just sort of absorb fly facts by a process of osmosis.

But it was going on the field trip that helped me to 'learn a lot in a short time'. Everyone without exception was friendly and encouraging. People gave me lifts (thanks to Jenni in particular here), lent me equipment and showed me their finds. I learnt that you don't have to be an expert to make interesting discoveries. I was incredibly chuffed when on day one at Cothill Fen NNR, armed with nothing more than a borrowed collecting tube (thanks Matt!) and beginner's luck, I managed to catch an interesting-looking soldier fly that turned out to be a Flecked General (Stratiomys singularior) – a rare speciality of the site. At Wytham, with almost the first sweep of a net lent to me by Erica McAlister, I caught a *Rhagio annulatus*. I was just happy that I recognised it as probably being a Snipe Fly; it was only later when Martin Harvey rushed off to look at it under the microscope that I found out it was unusual. It was brilliant to feel that I could contribute something, and even to find that there were a few things that I could identify for other people, such as shieldbugs and caterpillars (ok, so the caterpillars were identified for Victoria aged 9, but even so I felt useful).

I had a wonderful time, and I'd like to thank everyone who made me feel so welcome. I really enjoyed not having to apologise once for getting enthusiastic about a six-legged creature. I felt completely at home with the Dipterists, and I hope there will be the opportunity for more such trips. I would encourage anyone who is, like me, an interested novice, to go on one (and no one has paid me to say that!).

Sarah Loving

# Meetings

#### **Spring Field Meeting: Oxon Fens & Meadows**



This year's Spring Field Meeting was based around Oxford. Five sites, all within 10 km of the city centre, were visited, offering very different habitats: calcareous fen and wet woodland (Cothill NNR, Parsonage Moor); ash-oak-hazel valley woodland and meadows (Chilswell Valley LNR); riverside meadows (Long Mead LNR); ancient woodland (Wytham Woods NNR - photo above) and alkaline spring fens (Hinksey Heights LNR). In all, 24 people signed up for one or more days, with 18 attending all three days. It was really nice to meet beginners, for some of whom this was their first DF field meeting (see following item by Sarah Loving). Their enthusiasm gave a real momentum to the days out.

The first day was spent at Cothill NNR and adjacent Parsonage Moor SSSI (photo below), with Judy Webb providing a brilliant introduction to the sites. Our thanks to warden Steph Wilson for joining us and sharing in the fun and finds. Highlights included seeing larvae of *Odontomyia* and *Stratiomys* soldierflies scooped out of the calcareous mud by Judy and Martin Harvey. A few Flecked General soldierflies were on the wing. Looking through the "tinies" I collected from water traps in the wet woods, there are some nice finds, e.g. the sphaerocerids *Minilimosina v-atrum* and *Gigalimosina flaviceps*, and the phorid *Gymnophora forresteri*, all seldom recorded species. More on Cothill tinies in due course!

On Saturday we visited Wytham Woods NNR, where we met up with Dr Liam Crowley (Oxford University, Zoology). Liam is involved in the Darwin Tree of Life (DToL) project and we were able to provide a number of identified live specimens for him to take away for analysis. Speaking with Liam on the day, it is clear that DF members have an opportunity to contribute in a big way to DToL by providing live specimens when visiting Wytham (identifying them on-site" when possible). We discussed how to deal with "microdiptera", which often include species-rich families. Such flies usually require microscopic examination and sometimes dissection for identification. As this cannot be done on a living or even sedated specimen, the protocol would be for Liam to freeze the live specimen and then remove the abdomen and send it to a specialist for identification. There is a cryofreezer at the WW field station (Swiss Cottage), so with training it could be possible to do the freezing oneself while onsite. There are a few bunks at the cottage for staying overnight, along with cooking facilities and microscopes. Maybe DF can give some thought to doing DToL related fieldwork at Wytham?



The ancient woodland at Wytham provided some superb "macroflies" that included the spectacular comb-horned cranefly *Ctenophora pectinicornis*, several *Criorhina floccosa* (hoverfly) and the bumblebee mimic hoverfly *Pocota personata* (Photo: Martin Harvey)

Sunday, a hot day, was spent visiting three LNRs: Chilswell Valley (photo below), Hinksey Heights and Long Mead. These visits were a great opportunity to provide baseline Diptera records for these reserves - going from very few to, hopefully, several hundred records. Judy Webb is heavily involved in the restoration of the alkaline fens at Hinksey Heights, and she gave us a fascinating introduction to Chilswell and Hinskey reserves within the wider context of the Oxfordshire Fens Project.

Check out: https://freshwaterhabitats.org.uk/projects/oxfordshire-fens-project/

The beautiful riverside meadows at Long Mead (Great Burnet still flowering in numbers when we visited) is aiming for SSSI status and contributes invertebrate samples to the Global Malaise Trap program coordinated by the Centre for Biodiversity Genomics, University of



Guelph, Canada. I'll aim to compile initial record lists for these three LNR sites before Christmas so that we can send them to the landowners as timely "feedback".

Mark Welch



Issue 94 Autumn 2022

### **Summer Field Meeting 2022**

#### **East Anglia**

2<sup>nd</sup> to 9<sup>th</sup> July 2022



The **iNaturalistUK** report above was prepared a couple of days after the expedition. Just 5 contributors so far but  $1/3^{rd}$  of the 110 records were confirmed by the time of writing, a lot more are correct, just awaiting verification. There's a stonking new county record amongst them.

Explore our finds at https://www.inaturalist.org/projects/norfolk-dipterists-forum-field-week-2022 or browse at

#### https://www.inaturalist.org/projects/dipterists-forum

Sadly no group photographs were taken, breakfast was the only time when most folk gathered together but they were always preoccupied with the task of foraging.

Darwyn Sumner

#### Field Meeting Report NORWICH July 2022

The University of East Anglia proved to be an excellent base. We had a very large laboratory and the accommodation worked out well, thanks to the diligence of Jane Hewitt in making all the arrangements for everything to run smoothly. About 50 sites had advanced access permissions enabling us to visit the great complexes of National Nature Reserves and other reserves in the Norfolk Broads, as well as other sites on the coast and inland; local dipterist Tony Irwin put a huge effort into planning and master minding an unusually complicated task.

It had been expected that about 25 would come. Fortunately it was possible to accommodate nearly 40 and additionally some very enthusiastic local dipterists joined the day trips. It was hugely pleasing that there were so many newcomers to such meetings, both people with a primary interest in flies but also some who were more focused on other insects. A team from the Natural History Museum gathered named specimens for two separate but related projects: Darwin Trees of Life Project (whole genome sequencing) and UK Barcode of Life (UKBOL) (DNA barcode using short DNA strands); they were kept very busy! - and not just for flies.

Recording parties went to nearly all the planned sites as well as some extras. Many of the sites are large so in reality, even with so many recorders, we cannot pretend that we have covered the area thoroughly. We were fortunate that it was ideally warm rather than blistering hot. However, it was yet another drought year which inevitably impacted on the quantity of flies on the most drought prone habitats. In common with much of lowland England, hoverflies were sparse, and dolichopodids, fungus gnats and craneflies well below parr for instance. However, we still finished up with about 89 species of craneflies and many worthwhile finds among flies and other insects.

The Norfolk Broads are lakes created by digging out peat in ages past. Now there is a mosaic of open fen and carr (wet woodland) and adjacent grazing marshes with ditches; some broads have become filled-in naturally, locally with quaking

bog where fen has reached out over the water. Many are linked to rivers or artificial channels, others are in enclosed basins. Though naturally calcareous or neutral, there can be patches of acid conditions. They may look marvellous yet can be rather unproductive for flies under drought conditions; it is very clear that under current climatic trends, drought resilience is a conservation issue in addition to many other impacts. At least as regards craneflies, Bure Marshes emerged as by far the most species rich site as measured in relative recording effort; Sutton Broad fens provided the only record of the *Odontomyia angulata* (a rare soldierfly) and one part comprised a nice quaking fen that had the advantage of some cattle grazing (dense fen vegetation can be fly-species poor without some trampling and grazing.) We found some of the Broadland horseflies, such as *Hybomitra ciureai*.

Elsewhere, ground water fed valley fens were generally far more productive than the Broadlands. Buxton Heath has a calcareous spring supporting a reed bed, the outflow area teeming with flies, and with 6 species of aquatic soldierflies. This abundance illustrates very clearly that if cushioned from drought, the fly fauna can flourish. In contrast, Badley Moor SSSI, notified for active tufa springs, was far from active as a result of groundwater abstraction; the craneflies were mainly terrestrial. A few miles away, at Scarning Fen SSSI/NR the seepages are weakening and though cranefly totals were relative good, they were not as good as expected. It was a revelation that the two unofficial ground water seepage sites had a richer cranefly fauna that the official ones! On another unofficial site (Whitwell Common SSSI), the stiltfly Tanypeza longimana was photographed for the second time in Britain, and qualifies as the first Norfolk record.

Norfolk has the major pingo sites in Britain. Visits were made to 2 of the 3 main sites. Thompson Common is the most famous one, a huge complex of pools and intervening ground. At one pool we found *Odontomyia angulata* and on the intervening ground the hoverfly *Microdon devius* was discovered (only the second site in Norfolk) and the robberfly *Eutolmus rufibarbis* noted. Foulden Common yielded an almost exclusively terrestrial fauna; the pools are now very drought prone, groundwater abstraction being a huge issue as in so many parts of Norfolk. The sight of water being sprayed on crops of potatoes on drought-prone soils illustrated one of the underlying problems but also a growing population (including an increase in university size) and drier climate adds to water resource demands.

Inevitably, coastal sites were an attraction, including Winterton Dunes NNR in NE Norfolk and the extensive complex of dunes and saltmarsh on the North Norfolk coast. By sweeping Sea Lavender on the saltmarsh it was quite easy to find the horsefly *Atylotus latistriatus*, and also the lavender weevil *Pseudaplemonus limonii*. It was considered that the seepages on the cliffs either side of Cromer would be too dry but a coleopterist brought in a cranefly from a tiny trickle at West Runton Cliffs, *Symplecta chosenensis*, only the second Norfolk record, previously found the other side of Cromer on Overstrand Cliffs (the southernmost site).

Only a few of the known good finds are mentioned above and most identifications are largely a winter occupation. There should be plenty of data yet to trawl-in. It was a very enjoyable meeting and it is pleasing to report feedback that newcomers felt warmly received, dipterists or not. There was plenty of enthusiasm for next year's meeting, location awaiting confirmation.

Alan Stubbs

By August the main iRecord Activity had achieved a total of 1261 records, all participants were sent a recording guide and a full report will be published in due course.

Jane Hewitt



# Meetings

# Forthcoming Annual Meeting 2022 Annual Meeting

Saturday 19<sup>th</sup> & Sunday 20<sup>th</sup> November 2022 The Natural History Museum, London

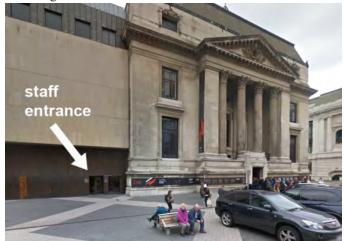


#### Cromwell Road, London, SW7 5BD

On the Saturday we will be in the Neil Chalmers Suite for the Dipterists Day event and AGM, located near the base of the cocoon, at the North end of the Darwin Centre. We aim to broadcast the talks live, so that members unable to attend in person can still participate. Details of how to access this broadcast will be posted on our website. On Sunday there will a practical workshop on making specimen dissections in the Angela Marmont Centre, also located in the Darwin Centre, on the ground floor at the South end. Doors will be open at 10 am, and sessions are due to commence at 10.30 am. A full timetable will be published on our website, once finalised.

#### Access

Anyone attending should enter the Museum through the staff entrance on Exhibition Road and report to the reception desk for a visitor pass. Tell the reception staff you are attending the Dipterists Forum event. There may well be a queue for the public entrance trailing past the staff entrance, just cut through this and go into the staff entrance.

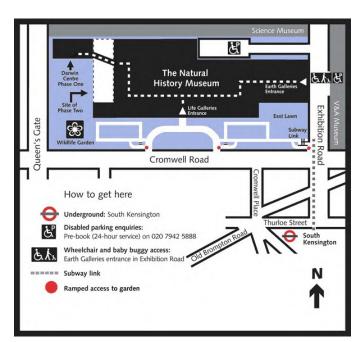


#### Travelling to the Natural History Museum.

Engineering works affect London's public transport network at weekends so remember to check the Transport for London website before planning your journey. The museum is close to South Kensington tube station which is served by the District, Circle and Piccadilly lines. Note this station does not have step free access. Also remember London buses no longer accept cash payments.

#### Accessible parking

Blue badge holders can book a space in the museum carpark, accessed via Queen's Gate. The carpark entrance is indicated on the map below, between the Natural History Museum and the Science Museum.



Please bring an exhibit for the Saturday meeting – there will be a prize for the best display!

#### **Online Content**

As well as broadcasting the talks live, members who want to share their 2022 fly highlights are encouraged to create a Padlet (there is an explanation of the Padlet concept as well as a guide to making one in the help section of Padlet website https://padlet.help/). All the Padlets will be shared with the membership via our website as well as being converted into posters for display at the venue.

#### **Visit to the NHM Collections:**

DF members will be able to access the National Collections on Sunday 20th November.

#### **Dissection workshop**

A workshop on dissection techniques will be held in the Angela Marmont Centre on Sunday 20th November. Experienced dissectors will be on hand as guides, and suitable equipment will be provided. Members with dissection challenges, or who want to learn new skills, are encouraged to bring along suitable wet specimens, and have a go at making preparations.

#### **Dipterists Supper**

On Saturday evening we will hold the Dipterists Supper at a local restaurant. If you wish to attend, please contact Zoe Adams (z.adams@nhm.ac.uk) in advance.

Zoe Adams

#### **Annual General Meeting**

Saturday 19th November 2022

Neil Chalmers Suite, Darwin Centre, Natural History Museum, London, SW7 5BD

The Chair will open the AGM at 12:15 (time to be confirmed) **Agenda** 

#### 4 . . . .

- 1. Apologies
- 2. Chairman's Report
- 3. Treasurer's Report
- 4. Dipterists Digest Editor's Report
- 5. A.O.B.
- 6. Vote of thanks to retiring committee members
- 7. Election of Officers and ordinary members to committee

The Chairman is elected biennially. The Secretary, Treasurer and other Elected Officers with specific responsibilities (detailed below) require annual election. The constitution currently requires nominations 30 days in advance of the AGM. Ordinary elected committee members serve for two years.

The Officers and Ordinary Members proposed for re-election or election this year, 2022, are as follows:

Officers	Already elected (elected 2021)
Chair	Erica McAlister
	For re-election

Vice Chairman Rob Wolton Jane Hewitt Secretary Treasurer Phil Brighton Membership Secretary John Showers **Indoor Meetings Secretary** Zoë Adams **Bulletin Editor** Darwyn Sumner Assistant Bulletin Editor Judy Webb Digest Editor Peter Chandler **Publicity Officer** Erica McAlister Website Manager Martin Harvey Conservation Officer Mark Welch **Training Coordinator** Vacancy

**Ordinary Members** 

For re-election (elected 2020) Victoria Burton

Already elected (elected 2021)

Tony Irwin John Mousley Marc Taylor

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

### **Spring Workshop 2023**

Friday 10th to Sunday 12th February 2023 Preston Montford Field Studies Centre

#### **Fungus Gnats**

Tutored by Peter Chandler

#### **Price**

Sole Occupancy Bedroom - £210 per person (£5 increase from 2022) Shared Occupancy Bedroom £185 per person (£5 increase from 2022)

The keen eyed among you will notice that the £95 discount on the headline price for DF members has disappeared. The FSC requested this change, and after some discussion the DF committee agreed to their request.

For comparison the headline rates for the 2022 Craneflies workshop were:

£300 for single occupancy (then discount applied if applicable) £275 for shared occupancy (then discount applied if applicable) We intend to give members advance notice of course topics and dates through the DF website before they get advertised on the FSC website to the general public.

#### **Booking**

Booking details on the FSC website from mid-October.

Visit the Fields Studies Council website field-studiescouncil.org click on Courses and Experiences then Natural History Courses then view our current courses and use Diptera in the keyword search.



#### The course

Peter Chandler, author of the new 2022 RES handbook on the Mycetophilinae, will be tutoring the course. It will cover the whole of the British fungus gnat fauna, comprising 574 species from 5 families: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae, with the majority (501 species) in the Mycetophilidae.

The new RES handbook

contains keys to the subfamilies of the Mycetophilidae, as well as keys to the tribes, genera, and species within the Mycetophilinae subfamily (334 species). Anyone planning on attending the course will need access to a copy of the new handbook. In addition, handouts will include new keys to the remaining subfamilies of Mycetophilidae, and to the members of the other fungus gnat families. Attendees should also download a copy of the previous 1980 RES handbook to the Mycetophilidae by Hutson et al, available free from the RES website. This 1980 volume covered everything except the Mycetophilinae.

Despite their general ubiquity, and the fact they form an important part of the Dipterous fauna of many habitats, much remains to be discovered about the fungus gnats, with plenty of scope for new observations. There are few records on adult behaviour, and the larval biology of around half the UK fauna remains unknown. Aside from the obvious larval associations with fungal fruiting bodies, there are species that develop in rotten wood, bryophytes, bird's nest and in caves. Some Keroplatidae even have predatory web-spinning larvae. Adults

### Meetings

are found, often in large numbers, in moist dark places, and generally associated with woodland habitats. They are one of the groups of Diptera that can be found throughout the year, and with a second abundance peak in the autumn, coinciding with the emergence of fungal fruiting bodies, they are a dominant part of the late-season fauna. Adults of several British species have also been recorded hibernating during winter inside caves.

The course is a great opportunity to get to grips with this difficult and diverse group. A group with a fascinating ecology, and one we all encounter on a regular basis in our samples.

#### **Handbooks for the Identification of British Insects Volume 9, Part 8**



#### Fungus gnats (Diptera: Mycetophilidae, Mycetophilinae)

Peter Chandler 2022

Field Studies Council (for the Royal Entomological Society) https:/www.field-studies-council.org/shop/publications/fungus-gnats/

Though I loaned my copy out to the laboratory at Norwich it seems that many dipterists there had already obtained their copies. (Ed.)

#### **Bursaries**

The Dipterists Forum is offering up to two places at half price on the Preston Montford course. If you would like to take up this offer please apply by e-mail to our chairperson, Erica McAlister, E.McAlister@nhm.ac.uk, giving your reasons for applying. Applicants must be members of the Forum. Applications should reach Erica not later than mid-December

Zoe Adams

### Summer Field Meeting 2023

### 50th Field Meeting

#### **South Wales**

#### Saturday 8th July to Saturday 15th July 2023

We are hoping to base the 2023 summer field meeting at Swansea University, close to the Gower Peninsula. The meeting will likely be held in early July (provisional dates are 8th-15th). Once arrangements with the University have been confirmed, further information will be posted on our website.

Jane Hewitt, DF Secretary

Last visited by Dipterists Forum in 2009 (see p18) [OS 1:250k maps https://www.ordnancesurvey.co.uk]

### Hoverfly Newsletter

Number 72 Autumn 2022 ISSN 1358-5029





Copy for **Hoverfly Newsletter No. 73** (which is expected to be issued with the Spring 2023 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<sup>th</sup> November 2022. Given the size limitations it may be worthwhile to send your articles in good time to ensure that they are circulated with the bulletin, in which newsletters are now restricted to a maximum of eight pages. My thanks to all contributors, and also to Martin Matthews for his meticulous proof-reading of the text.

The hoverfly illustrated at the top right of this page is a female *Meligramma guttatum*.

# SyrphBoard – a new, easy to use way to record hoverflies

Andy Murdock and Ioannis Sofos

January 2022 saw the launch of SyrphBoard, a new way to record British Hoverflies online. SyrphBoard was developed by Maploom Limited, a web mapping and data visualisation company, run by Andy Murdock (geospatial specialist and HRS volunteer) and Ioannis Sofos (software and data visualisation specialist) and was guided by HRS and UK Hoverflies Facebook Group members.

The aim was to address current challenges with hoverfly recording and create a system that can:

- Capture and store records online
- Capture nil returns (when no hoverflies are seen)
- Make regular recording easier through very visual data entry screens (icons and widgets)
- Capture other information (e.g. time of day, weather etc.)
- Make records available 'live' for HRS
- Provide self-service tools and real-time feedback to recorders
- Share and export data

Species can be entered very easily from lists such as 'HRS top 20' and 'My Recent 20' species seen. There are also text look ups for species and buttons

for entering the gender, date and observation method as well as validation to reduce errors.

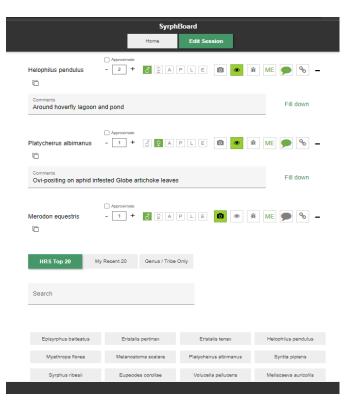


Fig 1

A common and time consuming issue with records is incorrect grid references. SyrphBoard allows users to save frequently visited sites and to click on the map to automatically return an accurate grid

reference and vice county. They can also search the map based on a grid reference entered.



Fig 2. Location data entry: saved sites and grid reference finder

The weather, time of day and 'nil return' (no hoverflies seen) options can be used to support new analysis such as high frequency recording across different times of day (e.g. to explore the impacts of hot weather events).

Another key advantage of SyrphBoard is that the records are accessible securely online and HRS can gain access to the records quickly, rather than having to wait until the end of the year when recording spreadsheets are usually submitted.

We are very keen that recorders should have access to and gain benefit from the records they provide to the Scheme. At any point users can export their records as a spreadsheet for use elsewhere. SyrphBoard also has a basic dashboard allowing a summary of recorders' observations to be viewed, for records to be browsed and links out to the UK Hoverflies Facebook group where identifications have been checked. This functionality will be extended later this summer in Release 2 with updates likely to focus on greater visualisation and analysis capabilities for users, third party recording, easier use on mobile devices and greater support for early stages recording (larval rearing).

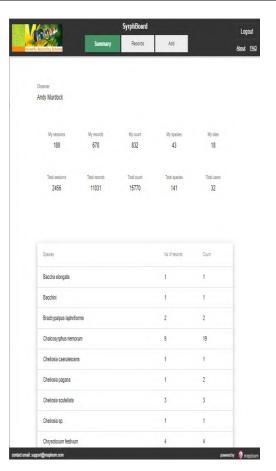


Fig 3

At the time of writing and since SyrphBoard launched in January, users have entered c.11,000 records of 141 hoverfly species from across Britain saving the HRS Administration team considerable time and effort. While SyrphBoard does not replace existing recording methods, it is hoped that more people will switch to and get greater value from submitting their records through it.

For more information about SyrphBoard you can watch a video here: <a href="https://youtu.be/66Bul4qJfew">https://youtu.be/66Bul4qJfew</a>

To use the SyrphBoard, go to:

https://syrphboard.maploom.com and login with your Facebook username and password.

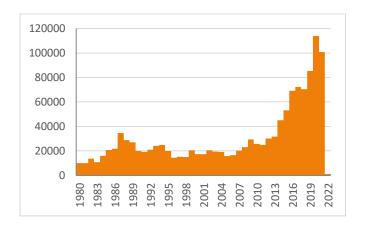
For any queries, please get in touch at: support@maploom.com

# HOVERFLY RECORDING SCHEME UPDATE: Autumn 2022

Stuart Ball, Roger Morris, Joan Childs, Ellie Rotheray and Geoff Wilkinson

This has been a busy year. As in 2020, the volume of data arriving for 2021 exceeded 100,000 records, which makes the job of checking and absorption into the database long and frustrating. A major factor in this process is the growing volume of data coming from iRecord and from iNaturalist, which add huge numbers of new names that have to be matched with the existing dataset. It is a slow and difficult job that is made worse by the numbers of people who use different screen names for different datasets.

This job was completed in late winter but a small number of datasets remain to be incorporated, so the final figure will doubtless be a lot more than exists at the moment. Also, there is a growing backlog on iRecord as new data are uploaded and verified. Further complications arise because there are people who are placing archive data onto iRecord that have already been submitted to the HRS many years ago. Some of this upload will be duplication that can be resolved computationally, but there can also be problems with nomenclature caused by splits such as those in Cheilosia albitarsis, Platycheirus scutatus and P. peltatus. This process of backlog uplift is also causing additional problems because people forget that the verification process is particularly demanding during the summer months. So, for verifiers who have scheduled enough time to keep on top of the daily average of about 200 records, the addition of a further 400+ records can cause apoplexy! These data cannot simply be 'accepted' by a global rule they have to be checked for possible problems with species splits.



**Fig. 1.** Numbers of 'unique' records on the HRS dataset to 12 April 2022.

#### News from the Facebook group

Last winter, we started to develop a programme of on-line talks for Facebook group members. These talks have covered a range of subjects pertinent to the growing interests of the group, and will be expanded to draw in a wider range of speakers as time passes. The talks are advertised on the UK Hoverflies FB group, so if you are interested in listening in, it is worth joining the group.

There have been further important advances, such as the development of an online platform 'SyrphBoard' that has been designed to help record at a much more refined level. One of the projects the HRS has always wanted to do is to encourage detailed daily recording (including nil results) throughout the day. SyrphBoard makes this possible. What we now need is somebody who might take an interest in co-ordinating efforts to do such recording so that we can investigate, for example, the way hoverflies behave in exceptionally hot weather.

#### **Recent snippets**

Recorders using the Facebook page sometimes report observations that in themselves may not appear to be of great significance but when combined with other data could be important pointers to aspects of hoverfly ecology and distribution. It is difficult to know how to capture such information so the following notes have been included here:

#### Paragus (probably haemorrhous) - Simon Knott

'Fascinating watching *Paragus* behaviour on bramble today (15/06/2022) in Bengeo garden (TL319134). Early morning females start ovipositing on buds. Later, when it's hotter, males patrol; if he finds a female, he abducts her & mating occurs elsewhere.' UK Hoverflies (15 June 2022)

https://www.facebook.com/groups/6092722324509 40/posts/5451075891603859/

#### Hoverflies out at sea - Craig Hannah

'Good to see the first influx of hoverflies offshore this year on an oil rig. 140 miles from Scotland and 170 miles from Norway, so more or less the middle of the North Sea. Syrphus sp, today I've probably counted 200 so far. (UK Hoverflies, 24 June 2022).

'Another mass migration of hoverflies offshore today, 3, possibly 4 species counted on the oil rig I work on, which is 140 miles from Scotland and 170 miles from Norway, so more or less the middle of the North Sea. Thousands of them, I think *Syrphus* sp, *Episyrphus balteatus* about 49% of each of them. Also think there was *Eupeodes* sp. plus another type (*Scaeva pyrastri*). Photos are poor as just the works camera.' (UK Hoverflies, 30 June 2022).

Location is 58°02'51.8"N 1°08'11.6"E or Block 16/26.'

https://www.facebook.com/groups/6092722324509 40/posts/5475575335820581/

#### Hoverflies also at sea – Lenny Simpson

Lenny works on Brent Charlie Oil Platform, 120 Miles NE of Shetland 60°54`N 1°48`E and provided a running commentary on hoverfly numbers over the course of a mass movement over the same period of late June/early July. His comments were as follows:

'A few *Syrphus*, *Eupeodes* and *Episyrphus* balteatus going about this morning'. (UK Hoverflies, 30 June 2022).

'Lots of *Syrphus*, *Episyrphus balteatus* a few *Eupeodes* and a handful of *Scaeva pyrastri* this morning'. (UK Hoverflies, 01 July 2022)

'A Few *Syrphus* and *Eupeodes* today plus a couple of *Episyrphus balteatus*, a lot windier today'. (UK Hoverflies, 02 July 2022).

Of those animals photographed, the *Syrphus* females seemed either to be *S. vitripennis* or *S. torvus* (usually not possible to be definitive from photos) and the *Eupeodes* were *corollae*.

#### Eriozona syrphoides larva near Great Yarmouth

- Neil Winston Symonds

A larva of this species was video-recorded in association with the giant willow aphid *Tuberolachnus salignus*. UK Hoverflies (25 June 2022)

https://www.facebook.com/groups/6092722324509 40/posts/5480913261953455/

#### **Hoverfly conference 2022**

Stuart & Roger will be attending the forthcoming Symposium at Barcelonnette in September and have offered four talks covering:

- Plenary presentation: update on progress with the GB HRS.
- Range shift in *Leucozona glaucia* in Great Britain.
- Changes in the phenology of British hoverflies.
- A model to explain possible climate change impacts on hoverfly populations.

At the time of writing this Newsletter we don't know what has been accepted.

# **Hoverfly Lagoons and Pseudo Rot Holes**

#### Boyd Barr

I was very interested to read the report in the Hoverfly Newsletter, (Bulletin Dipt. Forum No93 Spring 2022) from Ellen Rotheray regarding Hoverfly lagoons etc.

I have been meaning to emulate these pseudo rot holes for some time.

The use of a chainsaw to cut into existing tree stumps is beyond my ability so I intend to use green glass wine bottles which are cut to remove the top neck section.

I also wanted a system by which I could quickly substitute or exchange these glass cylinders effectively. The reasoning for this being that it would be easy to record the presence of larvae in the chambers on a weekly / monthly basis. Providing an easy method to record dates as to when eggs / larvae appear. The procedure is simple; a wooden dowel is screwed to the tree trunk through two spring clips with stainless steel screws, at various heights. This would also provide

data for any preferences or selection by egg laying females as well as species. (As described by Ellen, it is also important to 'standardise' the size of these chambers for experimental replication).

Two further spring clips are attached to the glass cylinder via cable ties. The glass bottle / cylinder is then simply clipped to the dowel with a further cable tie securing it. This extra tie is simply snipped off to unclip the cylinder and attaching its replacement.

Exchanging these vessels is quick and simple and by changing them frequently and storing them in racks netted at the top, will provide accurate data.

I intend to place a few of these in some local woodlands which are quite ancient; they appear on maps over two centuries ago.

The biggest problem is the wine bottles require emptying of wine before modification. I seldom volunteer for anything, but in the interest of science I immediately put one step forward and offered my services!

Hope to be able to report some positive results from these trials a.s.a.p.





Photos: Boyd Barr

# Oviposition in *Chrysotoxum* cautum

Roger Morris

Stuart and I visited Stonepits Quarry and Old Sulehay Forest after we had finished work on the abstracts for our presentations at the Symposium in September. At one point we watched a female *Chrysotoxum cautum* ovipositing on the underside of *Brachypodium pinnatum* leaves - just a single egg on each leaf. Amazingly, the egg was visible even to my eyes! This seems to have been very deliberate placement of an egg.

A note placed on the UK Hoverflies Facebook group elicited a comment from Vic Brown who records in the Gamlingay area: 'I watched this one ovipositing on Giant Redwood (*Sequoiadendron giganteum*) in my garden (9/5/2020). Single eggs, one visible in the photo. Note. My Redwood isn't a giant, it is only about 1.5 m tall. Container grown from seed, brought back from Sequoia National Park, when the kids were small, 19 years ago.' <a href="https://www.facebook.com/groups/6092722324509">https://www.facebook.com/groups/6092722324509</a> 40/posts/5445575438820571/



Chrysotoxum cautum female (photo: David Iliff)

#### Rhingia -a life on the edge

Judith Hibble (via Roger Morris)

This post by Judith Hibble in the UK Hoverflies Facebook group provided a rare insight into the threats faced by ovipositing *Rhingia campestris*: 'Looking for dung beetles - I spotted a fly with a large red abdomen buzzing around the cow-pats - realised it had a long rostrum and must be a

Rhingia. Occasionally landed on a blade of grass near a pat. Realised she was laying eggs on the pat. However, along with *Sphaeridium* beetles, another common inhabitant is a beetle — *Ontholestes* (*murinus*). Saw a commotion on another cow-pat - 2 *Ontholestes* has caught a *Rhingia*.'



Rhingia campestris female on blade of grass overhanging a very fresh cow pat (note the egg floating in the pool just above the fly



Ontholestes murinus (a rove beetle, Staphylinidae) – an active predator on cow pats.



Two *O. murinus* subduing a female *Rhingia* campestris.

(photos: Judith Hibble)

# Eristalis arbustorum and pseudoscorpion

**Andrew Cunningham** 

During a visit to the ornamental gardens at Killerton (Tiverton, Devon) on the 23<sup>rd</sup> March 2022, I potted up a female *Eristalis arbustorum* for further examination. Surprisingly, there were two pseudoscorpions attached to hind leg of the *Eristalis*. These were identified as *Lamprochernes chyzeri*. Further information on L. chyzery can be seen

on https://www.chelifer.com/?page\_id=194



Lamprochernes chyzeri (photo: Andrew Cunningham)

# Is it time to use AI to verify iRecord and iNaturalist data?

Roger Morris

The volume of records posted on iRecord has steadily grown and is now at a level where it is necessary for me to spend about an hour a day on verification during the summer months (longer when the egg timer refuses to clear). I dread to think what moth recorders have to deal with! So, we face a dilemma: check all posts manually or introduce some automated processes.

### **Dipterists Forum**

Having spent a lot of time assessing the sorts of identification problems presented on iRecord I do not think there should be automatic acceptance of any species based on photographs. Some remarkably common mistakes happen, such as listing a species as Syrphus ribesii when it is in fact a Eupeodes; or listing Eupeodes latifasciatus (or Epistrophe diaphana) when in fact it is a Syrphus. Much less rigour is possible in the case of records not supported by a photograph, so it must be accepted that at least a few will be wrong. The only realistic solutions for those records are: only accept records from recorders whose abilities are known; or accept data for very widespread and relatively easily identified species. I tend to favour the latter, as we must not lose sight of the need to encourage newcomers and it can never be known when the next really competent specialist will emerge.

In the case of AI, I think we need to tread carefully, although I am told existing systems in The Netherlands are showing great promise. To me, the critical issue is to bring down to manageable levels iRecord verification using experienced specialists. If that does not happen it can only be a matter of time before the pool of verifiers dwindles to a puddle. In some taxa that already exists, so there is a separate issue of determining how at least some records might be dealt with in bulk so that the verification process focuses on genuinely complicated taxa. Understanding the challenges faced by non-specialists is the key.

The problem of identification skills is central to my having much time in recent years getting to grips with the issues surrounding photographic identification. This medium is not going to go away, even though reviewers of papers may regard the subject to be 'of little scientific interest' (as one journal said on rejecting my analysis). To my mind, far from being of little scientific interest, there is a massive necessity to undertake detailed analyses across all taxa so that the quality of the data being accessed and used in numerous high impact papers is properly understood.

Using the most recent batch of iRecord and iNaturalist data downloaded to the HRS by Martin Harvey at CEH, I think it can be seen how much of the verification job could potentially be automated by AI. In those datasets there were 19,914 photographic records comprising 199 species in iRecord and 16,174 photographic records

comprising 132 species in iNaturalist. Those figures are far from even, however, as the data are heavily biased towards big, brightly coloured and obvious species, dominated by Eristalines, some Syrphini and all the Volucellini. Consequently, the top 30 species in both datasets are very similar (see below:

	% Photo	ranking	% Photo	Ranking
Species	(iRec)	(iRec)	(iNat)	(iNat)
Cheilosia illustrata			1.21182	25
Cheilosia pagana			0.21021	30
Chrysotoxum bicinctum	0.9716057	25		
Chrysotoxum festivum			0.27822	18
Dasysyrphus albostriatus	1.4322808	20	0.72338	26
Epistrophe eligans			1.3973	20
Epistrophe grossulariae	0.9716057	26	0.55027	27
Episyrphus balteatus	6.7844878	3	14.9314	1
Eristalis arbustorum	2.9483206	9	1.24274	11
Eristalis intricarius	1.507664	19		
Eristalis nemorum	1.8678281	16	1.05107	21
Eristalis pertinax	4.9585392	5	10.8384	2
Eristalis tenax	9.3223888	1	9.57092	3
Eupeodes corollae			2.5102	24
Eupeodes latifasciatus	1.3066421	22		
Eupeodes luniger	1.1139961	23		
Helophilus pendulus	6.9687579	2	9.37307	7
Helophilus trivittatus	0.8962225	29	0.84704	22
Leucozona lucorum			0.64919	17
Melanostoma mellinum	1.6165508	18		
Melanostoma scalare	1.8845799	15	1.87956	6
Meliscaeva auricollis	0.9213502	28	0.92741	13
Meliscaeva cinctella	1.030237	24	0.50699	28
Myathropa florea	5.2265684	4	5.49648	5
Parasyrphus punctulatus			0.08038	14
Platycheirus albimanus	2.1777368	14	0.80376	12
Platycheirus scutatus sl.	0.9464779	27		
Rhingia campestris	1.4239049	21		
Scaeva pyrastri	0.8878466	30	2.08977	19
Sericomyia silentis	2.2363682	13		
Sphaerophoria scripta	2.3620069	12	1.9723	4
Syritta pipiens	4.5816233	6	2.68332	15
Syrphus ribesii	1.8175727	17	0.21021	23
Volucella inanis	2.5211492	10	1.34784	10
Volucella pellucens	3.4424994	8	4.21664	9
Volucella zonaria	4.1125722	7	4.79164	8
Xanthogramma pedissequum sl.			0.36478	29
Xylota segnis	2.445766	11	1.26747	16
Total % of dataset	80.68515		84.0237	

**Fig. 1**. The 30 most frequently reported species in iRecord and iNaturalist data downloaded to the HRS in February 2022, represented as percentage of each dataset and ranking within those datasets.

This list seems to me to offer a starting point of what might be tackled by AI. Not all species will be suited to such an approach. For example, *Melanostoma* are potentially much more complicated and in need of detailed attention. Similarly, *Syrphus ribesii* records are only of

### **Dipterists Forum**

females and most *S. torvus* records are males, so we cannot assume that these species will be as readily separated by AI as might be desired. Nevertheless, it is a starting point that might help to make iRecord more manageable and that might also help to ensure that the people who contribute see their records verified quickly. This latter point is important because feedback I receive is that recorders find even a positive confirmation of a record useful feedback on their ID skills.

# An apology for a mistaken identification

Martin Matthews

Some readers will have realised that the 'encounter with Sericomyia superbiens' reported in Hoverfly Newsletter 71 (Spring 2022) was in fact an encounter with a quite different fly, a male Gasterophilus intestinalis (Horse Bot Fly; family Oestridae), a parasite of horses, mules and donkeys. The error was spotted very quickly by André van Eck in The Netherlands and Andrew Grayson in the U.K. Apparently my account reminded Andrew of John Ray's description of a similar hilltop encounter in 1660 when he found the Horse Bot to be 'a very aggressive nuisance'. My puzzlement at the behaviour of the fly and the habitat in which I encountered it is, of course, fully explained by the corrected identification. Other hoverfly recorders might wish to bear in mind the confusion that G. intestinalis may cause them, particularly if it is a species with which they are not familiar.



*Pipiza noctiluca* female, Cowfield Marsh 19 May 2022 (photo: Martin Matthews)



Lejops vittatus male, Horsey Mere 17June 1998 (photo: David Iliff)



*Dasysyrphus albostriatus* male, Northway 14<sup>th</sup> April 2022 (photo: Martin Matthews)



Brachyopa scutellaris male, Arle Grove 19 May 2010 (photo:David Iliff)



# **Cranefly News**

#### **Dipterists Forum Cranefly Recording Scheme**

For Superfamily Tipuloidea & Families Ptychopteridae & Trichoceridae

**Newsletter No 39** 

Autumn 2022

**Editor: John Kramer** 



#### Jersey Craneflies – Alan Stubbs

#### Introduction

In the period 1985 to 2002, Tony (A.G.) Warne made a series of visits to Jersey, the largest of the Channel Islands. His main interest was Coleoptera but he offered to obtain samples of craneflies for me to identify. Data from 14 sites was obtained, mainly for the 1990s.

The Channel Islands are British Crown Dependencies, often regarded as part of the British Isles but geographically very close to the continental mainland. Some recording schemes regard the British List and data sweep as including the Channel Islands. From inception, the Cranefly Recording Scheme has excluded these Islands. None the less, it is of interest to gain insight of the Channel Islands fauna.

The visits by Tony Warne were most frequent in late June, with none earlier in the season. Hence the spring fauna was missed entirely. There are very few records for July. Fortunately there is some other data for early autumn. Of note is the September emergence of *Tipula paludosa* in 1991 (that would have very exceptional in Britain 30 years ago but is now common in southern Britain); on Jersey, most of the autumnal species would be expected to emerge later into October (as is now the case in Britain). This review has been prompted by Pjotr Oosterbroek in an effort to record knowledge of the cranefly fauna of this part of Europe, there being nothing published. He obtained a list of my identifications of Warne's samples with many the names of species in outdated nomenclature. He also obtained a list of species in the Société Jersiaise Collection but the complete data, including identifier, is not currently available. I thank Pjotr for his copy of data long out of my mind and his pursuit of the collection.

In the list of species below the two sources are combined and current nomenclature is used. Hopefully this will be an incentive for others to improve knowledge about the fauna of these Islands.

Warne	localites	7 c.	Les Landes, cliffs (south, centre).
1.	Egypte (Fungus Farm)	7 h.	Les Landes, heath (south).
2.	Fern Valley	8.	Lower St. Lawrence Valley (Waterworks Valley).
3.	Grouville Marsh	9	Noirmont.
	m. meadows	10.	Ouaisne Common
	wc willow carr	11.	St. Catherines Valley.
4. 5.	La Landes du Oust La Miellede Morville	12.	St. Ouens Pond
5. 6.	Le Canne du Squez, Les Landes.	13.	The Elms, Les Pres.
7.	Les Landes.	14.	Trinity Valley.

#### SPECIES LIST.

NB. Species with specimen(s) in the Société\_Jersiaise Collection (SJC), Museum drawers Q1 and Q2, are indicated with an asterisk \* and the number of specimen(s) indicated as (SJC: 1-4). Species on this list but without specimen are given as (SJC: 0). The determiners are as yet unknown.

\*\*\* Indicates specimens in the collection which need the identification checking.

Species without an asterisk were collected by Tony Warne and identified by me (AES). Their habitat is indicated by a number.

#### TIPULIDAE (12 species)

Dolichopeza albipes\*. (SJC 1)

Nephrotoma flavipalpis (SJC: 0). 5 (15.IX.1986); 14 (29.VI.1993).

Nephrotoma guestfalica (SJC: 0). 5 (29.VI.1985, 29.VI.1993, 26.VI.1999).

Nephrotoma submaculosa\* (SJC: 4).

*Tipula cava*\* (SJC: 1). 4 (VI.1986); 6 (28.VI.1993); 7 (VI.1986, 14.VI.1986); 7 c (28.VI.1993); 7 h (28.VI.1993); 9 (VI.1986); 10 (24.VI.1998).

Tipula fascipennis 10 (27.VI.1991).

Tipula fulvipennis (SJC: 0).

Tipula lateralis 3 (02.X.1991); 3 m (30.VI.1993); 14 (09.VII.1990, 28.VI.1991).

Tipula luteipennis (SJC: 0). 7 (14.VI.1986, questionable because June is too early in the season, IX.1986); 10 (01.X.1991).

Tipula maxima (SJC: 0). 2 (22.VI.1992); 6 (27.VI.1993).

*Tipula oleracea*\* (SJC: 1). 3 m (30.VI.1993); 5 (16.X.1993, 26.VI.1999, 30.VI.1999); 8 (27.VI.1993); 12 (25.VI.1993, 26.VI.1993); 14 (09.VII.1990).

*Tipula paludosa* (SJC: 0). 1 (25.IX.2001, 09.X. 2002); 2 (04.X. 1991); 3 (02.X.1991); 8 (15.X.1993); 10 (10.X.1991); 13 (07.X.2001, 29.IX.2002); 14 (03.X.1991).

*Tipula pierrei* 3 m (30.VI.1993); 12 (25.VI.1993, 26.VI.1993).

Tipula rufina (SJC: 0).

#### PEDICIIDAE (3 species)

Pedicia claripennis 2 (12.VII.1990).

Tricyphona immaculata (SJC: 0). 4 (VI.1986); 6 (28.VI.1993); 7 (VI.1986); (14.VI.1986).

Pedicia rivosa (SJC: 0). 6 (28.VI.1993); 14 (20.IX.1988).

#### LIMONIIDAE (30 species)

Achyrolimonia decemmaculata 3 (03.X.1997).

Austrolimnophila ochracea\* (SJC: 1). 11 (30.VI.1993).

Dicranomyia chorea\* (SJC: 1). 3 wc (03.VI.1993); 8 (27.VI.1993);

Dicranomyia modesta 2 (04.X.1991); 3 wc (03.VI.1993); 8 (27.VI.1993).

Eloeophila maculata 3 (03.X.1997).

Erioconopa diuturna\*\*\* (SJC: 1). Possibly E. trivialis with an open discal cell, a much commoner species not in the collection.

*Erioconopa trivialis* 3 m (30.VI.1993); 14 (26.VI.1991, 26.VI.1992).

Erioptera fuscipennis 3 m (30.VI.1993); 14 (26.VI.1991, 26.VI.1992).

Erioptera fusculenta 3 m (30.VI.1993);

Erioptera lutea 14 (26.VI.1992).

Euphylidorea aperta 2 (22.VI.1992).

Euphylidorea lineola 2 (04.X.1991).

Helius pallirostris 3 (03.X.1997); 14 (26.VI.1991).

Ilisia maculata 14 (26.VI.1992).

Limonia dilutior\* (SJC: 1).

Limonia macrostigma 2 (04.X.1991); 3 (03.X.1997); 14 (26.VI.1991).

Limonia nubeculosa\* (SJC: 4). 5 (26.VI.1999); 11 (30.VI.1993).

Molophilus appendiculatus 2 (12.VII.1990); 3 wc (30.VI.1993).

Molophilus czizeki \*\*\* (SJC: 0). Questionable, not known from France.

Molophilus griseus (SJC: 0). 3 (03.X.1997); 10 (11.X.1998).

Molophilus obscurus (SJC: 0). 7 (VI.1986, 14.VI.1986); 14 (03.X.1991).

Paradelphomyia senilis 8 (27.VI.1993).

Phylidorea ferruginea (SJC: 0). 3 (03.X.1997); 3 m (30.VI.1993); 9 (VI.1986); 14 (29.VI.1993).

Phylidorea fulvonervosa 8 (27.VI.1993).

Pilaria discicollis 3 (03.X.1997); 8 (27.VI.1993); 14 (26.VI.1991, 29.VI.1993).

Pilaria fuscipennis 2 (12.VII.1990); 11 (30.VI.1993).

Pseudolimnophila lucorum 14 (29.VI.1993).

Pseudolimnophila sepium 14 (29.VI.1993).

Rhipidia maculata\* (SJC: 1). 5 (15.IX.1986, 26.VI.1999).

Symplecta hybrida 3 m (30.VI.1993); 8 (27.VI.1993); 12 (25.VI.1993, 26.VI.1993).

Symplecta stictica\* (SJC: 2). 3 wc (30.VI.1993).

#### **PTYCHOPTERIDAE**

Ptychoptera albimana\* (SJC 1)

TRICHOCERIDAE (1 species)

Trichocera annulata\*.(SJC 4)

#### **Alan Stubbs**

#### Leicestershire Entomological Society Occasional Publications - VC55 Craneflies

The Leicestershire & Rutland Entomological Society is producing a series of Status Reviews of the Diptera of VC55 up to 2020 to act as a baseline for future recording effort.

These are available at: <a href="www.naturespot.org.uk/content/leicestershire-rutland-entomological-society">www.naturespot.org.uk/content/leicestershire-rutland-entomological-society</a>
Amongst the reviews done to date are the species comprising the Tipuloidea (Craneflies) with 184 being found in the two counties (see table).

Family	Review	Date of issue	Author(s)	No VC55
	Number			species
Cylindrotomidae	40	Aug 2021	RM	2
Pediciidae	41	Oct 2021	JK & RM	8
Tipulidae	43	Oct 2021	JK & RM	48
Limoniidae: Chioneinae	46	Jan2022	JK & RM	52
Limoniidae:Limnophilinae & Limoniinae	51	Jul 2022	JK & RM	74

Much of the work in recording this group of flies was carried out by JK with RM collating the VC55 data, checking available databases etc for other records, removing duplicates and producing the draft texts and maps (MapMate©).

John Kramer & Ray Morris

#### Atypophthalmus umbratus (de Meijere 1911)

This species is noted in British Craneflies as captured in 1987 by Alan Stubbs and seems like a new addition to the British List (British Craneflies p350) but it was not included in Peter Chandler's RES Checklist of British Diptera published in 1998, or anywhere else, as far as I know, so it has come 'out of the blue'. Specimens were discovered in a hot house in Kew Gardens in and they are reported as last seen in 2002. It is one to look out for at Kew, and other similar hot houses where plants from hot tropical regions are grown. The Dome at the Eden Project, Cornwall, might be another site to search. It is recorded as pantropical in the Palaearctic Catalogue. The type locality is given as Djakarta, Indonesia, and it has been recorded in Asia and Israel. If anyone has any information, or any British specimens, there is a paper waiting to be written!!

## Geranomyia unicolor from the Channel Island of Alderney with notes on habitat and associations Paul Whitehead & Pjotr Oosterbroek

Geranomyia unicolor Haliday, 1833, is a west European species, distributed in Great Britain, Ireland, France, Spain, Portugal,



Fig. 1. *Geranomyia unicolor* Haliday, 1833, *in cop*. ©photo: Paul Whitehead

Madeira, the Canary Islands and the Azores (Oosterbroek, 2022). Throughout its range it is found along coastal cliffs and rocky shores (Coe, Freeman & Mattingly (1950); Oosterbroek (2022); Stubbs (2021)). The single inland record known to us is from the south of the French department of Mayenne, some 100 km inland (Quindroit, 2020); all other French records are coastal and limited to four departments in the northwest of the country [Pas-de-Calais (62) (Poisson 1932), Ille-et-Villaine (35) (Poisson 1932), Finistère (29) (Prenant 1925, Pierre 1926, collected in May 2022 by Jean-Yves Gloaguen), Morbihan (56) (MNHN, 1912)]. (Clovis Quindroit, pers. comm.). This coastal record comes from Hannaine Point, Clonque Bay at 49°71′N 02°22′W, on the Channel Island of Alderney. On 8 June 2022 a pair was observed in copula (Fig. 1) immediately beneath a Pleistocene raised beach cliff section in open exposure (Fig.2). As far as we know this is the only record of a cranefly from Alderney. Information for the other Channel Islands is limited to Jersey and is presented in this issue of Cranefly News.



Fig. 2. Hannaine Point, Clonque Bay, Alderney, Channel Islands, 8 June 2022. Position of *Geranomyia unicolor* Haliday, 1833 (arrowed), *in cop*. at base of raised beach. ©photo: Paul Whitehead.

Figure 2 depicts the boulder beach fronting the cliff. The boulders result from multiple cycles of derivation, most recently from the raised beach, its wave-cut platform here marked by flowering Wild Carrot *Daucus carota* L. The cliff marks what remains of a larger probably last interglacial raised beach that linked Hannaine Point to Fort Clonque Island as recently as *c*6000BP (James, 1997). Its upper levels mark storm surges and reworked solifluction, the section capped by post-glacial solifluction and human activity features. It is likely therefore that *G. unicolor* has an extended history on Alderney.

Stubbs (2021) provided evidence of the larval pabulum of *G. unicolor*: lichens and algae (seaweeds) around the upper splash zone, visible here in Fig. 2. The herbaceous vegetation at the foot of the cliff is a mixture of species down-slumped from above bringing with it various *Otiorhynchus* weevils and the coccinellid *Subcoccinella vigintiquattuorpunctata* (L., 1758). Littoral species such as Sea Beet *Beta vulgaris* ssp. *maritima* (L.) Arcang. proved attractive to the syrphid *Eristalinus aeneus* (Scopoli, 1763) for courtship purposes and the carabid beetle *Ocys harpaloides* (Audinet-Serville, 1821), its nomenclature recently confirmed, is new to the archipelago. Although also a littoral species there are one or two inland records in Britain associated with ancient landscape features. The chrysomelid *Apteropoda orbiculata* (Marsham, 1802) is here probably new to Alderney.

#### Acknowledgements

We would like to thank John Kramer for the confirmation of our identification and Clovis Quindroit for information on French records. PW has benefited from dialogue with Maxwell V. L Barclay (NHMUK).

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#### Verrall's work on craneflies

#### Introduction



George Verrall (1848-1911) is best known for his two volumes of British Diptera: Vol 8, (1901) on the Platypezidae, Pipunculidae and Syrphidae, and Vol 5 (1909) on the Stratiomyidae and other lower Brachycera, but, in addition to these, and his checklists of British Diptera, he also did some very significant work on the identification and distribution of British craneflies (Pont, 2011). Between 1886 and 1888 George Verrall published some 50 pages in a series of seven papers in the Entomologists Monthly Magazine (EMM) entitled 'List of British Tipulidae, &c. ('Daddy-Longlegs'), with notes', which set the study of British craneflies on a firm base. (Verrall 1886, 1887, & 1888). He included Dixidae, Ptychopteridae and Trichoceridae as 'Daddy-long-legs, but dealt chiefly with the Tipuloid craneflies. The papers show that Verrall was not only a collector but, as with the other groups that he studied, a very serious student of the Tipuloidea and his work certainly provided a base from which subsequent authors such as F.W. Edwards and Henri Audcent and Ralph Coe later benefitted.

His extensive travels gave him access to excellent habitats in England, Wales and Scotland and his library, correspondence and visits put him in touch with all of the leading dipterists in Britain, Europe and North America. He especially admired the work of Baron Osten-Sacken (1869) in his Monograph of North American Tipulidae, a work which includes keys.

#### The Papers: 'List of British Tipulidae, etc. (Daddy-long-legs) with notes'.

Below is a brief summary of the contents of each part as published. Verrall's list is based on Vol. III of Walker's British Diptera (1856) and also informed by Osten-Sacken's systematic arrangement of the genera (Osten Sacken 1869).

**Part 1, Nov. 1886. EMM 23:117-125.** At that time the 'Daddy-long-legs' ('craneflies') were divided into four families: Dixidae, Ptychopteridae, Limnobiidae and Tipulidae. Verrall adds 15 more species to the 28 species which he listed on his Jan 1886 'List of British Diptera' making a total of 148 Tipuloid craneflies then known. He then lists some 24 reputedly British species of craneflies for which he claims that more evidence is needed in order to ascertain their British Status.

#### Keys

A key to the 'cranefly' families and genera is then given, which is followed on pp 123-124 by a key to the genus *Limnobia* (*Limonia*). This part finishes with notes, including a close comparison of *Limnobia nitida* n.sp., now *Limonia maculipennis* (Meigen) with *Limnobia pannonica* Kowartz, which is an East European species not known in Britain. Also presented are notes on *L. trivittata* (*L. phragmitidis*) and *L. macrostigma*.

**Part 2: EMM 23, Dec. 1886 pp** 156-160. The description of the family Limoniidae (called Limnobiadae by Verrall) continued with the Key to *Dicranomyia*, and notes. *D. aquosa* Verrall is described as a new species with comparisons to similar species and Verrall uses the term 'open discal cell' to describe the lack of medial cross-vein. Notes are given on *D. modesta* Meigen and Verrall recommends 'a very close study of the male genitalia' to better define this and similar species. A similar recommendation is made with *D. chorea*. Notes are also given on *D. stigmatica, lutea, mitis, sericata, dumetorum*, and *didyma*.

#### Part 3: EMM 23, 1887 pp 205-209. The family Limoniidae, continued.

Notes on Rhamphidia (now Helius) longirostris, Orimargo virgo, and Antocha opalizans.

Key to Molophilus. Seven species were known to Verrall, which included murinus, now Tasiocera murina.

Key to *Rhypholophus*. Five species were known to Verrall which included *Ormosia lineatus*, *O. nodulosus*, and *O. similis*. He mentions finding '*R. pentagonalis*', 'a large species with a discal cell', which is now placed in the genus *Scleroprocta*. Notes on *Erioptera*. Six species are on Verrall's list. He also mentions a species with 'a curiously forked end to the hooks on the male genitalia' which he has failed to identify with any described species. This is presumably *E. griseipennis* Meigen 1818, although Meigen did not describe the genitalia.

And finally there are notes on *Lipsothrix errans*. Verrall mentions that out of eleven specimens 'only one male has quite black knees'. The remaining ten specimens we would now identify as *L. remota* (Walker 1848)

#### Part 4: EMM 23, May 1887. pp 263-267

Notes on the genera: *Idioptera*. Verrall states that he is not sure that *I.fasciata* (now *I. linneii*) is British, but he has taken *I. pulchella* Meigen at Lyndhurst.

Genus Ephelia, (now Eloeophila). Four species are described: miliaria, apicata, submarmorata and marmorata (now maculata).

Key to *Limnophila* species. Sixteen species are described here, all of which have now been allocated to other genera. This section finishes with a detailed discussion of the yellow European species of *Limnophila*.

Part 5: EMM 24, Oct. 1887. pp 108 – 112. Continues notes on the British 'Limnophila' species: aperta, ferruginea, ochracea, bicolor, (Adelphomyia?) punctum, fuscipennis, discicollis, subtincta (scutellata), lucorum, nemoralis, filata, and senilis.

A brief note on the genus Trichocera (winter gnats) follows which Verrall comments on the lack of knowledge of this group. Key to genus Amalopis, and notes on littoralis, occulta, immaculata, and unicolor.

The section ends with a note on Phalacrocera replicata.

#### Part 6: EMM 25, June 1888. pp 20 – 27. This part deals with the Tipulidae, as follows:

Dolichopeza sylvicola Curtis (Now D. albipes.) – note. Verrall comments on the function of the 'white feet' as a distractor to predators, but comments that he has never seen a mutilated specimen, with a food snapped off by a bird or spider.

Nephrotoma dorsalis note. The genus Nephrotoma was defined as having 19 antennal segments.

Key to *Pachyrrhina*: This genus was defined by having 13 antennal segments. 10 species are keyed and notes given on these species of *Pachyrrhina*. It is now merged with *Nephrotoma*.

Key to *Tipula* and notes on *Tipula*. Verrall begins this section by saying 'Most reluctantly do I attempt any table of this genus at present;' however he concludes that 'an imperfect table is better than none at all', and hopes that Lepidopterists may be induced to take up the group. 34 species are described. *Tipula lunata* is identified by its 'ashy-grey' abdomen. (Perhaps T.luna) *Tipula ochraceous* has an 'ochraceous' thorax and the male genitalia have a 'tufted plate beneath' ie this is T. lunata. T. fascipennis is also described with 'thorax brownish-grey.'

#### Part 7: EMM 25, Oct. 1888. pp 97 - 99

This begins with the Key to Ctenophora in which the three species we know today are described. This is followed in parenthesis by a description of a male 'Amalopis pyrenaica' sp. n. from a specimen caught in the Pyrenees and given to Verrall by Baron Osten-Sacken.

There then follows a few paragraphs 'On Collecting & Setting Tipulidae' (p98). Verrall concludes this section by saying 'I would especially emphasize the labelling, as specimens without a history are almost valueless.' He added a circular label to his specimens 'punched with an old gun-wad punch'!!!

The final section is 'Addenda and Corrigenda' and makes interesting reading. The final part of this section is a description of *Amalopis claripennis* sp. n., now *Dicranota (Ludicia) claripennis* (Verrall 1888).

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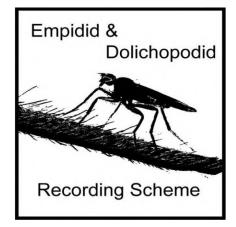
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John Kramer

The next copy deadline for issue #40 of Cranefly News is Dec. 20<sup>th</sup> 2022. Please send any copy to me.

There is an expanded digital version of this newsletter sent to members of the Cranefly Recording Scheme. If you wish to join the mailing list, please let me know.

john.kramer@btinternet.com



# Newsletter No. 27 Autumn 2022

# Interesting dolichopodids recorded at the Dipterists Forum field meeting in Cornwall, 2021 Martin Drake

This meeting's haul of dolichopodids was good – 108 species among just over 1000 specimens, and including about a dozen species of conservation interest. I say 'about' a dozen because the formal rarity status can be misleading for tiddlers, such as *Rhaphium fasciatum* and *Syntormon monile*, that are almost certainly under-recorded. See the maps on the next page to accompany the accounts.

Most nationally scarce dolichopodids were sparsely distributed and found in low numbers. A distinctive exception was Dolichopus andalusiacus which was found at six sites and was sometimes quite numerous, particularly at Penhale dunes. Ponds seem to feature frequently in the site descriptions of these records. The national distribution is now absurdly tilted to the far west of Cornwall. Perhaps the clue to this distribution is in its name - Strobl described it from a specimen from Algerciras in Andalusia on the southern tip of Spain, and its European distribution is decidedly southwestern. Another species with a strong cluster of records in this part of Cornwall was Campsicnemus pumilio (Croft Pascoe Pool, Rospannel Farm, Windmill Farm), although its habitat affinity is not easy to fathom as I think that records submitted to the recording scheme probably include plenty of errors based on females. But the swampy nature of these three Cornish sites does fit with a known preference for water margins. The first record west of Somerset for Rhaphium antennatum was from dunes at Kennack. Not only does the record upset the distribution pattern but introduces an unusual habitat for this species that appears more at home on coastal marshes and floodplain wetlands. The map for Syntormon macula is filling up nicely. I wonder whether this species is undergoing an increase in frequency, like Dolichopus virgultorum (Drake 2017), but of course it is difficult to disentangle increased recording from a population expansion. Not only is the density of dots on the map increasing but there is an increase in records of males which are found far less frequently than females and fly in midsummer when recording is at its peak, unlike the early-flying females, so their increased occurrence does not seem to be an artefact (Drake 2021a). The record from the Cornwall meeting was a single male from Croft Pascoe Pool. Schoenophilus versutus is small and probably overlooked but almost certainly correctly identified when found. Its habitat affinities are somewhat vague; it shows

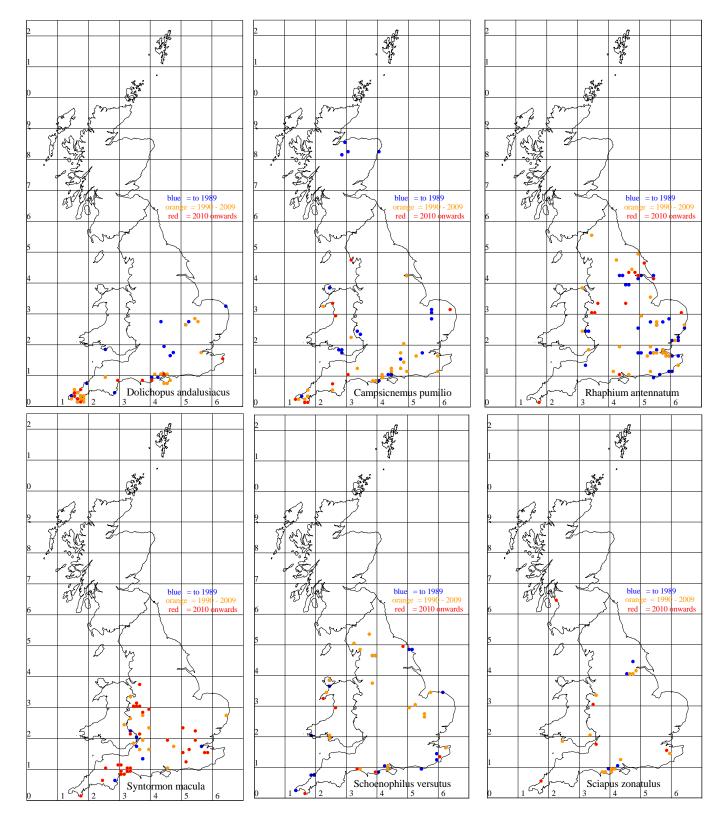
a propensity for coastal sites but is not closely tied to them and is found at a variety of wetlands. A small colony was found at Windmill Farm on the Lizard by sweeping a swamp dominated by spike-rush (*Eleocharis palustris*), bulrush (*Schoenoplectus*) and short flooded grass. *Syntormon mikii* (Rare) was found at Gwithian Green where two collectors each found single females. As the distribution map in Drake (2021b) shows, Cornwall is one of the most favoured counties for this coastal species, where it had previously been found at several of the sites that we visited in 2022.

Uncertainty surrounds several *Sciapus* as d'Assis Fonseca's key has become unreliable following Meuffels and Grootaert's (1990) revision of the trickiest species-group in the genus. In this group, we found *S. zonatulus*, including a male which makes the record reliable, at Penhale dunes on the bare windblown sand of the foredune (two recorders, several specimens). Confirmed records come from soft coastal cliffs and dry heaths, which fits with the Cornish find but this is the first in the West Country beyond the Dorset heaths. Its status was left as Data Deficient owing to the previous muddle in identification but it is a good candidate for 'Rare'.

Thrypticus is unusual among dolichopodids in having herbivorous stem-mining larvae, and adults can sometimes be found by sweeping likely foodplants including spike-rush and bulrush (Schoenoplectus lacustris). At Bulrush Pool on Penhale dunes, T. nigricauda was frequent on the bulrush which suggests that it could be another host-plant for this fly, although spike-rush was very abundant too. I also found another species that I will be describing shortly – so I cannot spill the beans just yet; suffice to say that it looks just like T. cuneatus which has distinctive wings shaped like those of the common Sciapus platypterus.

The final species to mention is *Aphrosylus raptor*, one of the two larger species in the genus and whose larvae may feed on barnacles, as do those of *A. celtiber*. It is far less frequently recorded than *A. celtiber* although it is found on the rocky coasts from the Solent to south-west Scotland. Maybe in Cornwall it is moderately common, but we still found it at only one site at Coverack compared to three for *A. celtiber* and four for the tiny *A. ferox*.

Many thanks to the numerous dipterists who handed their specimens to me during the meeting, making up over half of the records.



# Rhamphomyia marginata (Empididae) on the move

#### **Nigel Jones**

The 4-5mm length females of *R. marginata* are amongst the most distinctive of flies in the British fly fauna, having remarkably broadened wings, featuring a distinct dark brown apical band that extends more faintly around the hind margin. It was first discovered in Britain in East Kent in May 1973. The recording scheme database contains 53 records from the period 1973 – 2008, all from East Kent and West Kent. In

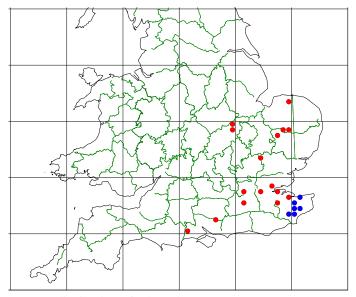
Newsletter no. 16 (Autumn 2011), Adrian Plant reported that a first record from outside Kent had come from the New Forest in April 2009. No further ex-Kent records were submitted to the scheme until 2013, since when there has been a slow but steady trickle of records submitted from another seven vice counties. It appears that after gaining a very firm foothold in Kent over the period 1973 – 2008, the species has begun to extend its UK range. Since 2017 records have been made every year, often from new vice counties. So far the range, though considerably extended, is restricted to south east England, including the following nine vice counties,

Hampshire, East Kent, West Kent, Surrey, South Essex, Hertfordshire, West Suffolk, West Norfolk and Northamptonshire.

R. marginata is most often found along rides in broadleaf, conifer and mixed woodland between late April and early June, peaking throughout May (recorded UK dates 18 April – 6 June). It will come to light traps, but can be found quite readily by searching woodland rides from late afternoon until 20:30 hours. Laurence Clemons has had particular success finding it at these times, most notably as part of a determined blitz search on 19 May 1995 when he found R. marginata males and females at 12 sites in East Kent! Look for aerial swarms. Separate male and female swarms have been found, but "role reversal" is the norm with females establishing swarms and males flying into these to select a female partner. Swarms can be low flying or at up to 6 metres height. The fly has also been found resting on foliage and by sweeping both ground vegetation and tree foliage.



*Rhamphomyia marginata* (f) Grafton Park Wood, Northamptonshire. Photo: Ron Porch.



Known distribution of *Rhamphomyia marginata* at July 2022. Blue – before 1990, red, 1990 to 2022.

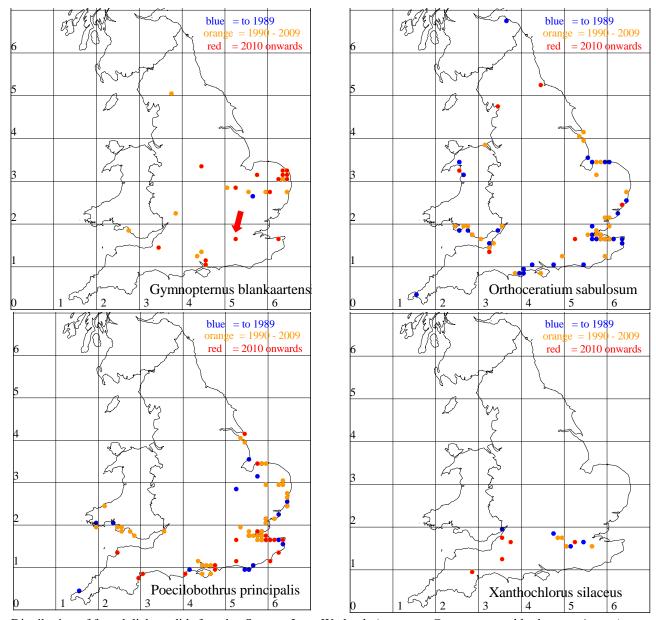
#### Dolichopodids of a small London wetland Martin Drake

Roger Morris and Derek Coleman ran a Malaise trap at Spencer Lane Wetlands, a small Local Nature Reserve in Surrey managed by London Wildlife Trust (TQ279667). The reserve developed from an area where watercress was grown by the River Wandle, a base-rich chalk-stream just right for watercress. Now it is a mix of reedbed and willow carr with limited dead wood. Glancing at a road atlas you'd think that it was in the middle of endless housing and industry of Greater London. So not very promising except in a London context. But the dolichopodids that I identified form a remarkable and almost ecologically impossible assemblage for its geographical position.

As might be expected, there was an assemblage of species associated with fens, including lots of Ethiromyia chalybea and occasional Poecilobothrus chrysozygos and Teuchophorus spinigerellus. The most unexpected was Gymnopternus blankaartensis which was commonest species by far in the samples, with nearly 700 individuals representing nearly half entire catch. I normally expect this uncommon species in topnotch fens such as those of Norfolk. There were also other species of good swamps, such as plenty of Hercostomus plagiatus and singletons of Campsicnemus picticornis, Achalcus flavicollis and Hercostomus parvilamellatus. But then there were four coastal species, or at least species that are very rarely recorded far from the coast, and two of them have a conservation status: Orthoceratium sabulosum (16) and Syntormon mikii (20 on different dates). Then a male of Poecilobothrus principalis, a species of saltmarshes, and a couple of Syntormon pseudospicatum although this last species does occur rarely inland. The nearest stretch of the River Thames lies about 8.5km away across a swathe of old built-up London, but its reinforced banks are hardly suitable habitat for such specialists. The river is tidal here but probably only just brackish. So these saltmarsh or coastal species clearly have not read the text-books or they survive on presumably substandard habitat. As their numbers were very low they could be strays, but one would not apply that argument to explain, say, the single Teuchophorus spinigerellus trapped in the middle of a reedbed, its normal habitat. I suspect that some saltmarsh species have wider tolerances than we normally assume.

Other uncommon species were more probable residents. *Syntormon macula* is turning out to be moderately widespread in southern England but males remain elusive (Drake 2021a, b). On three dates between 15 August and 5 September, four males were caught. Roger tells me that there is not much dead wood on the site, just old willows, so these are probably the larval development site for *Systenus ?pallipes* ( $1^{\circ}$ ) and *Australachalcus melanotrichus*. It was good to see a population of *Xanthochlorus silaceus* flying for several weeks in the absence of other commoner species in the genus; this record lies in the middle of a local band stretching across the London Clay and just into the flanking Chalk.

Many thanks to Roger Morris for picking out the dolichopodids from a year's worth of Malaise-trap samples and for comments on the site. Apologies to Scotland for chopping off record-free area on the maps.



Distribution of four dolichopodids found at Spencer Lane Wetlands (arrow on Gymnopternus blankaartensis map).

#### Empididae workshop key – index Nigel Jones

I've recently made an index for the Empididae key produced for the Dipterists Forum workshop in 2019. Members who would like a copy of this should make their request to me at <a href="mailto:nipajones@talktalk.net">nipajones@talktalk.net</a>

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https://doi.org/10.1101/2022.02.25.481977

#### **Contacts**

#### **Dolichopodids**

Martin Drake – martindrake2@gmail.com

#### Empididae & Brachystomatidae

Nigel Jones – nipajones@talktalk.net

#### Hybotids & Atelestidae

Stephen Hewitt – 28 Castle Drive, Penrith, Cumbria CA11 7ED smhewitt@hotmail.co.uk

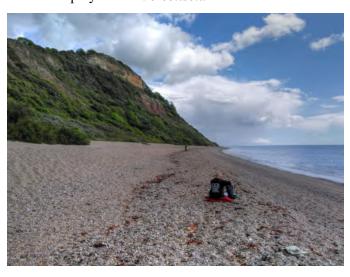


### Lesser Dung Fly Study Group - Newsletter 3

#### Sucking up small-fry on the South Devon coast

Andrew Cunningham

Mark Welch was down in Devon for a few days in late May. This presented an opportunity for Dave Brice, Richard Lane and I to meet up in pursuit of strandline sphaeroceridae. Checking out the ordnance survey maps, we decided on Weston Mouth (SY164879). A walk down from a little car park brought us to a shingle beach at the base of some high soft crumbling cliffs. The strandline was a bit sparse but we managed to record no less than three species of *Thoracochaeta* amongst other genera. These were dominated by the common *T. zosterae* followed up by a few *T. erectiseta*.



What I found most interesting was the usefulness of a modified hand vacuum in shingle. The flies and other insects will scurry away into the shingle but plunging the vacuum into the shingle was effective in producing several specimens below seaweed. As a test, I selected a few spots of bare shingle, well away from any strandline debris, and plunged the vacuum into it which produced specimens even then!

As an ongoing study of shoreline sphaeroceridae and associated diptera in the UK, we would be grateful for any records or unidentified specimens. If you are able to help with this, then please get in touch with Dave Brice by email at ischiolepta20@gmail.com

Sampling brachypterous species Mark Welch Following on from Andrew's item on the virtues of vacuum-sampling, I thought that it would be of interest to mention some brachypterous sphaeros. I came across specimens of two rarely recorded brachypterous species in a batch of sphaerocerids sent to me for identification by Nigel Jones: *Spelobia manicata* (1m 1f), *Pullimosina meijerei* (3m, 1f). As well as these "rarities", two female *Pteremis fenestralis* were found, a common species that

can also occur in a short-winged form. All of these specimens were collected by Nigel from a single Shropshire site (Racecourse Common near the village of Llawnt). Not being aware of *S. manicata*, I initially considered the two specimens (1m, 1f) to be brachypterous *Spelobia clunipes*, a morphologically very similart species. I contacted Dave Brice about them and he pointed me to *Spelobia manicata*, which is described in Roháček (1991) and appears to be exclusively brachypterous. While considering *S. manicata* to be a *bona fide* species, Roháček mentions that it could be a terricolous ecotype of *S. clunipes*.



The identification of *Pullimosina meijerei*, a very small sphaero' at 1mm long (partially dissected brachypterous male shown above), was straightforward as it keys correctly in Pitkin (1988). It occurs in brachypterous and normal forms. Not having encountered this species before, I dissected the specimens and prepared slidemounts to confirm my identifications.



Diagnostic 5th sternite of male *Pullimosina meijerei*.

I have just been working through sphaerocerids from Cothill NNR, Oxon, given to me by Judy Webb at the DF Spring Field Meeting. One of the specimens taken in a pitfall trap is *Crumomyia pedestris*, a micropterous relatively "large" sphaero' with very short wings. This species would seem to be genuinely localised.

All sampling methods are selective. Vacuum sampling, water traps and pitfalls are convenient means of studying an otherwise largely inaccessible fly fauna, i.e. ground/soil dwellers. With increased use, a more representative picture of species' distributions and status will emerge. The message is clear: use vacuum samplers, water traps and pitfall traps more often .... Please!

Issue 94 Autumn 2022

### Forum News

#### A new lesser dung fly for the British Isles

Minilimosina floreni Rohacek and Marshall (Diptera, Sphaeroceridae) new to Britain from Fair Isle, Scotland. Mark D. Welch, Dave Brice & Nick J. Riddiford Dipterists Digest, 2022, 29, 239-244.

A female *M. floreni* was taken in a pitfall trap at Swey Bog on Fair Isle. It is likely that the specimen arrived at Fair Isle *via* an easterly airstream from Scandinavia, like so many of the avian rarities recorded on the island.

#### Three new lesser dung flies for Ireland

Thoracochaeta Duda (Diptera, Sphaeroceridae) recorded from marine strandlines on Ireland's east coast, including three additions to the Irish list. Simon Hodge & David Brice. *Dipterists Digest*, 2022, **29**, 221-224.

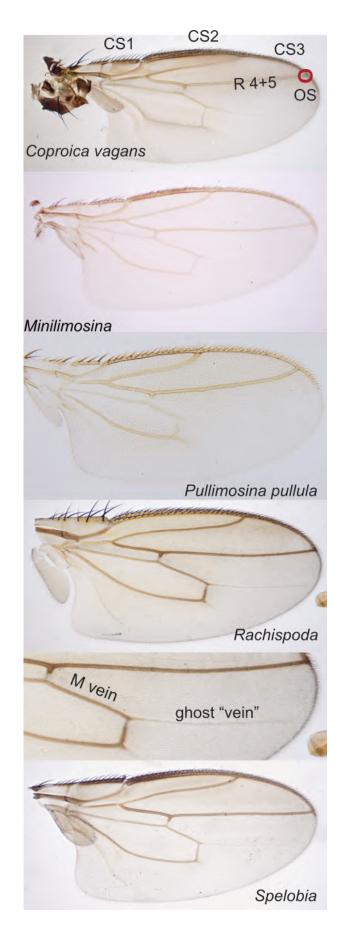
*T. erectiseta, T. seticosta, T.valentinei* (+ *T. brachystoma* confirmed).

Sampling of 11 strandlines on the east coast of Ireland between July 2021 and January 2022 produced 225 sphaerocerid specimens of five species, including these three additions. All three have been recorded in Britain, although *T. seticosta* is extremely rare.

#### LDF wings: sub-family Limosininae

Here, we illustrate some key features of the wing used in the identification of members of the sub-family Limosininae. Flies of this sub-family are easily distinguished from those of the Sphaerocerinae and Copromyzinae using wing venation (Pitkin, 1988, pp 82, 93, 101). Important features of the wing (top photo opposite) include the relative lengths of costal sectors 2 and 3; the length (zero, very small, obvious/long) of costal overshoot OS at intersection of vein  $R_{4+5}$  and costa (red circle). Coproica spp and Pullimosina spp have long costal overshoots (photos). Spelobia a have a straight R<sub>4+5</sub> and a very small costal overshoot (a nubbin that extends beyond the costa/R<sub>4+5</sub> junction. Rachispoda illustrates the case where there is strictly zero overshoot and the vein is slightly curved forward at the distal end. An enlargement of the wing of *Rachispoda* (photo) showing the feint "ghost vein" extending from the true (thick, sclerotised) median vein ( $M = M_{1+2}$  of Pitkin) and very nearly reaching the wing edge. This "vein" is NOT to be considered as present when identifying the subfamily (couplet 1). Furthermore, Limosininae lack an anal cell, whereas the other two sub-families have one. Minilimosina spp (photo) have a small overshoot and the  $R_{4+5}$  vein is bent slightly forward distally. Note that this small overshoot, a little longer than that of Spelobia, qualifies as "well beyond junction" (Pitkin, couplet 54).

Pitkin (1988) RES Handbook for the Identification of British Insects Vol. 10, Part 5e. Lesser Dung Flies.



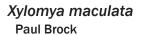
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## Dipterists Forum Flickr group



Odontomyia ornata Sean Brown Canon EOS-1D X

Dictenidia bimaculata Ian Andrews TG-5



Spiriverpa lunulata Nigel Jones TG-5

