

Dipterists Forum recording schemes meeting

- Notes and actions (taken by Martin Harvey – apologies for any errors and omissions!)
- Meeting arranged by Dipterists Forum committee, held at Natural History Museum, London, on 21 September 2019, with support from the Biological Records Centre



Present

Anthony Bainbridge; Charles Griffiths; Chris Raper; John Kramer; John O’Sullivan; John Showers; Martin Drake; Martin Harvey; Matt Smith; Nick Isaac (BRC/CEH); Olga Sivell; Phil Brighton; Ray Morris; Ryan Mitchell. (Roger Morris was unable to attend, but we are grateful to him for providing input to the agenda in advance of the meeting.)

This meeting was convened by Dipterists Forum to enable discussion between national and local recording schemes/groups, and to gather feedback on whether there is more that we can do to encourage the collection and sharing of Diptera records. The meeting follows on from a previous one on the same topics in 2014. It was recognised that lots of good things are happening already, but it is always worth sharing ideas and looking for ways in which we can continue to develop this important area of interest.

Diptera data sharing

A presentation by Martin Harvey provided a reminder that the Biological Records Centre (BRC) works closely with the national recording schemes to archive data and analyse it, and to support schemes in other ways such as provision of websites and assistance with data management where needed. BRC encourages recording schemes to share their data via the National Biodiversity Network (NBN) Atlas, and can arrange for data to be supplied to that Atlas on behalf of schemes, or for those schemes that use iRecord an automated export process can be set up so that data goes to the Atlas on a more-or-less monthly basis.

A range of Diptera recording schemes share data via the NBN Atlas, but not all do so. Data on the Atlas is available (via a suitable data licence) for research, conservation and other uses, and for the Soldierflies and Allies recording scheme there have been over a thousand downloads made in recent years, enabling the data to be used for a wide range of purposes.

John Showers provided a diagram showing the routes by which data flows from recorder via the county Diptera recorder and local records centre, via iRecord, and via the national schemes on to the NBN Atlas. This is a complex area and not all data is shared in all directions, but progress is being made and it is becoming easier to exchange data where required.

See the separate presentation PDF for more details.

iRecord makes it possible for verification to be shared among groups of people, overseen by the national recording schemes. It is possible to provide verification and download permissions to county Diptera recorders who wish to make use of this resource. For details contact irecord@ceh.ac.uk

Analysis of species and assemblage trends using Diptera data

Nick Isaac from BRC (which is part of the Centre for Ecology and Hydrology, CEH) gave a presentation on how CEH works with recording schemes to analyse records in order to produce data on trends in species distributions. There are many biases in biological records datasets that need to be factored in, and Nick outlined some of the approaches taken to allow for this.

We discussed ways in which Diptera data could be collected in order to enable greater accuracy in trend analysis, including the concept of “complete lists” (i.e. does your list of species represent all species you saw on that visit, or is it a partial list of ‘highlights’), and the value of repeat recording at sites that have had records in the past. CEH is also keen to hear views on how best they can make the results of trend analyses available to scheme organisers, in order to gather feedback on whether the analyses meet expectations or where there are mismatches between what the data seem to show and what recorders’ experience tells us.

For more information see the separate PDF of Nick’s presentation.

National recording scheme perspectives

Charlie Griffiths told us of progress so far with setting up a new recording scheme for Sarcophagidae (flesh-flies). Charlie (who has just completed an MSc in entomology at Harper Adams university) is developing this with Nigel Jones and Daniel Whitmore, and they are currently making plans for new identification resources and other materials that will help dipterists record this group of species, many of which require examination of specimens to identify. The meeting welcomed this new initiative and discussed approaches to encouraging recording of the group, including managing expectations of recorders so that they are not discouraged by the need for specimens in order to identify many of the species.

Olga Sivell gave a presentation on the Calliphoridae (and Rhiniidae (and Polleniidae – see [Cerretti et al. 2019!](#))) recording scheme, focusing on maintaining data quality while not discouraging recorders. This is another group that contains species which are hard to identify, and Olga demonstrated that some previous records and published research have been shown to be based on misidentifications when specimens have been checked, or have to be treated as unconfirmed where specimens are not available. Olga provided some suggestions and examples to demonstrate that successful recording of such species can be helped by developing new identification guides, with plenty of information to help people learn how to distinguish the species, to encourage new recorders to get involved while ensuring that data quality remains high.

See separate PDF of Olga’s presentation for more details.

Feedback to recorders via newsletters and websites

Olga’s emphasis on ensuring data quality and the need for specimens to back up records led neatly on to the topic of feedback to recorders, and Martin Drake summarised the role that newsletters (either printed or electronic) can play in maintaining links between schemes and recorders, and also providing a means for sharing information about natural history observations, such as notes on behaviour and ecology, that could otherwise be lost (a point also made by Anthony Bainbridge who made a plea for recording of ‘what an insect was doing’, as well as the usual what/when/where record details).

See separate PDF of Martin’s presentation on newsletters and feedback.

Martin Harvey showed how the new Dipterists Forum website has space for national and local recording schemes to have a presence within the main website. This could just be a link to an existing independent website, or a ‘mini website’ for a scheme can be set up within the DF website. If anyone wishes to pursue this please contact Martin H in the first instance, so that the initial framework can be set up for any new web pages, and scheme/group organisers can be given editing rights to add their own content and news etc.

Prior to the meeting Darwyn Sumner also highlighted the “Scratchpad” system for constructing taxonomic-based websites, managed by the Natural History Museum. There are [scratchpad sites](#) for a number of

Diptera groups: Mosquitoes, Fungus gnats, Lonchaeidae, Milichidae, Scathophagidae, Micropezids & Tanypezids, Sarcophagidae, Tachinidae, Calliphoridae, Sepsidae, Agromyzidae.

Links with local Diptera groups

Unfortunately Derek Whiteley was unable to attend, and we were grateful to John O'Sullivan and John Showers for providing information on their local group set-ups in Bedfordshire and Northamptonshire respectively. It was noted that like all such groups much depends on having one or a few committed and enthusiastic leaders to inspire others to take part. Once this nucleus of 'organisers' is established many good things can follow: regular field trips, often to previously unrecorded areas; collation and verification of local records; training events and mentoring opportunities to help new recorders learn more about Diptera; spreading the word about Diptera via larger events such as bioblitzes and conferences, with Bedfordshire's series of "Neglected Invertebrates" conferences being an amazing example of where this can lead (albeit an example that has again depended heavily on the inspiration and motivation of one person, in this case Alan Outen).

Discussion

There was wide-ranging discussion during the day. Three topics stood out.

Succession planning

Finding new people to help with existing and new recording schemes, and to run local groups, remains a concern, but there are many encouraging examples of new people stepping forward, some of whom were participants in this meeting. As is well-known, running training courses and giving talks can all help to engage new volunteers, but the number of people who are able to play active roles is always a small proportion of the number of people attending such events.

Ongoing mentoring plays a very important role in new people getting involved, and the mix of events, mentoring and social media activity encouraged by the Hoverfly Recording Scheme was highlighted as having played a significant role in developing the interest of several of the people in the room. Local groups can play an important role here in putting 'new' dipterists in touch with more experienced people. Data protection and safeguarding issues need to be taken seriously when considering how to bring people together, but there are still many opportunities for like-minded people to meet through the activities of local and national groups.

The question of "how can we get the next generation involved with running recording schemes and groups" is often raised, and there are some great examples of young people playing a significant role, but it was noted that youth is relative (!) and that the pressures of work and family inevitably mean that it is often 'older' people who have the time available to devote to interests such as entomology. Perhaps we could do more to enthuse people in this category to play a role in Diptera recording. It was also pointed out that schemes with two or more organisers obviously have greater potential capacity to be active, and are also less likely to fold if one person drops out, so building up a team approach to schemes could help address some of the succession planning issues.

Grant schemes

There was considerable discussion on this idea, and whether Dipterists Forum might establish such a fund, in addition to the bursaries that DF already offers. There are existing funding schemes that can provide small grants to entomologists, e.g. via the [BENHS](#) and the [Entomological Club](#). Such a scheme might be able to support the purchase of items such as keys and microscopes to assist new volunteers, or to cover travel costs to training events and museum collections. There are challenges around defining who would be

eligible for such funding, and what might be expected in return, and we should find out from the other funding sources as to how these have been tackled.

Links with universities

There is a broad interest in environmental issues among university students (not just those studying environmental topics), and there should be potential for making more links with universities at various levels. Potential difficulties are that there are few universities with entomology courses; students may be more interested in using data rather than helping collect and manage it; student interest may be confined to fulfilling their course requirements and would not lead on to a longer-term interest.

Some universities have established student natural history groups, and these could be a useful focus for DF to link in to as they are likely to include people with a real interest in wildlife. Butterfly Conservation have established a [moth recording challenge](#) with teams of students on different campuses recording as many moths as they can.

Actions

- DF committee to investigate potential for indexing and sharing scheme newsletters
- DF committee to investigate options for a small grants scheme for dipterists, including finding out from existing schemes what works best and how what their criteria are
- DF committee to build on its previous work to make links with universities and other student organisations
- DF and recording scheme organisers to continue working to share data, where appropriate, with BRC and NBN Atlas
- All to be enthusiastic ambassadors for the joys and rewards of getting involved with Diptera recording, and especially with helping to organise schemes, verify records, run groups and assist others!

Acknowledgements

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