BULLETIN OF THE
Dipterists
Forum

Bulletin No. 69

Spring 2010

Affiliated to the British Entomological and Natural History Society

Bulletin No. 69

Spring 2010

ISSN 1358-5029

Annual Subscription

Obtainable via subscription to Dipterists Forum:

Annual Membership (N.B. Overseas = £20 total)

Forum - £6 (includes Dipterists Bulletin)

Subscription to Dipterists Digest - £9

Contact Mr M. Parker, 9, East Wyld Road, Weymouth, Dorset, DT4 0RP Email: jmparker_87@hotmail.com

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

Contributions

Please refer to the back pages of this Bulletin for details of how to contribute and send your material to both of the following:

Bulletin Editor: Darwyn Sumner

122, Link Road, Anstey, Charnwood, Leicestershire LE7 7BX. 0116 212 5075 Darwyn.sumner@ntlworld.com

Assistant Editor: Judy Webb

2 Dorchester Court, Blenheim Road, Kidlington, Oxon. OX5 2JT. 01865 377487 judy.webb@virgin.net

Dipterists Forum Forum

www.dipteristsforum.org.uk/index.php

Photographs: Front cover *Hylemya vagans* (Anthomyiidae) Les Butler, above Athericidae, Sciomyzidae, Darwyn Sumner. Cartoons from several sources.

BULLETIN OF THE
Dipterists
Forum

Contents

Newsletters

- Anthomyiidae #8
- Cranefly #20
- Fungus Gnats #4
- Hoverfly #48
- Larger Brachycera #28
- Oestridae #1
- Sciomyzidae #5

MP PRINTERS

MP Printers (Thame) Limited
Unit C10 • Station Yard • Thame
Oxon OX9 3UH
t: 01844 261909 f: 01844 261309
e: info@mp-printers.co.uk
w: www.mp-printers.co.uk

Editorial

Citizen Scientists

"I'm a Citizen Scientist" is a popular claim these days, it has a nice formal ring to it that one could use when caught trespassing. I didn't know I was one until Chris Thompson applied the term to us at the AGM though I doubt the expression would help me if I get caught waving my net around where I shouldn't.

People with strong backgrounds in Natural History belong to this group, it seems. This is a peculiarly British passion too, Chris showed dipterists' activity plotted on a world map with hotspots firmly centred on the UK and whilst there is a scattering on mainland Europe too, there's very little systematic work anywhere else in the world.

There's not a great deal of public awareness of this citizen scientist culture, for us its roots are firmly based on the famous philosophers of the past; even before the term "science" was adopted. Some experience real surprise at discovering its existence for the first time, Oliver Grafton of NBN expressed this rather nicely in his retirment letter (he now works as Senior Specialist in Biodiversity Reporting for Natural England.)

Is this culture disappearing or is it evolving? On the one hand we have the continued pressure on the valuable institutions which encourage its study, the latest casualty being the Booth Museum of Natural History in Hove (Museums and Libraries are always first to be hit when savings are to be made) on the other hand we have NBN making the most of the opportunity to jump onto the Darwin bandwagon with their Darwin Guide to Recording Wildlife (see reviews).

I'm afraid us naturalists don't have sole claim to the term, we're competing with amateur Astronomers and the like, one programme in the BBC Radio 4 documentary series "Citizen Science" has briefly dealt with some of the larger National Recording Schemes under the heading of "Conservation". If anyone is conducting any dipterological project work this year, they might care to have a stab at R4's "Material World" competition for the title "BBC Amateur Scientist of the Year" (http://www.bbc.co.uk/radio4/features/so-you-want-to-be-a-scientist/), they do mean us! can we nominate historical figures like the cobbler, Thomas Edward (Samuel Smiles "Life of a Scotch Naturalist")

Ordnance Survey - free at last!

As a result of an online petition to the Prime Minister requesting "*the Prime Minister to free UK Digital Mapping*" (the "Free our Data" campaign) the Government has announced a new strategy for Ordnance Survey which will "*make data more widely available*" and Ordnance Survey "*will reform to ensure easier access to its high-quality geospatial data and services*". Well done all concerned, this has been a lengthy campaign and we're now anxious to find out how we can benefit from it. To view the press release from Communities and Local Government, visit http://www.communities.gov.uk/news/corporate/1421671 dated 23rd December 2009 in which OS's CE, Vanessa Lawrence tells us that amongst the possible range of free products are:

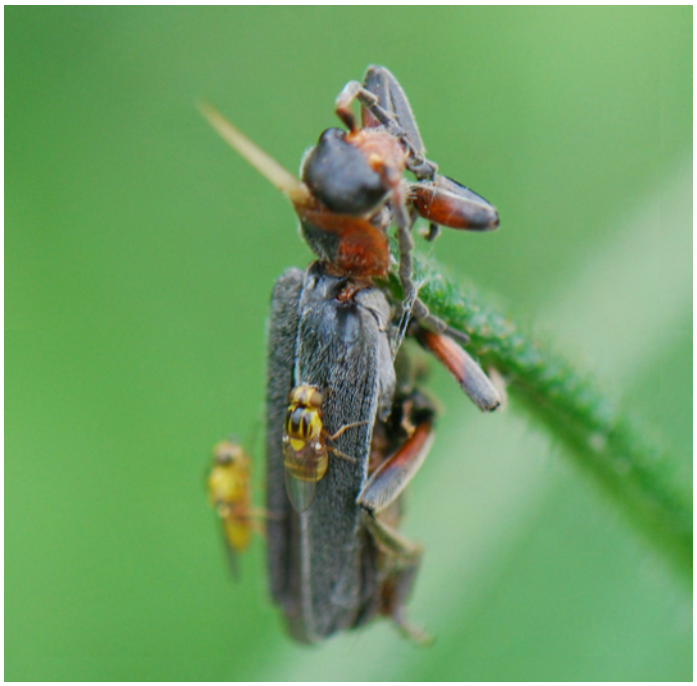
> 'Raster' products in a range of scales from 1:10,000 to 1:1 000 000 that will enable developers to produce an application that overlays their information on a map and to zoom-in from a national view down to the street level

Both NFBR and NBN are aware of this and a request has been made that they help recorders take advantage of this free material. Just think of it - detailed OS maps in your favourite recording packages, GPS devices and websites (OS OpenSpace) without having to pay a king's ransom.

Bee crisis - what crisis?

I seem to have found a partial answer to the question about the contribution that flies make to pollination, posed in Bulletin #67: "Do plants depend on flies", On 26th October New Scientist discussed the very issue I had raised in an article by Marcelo Alzen and Lawrence Harder. It would appear that the release of a movie "Vanishing of the Bees" has created much of the current hand-wringing and the "crisis" is based on tenets that bees do most of the pollinating and that pollinators are declining worldwide. The authors tell us that the idea that bees are responsible for the production of a large proportion of our food is simply not true. Finally we are seeing some kind of acknowledgement of the contribution of other animals (flies, butterflies, birds and bats) to fruit and seed production in wild and cultivated plants in the popular press. It also transpires that yields in pollinator-dependent crops have increased steadily over recent decades so it seems *Episyrphus balteatus* continues to do great work, let's hope the popular press learns to distinguish it from a bee.

Puzzle picture



Identify the 3 animal species involved

News from the schemes

Many of us have been at this identification lark for quite a while and probably each have our own stories of the the toughest and most difficult ones to navigate. So it is too with word processors, with the single difference that any modern or improved method of work hase been systematically disposed of over the years to arrive at a single tool which combines the worst ideas that anyone has been able to come up with. I subscribe to the concept of a tool as a tool rather than a challenge (hence the use of Adobe's InDesign in the compilation of this Bulletin) but I'm pleased to report that one of our Newsletter editors has finally cracked the Enigma code and produced his newsletter in a style that closely matches the Bulletin's "house style" using Word. Well done David Iliff! No doubt other newsletter editors will be clamouring for his solution in the form of a template, we'll try to get a downloadable one onto the Dipterists Forum website when he's recovered.

Tephritid Flies Recording Scheme

Firstly my apologies to those who expected a presentation at the Annual Meeting on 28th November 2009 but general life pressures dictated that this 'hobby', conceived in 1983, be temporarily put aside. For those with internet access an updated set of distribution maps was posted on the Dipterists Forum website in September 2008 and the backlog of paper records is manageable.

Since 1995 all data have been stored on RECORDER 3 – the first record, a male *Tephritis cometa* found by Andrew Halstead at Sichester Common SU6262 on 19th August 1995, was entered on 18th November. Initially the database was run on a 100 MHz 486 computer with 540Mb hard disk and 8Mb RAM (costing £2500) and then, in 1999, transferred to the Windows 98-driven machine used to this day. While regular back-ups were made onto nine 3½" floppy disks, using MS-Backup operating within Windows 3, Windows 98 could not read these and so all the program and data files had to be laboriously copied to another set of disks (which could only hold 1.44Mb) and then moved to the new machine. From this regular back-ups were made onto a CD-ROM – until two years ago when the CD writer failed. Fortunately Richard Moyse located a USB memory stick compatible with Windows 98 and this was my only means for archiving – until a month ago.

In November 2009 I acquired a new computer with two 250Gb hard disks (RAID), two CD/DVD writers and enough USB ports for a bank of external storage devices. However it is operated by Windows 7 Professional which, in its native format, will not recognise RECORDER 3. An attempt to use Microsoft Virtual PC 2007, which came with a computer magazine, whereby a virtual copy of Windows XP can be run in Windows 7 was unsuccessful as the 64-bit operating system will not open the 32-bit program. So, as of 27 December 2009, I have two copies of RECORDER 3.3, one with 19,500 British Tephritidae records and the other with 123,000 mainly Kent invertebrate records, and a state-of-the-art computer which turns its nose up at them!

I have tried MapMate as an alternative database, since it supports vice-counties, but it will not allow undated records and is hardly 'user-friendly'. In the meantime I have saved the RECORDER data as an Access table with the field names Species, Date, Site, Grid, VC, Sex_stage, Collector, Determiner, Site description, Comment, Literature reference and Date_updated. The dates have been converted to dd/mm/yyyy text so that an unknown date reads 00/00/0000. Any advice on the way forward would be most appreciated.

For interest some of the statistics in the dataset are

a. Number of species: 79.

b. Number of records: 19475.

c. Number of named recorders: 418.

d. Precision of dates: full date 17314; no date 738; year only 812; month and year 611.

e. Number of grid references: 6607.

f. Precision of grid references: 8 figures 199; 6 figures 3063; 4 figures 2780; 2 figures 565.

g. Number of 10km squares covered: 1376.

h. Number of vice-counties (including Irish) covered: 143.

The top ten most widely distributed species according to vice-county are *Xyphosia miliaria (*110); *Tephritis vespertina (*103); *Urophora jaceana (*99); *Chaetostomella cylindrica (*97); *Euleia heraclei (*77); *Urophora stylata (*69); *Tephritis bardanae (*69); *Terellia ruficauda (*68); *Acidia cognata (*64) and *Terellia tussilaginis (*62).

The top ten recorders, with number of records, have been Laurence Clemons (2240); Andrew Halstead (912); Steven Falk (865); Jonathan Cole (705); Montague Niblett (653); Mick Parker (579); Peter Chandler (577); Derek Whiteley (516); Adam Wright (508) and Simon Grove (507) while the top ten, with number of species, have been Ivan Perry (65); Jonathan Cole (59); Andrew Halstead (58); Mick Parker (57); Peter Chandler (56); Martin Drake (54); Laurence Clemons (53); Henry Andrews (53); Montague Niblett (51) and Peter Hodge (50).

Laurence Clemons 14 St. John's Avenue, Sittingbourne, Kent ME10 4NE.

Sepsid Recording Scheme

So far for 2009, I have received batches of sepsid records from Laurence Clemons, Roy Crossley and Martin Drake, which totals roughly 350 individual records. My thanks go to all of them.

Please remember the scheme when you are out and about recording during 2010

Steve Crellin, Sepsid Recording Scheme Organiser

Conopid Recording Scheme

I have some information about this scheme although it's a little tricky to sort out, it finished up being forwarded to me from Alan Stubbs but has communications in it from David Clements and David Baldock - both of whom signed themselves just "David". A paragraph of David Clements somewhere in this mixture runs as follows: (ed)

"The atlas project is stalled at the moment, although the database is reasonably complete. There are quite a few records in the NBN gateway that I do not have, and there are some old and 'difficult' records here which still need sorting out. Also quite a lot of duplication in the database, due to MapMate synchro files reintroducing records that have previously been weeded out or altered. Trouble is I am too busy with other things to go through it all, although I do try to keep everything up to date. Maps next year possibly?"

Simuliid Recording Scheme

John Kramer had the following letter from Roger Crosskey:

"*You may be amused (or not!) to know that for years I have been trying to scotch the idea that there is a Simuliidae Recording Scheme equivalent to the various Diptera recording schemes. There never was any such scheme and it has been something of a*

"Radcliffe, his name was. Seemed to spend a lot of his time chasing flies. His mind was unhinged." **Bram Stoker**

mystery how the idea of there being a simuliid scheme got about I think two main reasons might lie behind it. First, at some point years ago I was supplied with BRC base maps in case they would be helpful. Secondly.I collected simuliids in South East England and worked up quite a collection for which the main findings were published - as I expect you know - in Dipterists Digest.

The only thing of country-wide note is a 10km square map for the whole of Britain in one of the issues of the British Simuliid Group Bulletin. This related not to individual species records but is simply a situation map showing those squares from which simuliids per se *have been recorded. It was made up basically from all that I and Jon Bass could ascertain from literature, museum and CEH material, etc. etc. As my own South East England material was covered it gives the map a serious imbalance - no other part of Britain has been collected with anything approaching similar comprehensiveness.*

I appreciate your offer of BRC of assistance but, as you see in light of the above, there is no existing need.

Lastly perhaps I should mention that I am eighty next year and not rushing to put my waders on and do any more collecting!

I hope my reply is helpful.

Cordially Roger Crosskey"

Empidid & Dolichopodid Recording Scheme

The Empidid & Dolichopodid Recording Scheme has just celebrated passing the 100,000 record milestone with a total of 100,975 records on the database at the end of 2009, an achievement made possible by a small but growing group of enthusiasts actively interested in these flies.

In recent years recording of Empididae (interpreted widely to include not only Empididae but also Hybotidae, Atelestidae and Microphoridae) has been the primary focus of attention with 69,108 records now entered. Dolichopodidae have received rather less attention with only 31,867 records collated to date. This imbalance between the numbers of empidid and dolichopodid records solely reflects the fact that Adrian Plant (who has coordinated E&D recording over the last 10 years) has put more effort into empidid recording, and it has been evident for some time that a fresh face was needed to inject more energy and enthusiasm into the recording of dolichopodids. I am now pleased to announce that Martin Drake has stepped forward to fill the vacuum and champion recording of dolis.

The Recording Scheme will continue to gather data for both empidids and dolis and records of either group can be sent to Adrian or Martin. Currently, the Scheme can only accept records in Mapmate or Excel formats although hand-written paper records can also be handled and we hope to be able to receive records from Recorder in the near future.

Adrian Plant, Department of Biodiversity & Systematic Biology, National Museum of Wales, Cathays Park, Cardiff, CF10 3NP.
adrian.plant@museumwales.ac.uk
Martin Drake, Orchid House, Burridge, Axminster, Devon EX13 7DF.
martin_drake@btopenworld.com

Thyridanthrax fenestratus status in Dorset

In the last edition of Dipterists Digest I reflected on the historic records of Pearce in Dorset and, from impressions received, it's possible extinction in Dorset. The latter statement duly galvanised an indignant response that it is not extinct (alive and well 8 years ago) and another report listed 11 six figure grid references for sightings in 2008/plus a report of two localities for 2009. Such records had not been sent to the recording scheme.

It is a common experience that declaring a species nationally or locally extinct is a sure way of being proved wrong. So perhaps we should capitalise being wrong by goading others to admit their records of this species (no doubt the scheme organiser will be happy to hear from you: I will be glad to hear of *Thyridanthrax* records so that I can add a footnote for the DD article).

Incidentally, there is very little information available on the status of this species in the New Forest.

Alan Stubbs

NBN Gateway

I revisited the NBN Gateway recently, after some absence. It is most interesting to take a look around it. For my part I directly manage 3 datasets and 1 organisation there. I used to manage many more when I was at Leicestershire Environmental Resources Centre.

The organisation of course is Dipterists Forum with 19 members signed up to it, about 5% of the total DF membership are therefore getting full access to the information there.

Tha datasets are the **Stilt and Stalk Fly** recording scheme and the **Field Week datasets** from 1999 and 2000+2001 in **North West England** and **Cornwall+Devon** respectively.

I also have access to the full data on the **Hoverfly Recording Scheme** which Stuart and Roger put there.

There are datasets too for the **Mosquito Recording Scheme** and historical datasets for **Muscidae** (to 1985) and **Dixidae** (to 1988) all provided by the BRC (CEH).

John Kramer and Alan Stubbs' work on the **Craneflies** has resulted in the publishing of an NBN Gateway dataset (by CEH) of 76,171 records.

The Fungus Gnat records are currently awaiting final checking from Peter Chandler before going live.

The Larger Brachycera are due to be published to the NBN Gateway in 2010.

Apart from a couple of single species datasets and regional compilations (Cornwall's ERCCIS kindly acknowledges the datasets they got from DF; I sent the datasets separately to them) that's about it for Diptera on the Nation's "spotty map generator."

It is interesting to read ERCCIS' notes about the dataset they were able to publish: "*Hoverfly species distribution dataset from 1997 to 2009 for Cornwall and the Isles of Scilly*". It's speculation on my part but it would seem that the sheer numbers of hoverfly records that were made available to this Local Records Centre by DF was an incentive to further surveying and digging out of historic mate-

rial by local "citizen scientists". It's also very gratifying to read their comment: "*The records in this dataset will be verified through ERCCIS or a local or national expert where applicable.*"

The usage of the DF datasets on the NBN Gateway is also interesting, I cannot give the figures for the Hoverfly Recording Scheme (which will surely be a lot higher) but the following figures tell a story:

	From	Grid map	10Km report	Site report
Cornwall+Devon	March 05	6401	4023	5929
North West England	June 04	6791	4184	7711
Stilt & Stalk	March 05	49411	49411	75822

The Grid map column shows the number of times that the data has been used to generate a distribution map on the NBN Gateway, the others indicate the use of the data to generate 10Km and Site reports.

A mere 1176 Stilt and Stalk Fly records from 669 sites have been used 75,822 times in generating site reports - which must surely have had some impact on conservation at those sites, the main users tend to be environmental consultants and Natural England.

There is clearly a considerable value in publishing diptera datasets on the NBN Gateway, the following suggestions will surely help ensure better conservation of their sites and detection of more records for the recording schemes:

1. Encourage members to use NBN Gateway

   a. Sign up more DF members to the DF on the NBN Gateway

   b. assist members to familiarise themselves with "spotty map" generation

   c. provide guides on the Dipterists Forum Forum

   (*John Kramer comments that he doesn't think there is currently a difficulty or barrier to use - he just follows the on line instructions*)

2. Publish Field Week lists

   a. historical ones can be done piecemeal

   b. current ones can be done almost immediately after the Field Week, using the data that is collected as highlights for publication in the Bulletin

   c. produce guides for compilers of those lists

   (*JK rightly points out that different Dipterists prioritise different kinds of activities such as life-cycle work and taxonomy. Development destroyed pretty well all my best sites in my home town so I'm unashamed about my emphasis in this article on the conserving of sites. Our printed output is not consulted by LRCs (see 6.) they simply don't have the resources*)

3. Publish more Recording Scheme datasets to NBN Gateway

   a. ensure that all printed atlases are available as NBN Gateway datasets

   (*current examples: Tephritidae, Sciomyzidae,* ***Larger Brachycera (due in 2010)***)

   b. debate the need for atlases in print format in the future

   (*NBN Gateway can provide phenology, there is room for the ecology of scarcer species on our Wiki, our newsletters provide a vehicle for many other things*)

   c. publish well-defined historical datasets to the NBN Gateway where they are available

   d. ensure that all Recording Scheme organisers publish at least a small amount of data onto the NBN Gateway

   (*this task has been made very simple in Recorder 6*)

   e. obtain "How to ..." guides which tell how to publish datasets to the NBN Gateway using of Recorder and MapMate

   (*there are online guides and Local Records Centres will also have done this and will be happy to help out*)

4. Publish BAP and other critical and important species to the NBN Gateway

   a. links to Gateway maps can easily be incorporated into Dipterists Forum's Wiki and Forum - there are examples in the Stilt and Stalk Fly section.

5. Liaise with LRCs in respect of verification

   The premise here is that LRCs may submit records unverified by Recording Schemes to the NBN Gateway. This problem has been seen as a barrier to some schemes getting involved in publishing datasets to the NBN Gateway and has been much discussed by NFBR .

   a. Produce critical identification lists and make them accessible to LRCs to assist with their verification (as an example, Ian McLean has done one for the Sciomyzidae)

   Local Records Centres are keen to ensure high standards of work and a formal Accreditation system is currently under development through ALERC and Natural England. A comprehensive Diptera critical identification list (and access to our keys and newsletters) would be of value to both LRCs and Dipterists Forum.

   b. provide Local Records Centres with access to the regionally based datasets which have been submitted to the NBN Gateway

6. Speed up the process

   a. The value of a record at a site declines over time, many Local Records Centres, providing local services for local conservation, produce reports with a 5 year cut-off point in response to demands from their "customers". Recording Scheme datasets which are regularly "topped up" are fine but the value of our Field Week datasets in informing "on the ground" conservation is sadly decreasing as time goes by.

Darwyn Sumner

Notice board

BAP & Conservation

News from the Conservation and BAP Officer

Conservation

In addition to Alan Stubb's very comprehensive information on conservation issues in this issue, I would like to add the following.

Reedbeds

John and I attended a reedbed workshop, organised by RSPB, where Alan gave an excellent talk on invertebrates and reedbeds. During the workshop it emerged that the RSPB has done and is still conducting several projects on non-avian species and reedbeds. These projects include invertebrates and also flies. The talks at this workshop ranged over birds, management examples, reptiles and amphibians, mammals and invertebrates. Most speakers pointed out that a mosaic of different microhabitats seems to be best for the species. Although the micro-habitat needs of species differ, many participants seemed to agree that a reedbed that is managed on a longer rotation, with a variety of habitats seems to be best for most species. The ultimate goal is to publish a handbook on the management of reedbeds, hence, if you have anything that ought to be considered, please let me know and I will forward it to the relevant contacts.

BAP

Once again, I have only very limited news. It appears that the actions necessary to work on the BAP species are supposed to be finalised by April 2010. However, rumours indicate that this will be impossible for the invertebrates due to the sheer number of species. I will try and keep you posted.

Please note that each of our Diptera BAP species stand for a whole group of species with similar habitat needs and hence work on one species will most likely benefit a larger group of species.

ADOPT A SPECIES

You might recall that I appealed for volunteers to come forward for this scheme in several Bulletins in 2007 and 2008. I am not going to repeat a summary of this call again, but rather refer you to these two Bulletins or the Dipterists Forum webpage, where you can find it in the Forums section.

News from 'Adopt a Species'

I would like to thank all of you who already adopted a species and have contributed to this or other Bulletins or kept me updated so that I could summarise your work.

Your work is very encouraging and I hope that some other dipterists might follow. Currently 15 of our 35 BAP species and 3 species with conservation status have been adopted. Below you can find an update by David Scott on *Dorycera graminum*. Thank you very much for this contribution and good luck with your quests. I would very much like to receive updates on any of the other adopted species, so please get in touch.

So far *Blera fallax, Campsicnemus magius, Clusiodes geomyzinus, Dolichopus laticola, Dolichopus nigripes, Dorycera graminum, Empis limata, Hammerschmidtia ferruginea, Idiocera sexguttata, Lipara similis, Lonchaea ragnari, Milichia ludens, Mintho rufiventris, Myolepta potens, Odontomyia hydroleon, Rhamphomyia hirtula, Rainieria calceata* and *Salticella fasciata* have been adopted

Please bear with me if you do not always get an immediate response from me. Sometimes I am buried under work and, as I am doing this job in my spare time as a volunteer, I sometimes have to ask for help from other dipterists. I might sometimes need to approach several before I can help. I will eventually get back to you, but this might occasionally take some time.

Dorycera graminum.

The following is the text of a note submitted by David Scott.

Dorycera graminum was first seen on this N. Essex site in 2009 on 19/5, a few days earlier than the previous three years. The maximum number counted was 32 on 8/6. This is comparable with 2006, but well down on 2007 and 2008 with peak numbers of 97 and 80 respectively, perhaps a consequence of two wet Mays in succession? The last flies were noted on 13/6.

Spear thistle was thought a possible larval foodplant in 2008, but neither of the two viable cyclorrhaphous pupae extracted from dead thistle stems produced *D. graminum*, each yielded an as yet unidentified Ichneumonid parasite. I have a growing suspicion that they may have been of a *Cheilosia* sp.(see Hoverfly Newsletter no.45, p.2) and my collection of dead Spear thistle roots/stems gathered this spring contained no pupae at all.

I did an armchair investigation of more recent *D. graminum* sites listed in the English Nature Report 395 appendix1, using Google Earth and Nearby.org.uk to map on the grid references.

The bulk of the sites are in S.Essex and N.Kent, below 20m elevation and often having bodies of fresh water, apparently from gravel workings, and salt water, within the kilometre square.

The vegetation of the sites usually appears to be low management or amenity grassland often with some hedge or scrub element, sometimes marsh grazing on alluvial soils, but more frequently sand or gravel, sometimes over chalk. Outside the South east the `Hills and Hollows` site at Northampton (Bulletin no.66) matches this except for the 90m elevation and absence of water. Here at Brightlingsea, although here there is both gravel working and coastal grazing within 2-300m neither has yet produced any *D. graminum*, which occurs on higher grazing land.

As with many scarce species habitat alone would not appear to be a limiting factor. Closer observation of the apparently ovipositing females or offering a range of food sources to captive females might help with understanding this as yet unknown part of the species life history.

David Scott

If you wish to contact David, email me (Barbara Ismay) and I will forward this to him or try and get in contact with him via the Dipterists Forum webpage. You can post a query or information for David under Forum and there under 'Adopt a species' if you are a member of Dipterists Forum

If after reading all this you feel that we should stop talking and rather start to help our threatened species, then please get in contact – you might be able to help! If none of the BAP species is in your area, why don't you try and work on one of the species included in the Species Statuses (RDBs)?

Barbara Ismay
BAP and Conservation Officer, Co-ordinator of 'Adopt a Species'
e-mail: schultmay@insectsrus.co.uk **or telephone: 01844-201433**

Adopt a species

Please help our threatened species by getting involved in their active conservation and adopt a species. I hope to hear from you soon.

Conservation Issues

It may be a recession but not as measured in planning threats.

The good news is that Dungeness Nuclear Powerstation C has been dropped, or more correctly it is not on the approved list. One reason given was vulnerability to anticipated problems with rising sea level (the reason why A & B should not have been built on this shingle foreland), seemingly a factor not apply to the approved expansions of other existing coastal power station sites! The Amber alert news is that a major expansion of Lydd Airport which would affect Dungeness in land take and increase air pollution (very sensitive lichen flora) has been rejected but is open to appeal ss the battle continues until March for a decision at county level (could go to further appeal at higher level). At stake is the ecology of the largest shingle foreland of its type in Europe and parts of Romney Levels, both with rare flies.

There has been growing concern for the Mid Spey valley (Aviemore, Grantown and villages) where housing and employment expansion plans have been proliferating. That includes doubling the size of Aviemore with 1,500 new homes, employment buildings and facilities, placed NE of the main bridge across the Spey. Though on a river terrace above flood level, it is on the outside of a bend in the river where only a slight change could result in erosion of the gravel terrace. Nethy Bridge and Carrbridge are among the villages. As so often the case, entomological knowledge of the ground under threat is insufficient or nil. However, the hot news of mid December is that an inquiry decided that the projection of housing needs in the Cairnorgms National Park was exaggerated: Hence the huge expansion of Aviemore and the other main worrying developments have been rejected. That includes a proposed development site near Carrbridge where Buglife has been fighting for, in partnership with local opposition groups.

On English Ecotowns, the good news earlier this year was that Weston in Oxfordshire has been dropped. However, Bordon in the Hampshire Weald was passed. At the latter there is concern that a heathland connection between SSSIs/SACs will be compromised (or made impossible) and that 're-assuring' projections of water use (ground water abstraction) are so theoretical as to be worthless. Stephen Miles lives at Bordon and will be glad of any offers to help to gain further local entomological data.

In late Autumn 2009 Buglife was made aware of a development plan for a huge brownfield site on the Isle of Grain, north-east of Rochester, Kent. As so often, the consultants report had token invertebrate survey over only token small parts. However, the rarely recorded hoverfly *Paragus albifrons* was among the records. The Hoverfly Recording Scheme data shows that most records over the last few decades are from The Isle of Grain/Hoe Peninsular (these areas merge, Grain not being an island). If anyone has unsubmitted records of this species, please feel prompted to send them in. Also it will be very expedient if next season some hoverfly recorders could explore for further occurrences of *P. albifrons* in that district. The ecology is poorly understood since records are usually of singletons so we do not understand the optimum habitat requirements in Britain, brownfield or not.

Progress with BAP species, and indeed habitats, has proved fraught. The government 'owns' BAP. The wildlife agencies, with JNCC in central position, have a key role. There have been committees and grand meetings of various sorts, reporting to steering groups etc. as an extended bureaucracy. After what seemed an interminable process, at least there is a revised list of BAP species, however imperfect. Beyond that, there is a quagmire that is driving NGOs anguish, in particular who has authority to take the lead for many of the species. Add to that government and agencies being skint, indeed facing further reducing resources, and government/NGO partnership is a hollow concept. NGOs cannot raise the necessary scale of funding since most funders do not accept funding applications for work that sniffs of survey, use of experts, science or the hard-nose end of conservation. Apart from the 'political theft' of Lottery money for the Olympics (now including art olympics), the current rules seemingly make it impossible to recover full costs. NGOs such as Buglife have found the present period not all doom and gloom to get project funding of some types (with enormous effort) but BAP species are proving especially difficult to fund. Moreover, it is especially difficult for taxa such as flies to break through when historically Orthoptera, dragonflies, Lepidoptera, aculeates and beetles have momentum for on-going funding.

Alan Stubbs

Natural History Museum

The Diptera Collections of the Natural History Museum

Imagine a long corridor extending into the distance, lined on both sides from floor to ceiling by grey metal cabinets. This rather forbidding image was what eventually greeted us on a recent Sunday morning as we were shown round the Natural History Museum's new Darwin Centre on the day after our AGM. A cabinet door was opened to reveal a stack of wooden drawers, and as one of these was pulled out we forgot our drab surroundings as we took our first look into the NHM's enormous collection of Diptera. I had never seen a collection approaching this one in its comprehensive coverage of the order, and its sheer size took my breath away. Each of us was provided with a microscope and invited to ask for whatever we wanted to look at. I had a few doubtful Muscids with me and asked to see British specimens of the genus *Spilogona*. "No problem," I was told, and no less than five drawers appeared on my table.

A collection of this size is no doubt a great asset to a specialist looking at a particular group of insects, but to lesser mortals like me it looks a bit intimidating. This problem is being solved by establishing a synoptic collection of British Diptera. Just five specimens of each British species are being taken from the main collection and housed separately in this smaller one. There are, of course, some rarities for which five specimens cannot be spared, but when it is completed the synoptic collection will provide manageable numbers of the majority of British species, and will be an excellent first reference point for identification.

The main collection is in two sections – British and world-wide. It includes the holotypes of many taxa and provides large series of specimens for comparative work, dating from the nineteenth century to the present day. In addition to the pinned collection there are also many flies preserved in alcohol – the "spirit collection". To me, the most amazing fact of all is that the collections are accessible to anyone who wishes to study them. Their immediate guardians are two doughty ladies - Dr. Erica McAlister and Ms. Kim Goodger. Anyone wishing to visit should contact Erica at e.mcalister@nhm.ac.uk

Howard Bentley

A glimpse of the Natural History Museum Diptera section at work 78 years ago


WOMEN'S 8,000 FLIES FOR MUSEUM

Miss D. Aubertin (left) and Miss E. Trewavas busy yesterday at the Natural History Museum, South Kensington, arranging the 8,000 flies of different kinds which they caught during an expedition to the Carpathian Mountains in Poland and Czecho-Slovakia.

In my recent article about Ethel Pearce (2009. *Dipterists Digest* (*Second Series*) 16, 117-146) I mentioned that she had pasted into a copy of one of her *Typical Flies* volumes a newspaper cutting, which is reproduced above. The caption reads: "Miss D. Aubertin (left) and Miss E. Trewavas busy yesterday at the Natural History Museum, South Kensington, arranging the 8,000 flies of different kinds which they caught during an expedition to the Carpathian Mountains in Poland and Czecho-Slovakia."

It has not been determined where and when this was published or if Ethel Pearce, who was herself a journalist, was responsible for it, but it can be dated to 1932 as it concerns an expedition that took place in that year. It was reported in *Nature* (130: 659-659; 29 October 1932) that "the Entomological Department of the British Museum (Natural History)" had recently acquired "some 8,000 insects of various orders, but mainly Diptera" that "have been collected for the Department in the High Tatra Mountains [the northern range of the Carpathians] in Poland and Czechoslovakia by Miss D. Aubertin and Miss E. Trewavas." So it appears that not all 8,000 insects were flies but most were. The duration of the trip and the collecting methods used are not stated but, whatever these were, the collection of 8,000 insects does seem a remarkable achievement.

Of the two people shown, only Daphne Aubertin (1902-1970) can be claimed as a dipterist. She was on the staff of the Diptera section from 1927 to 1935, leaving in the year that she married Mark Dineley. She had apparently worked previously on Mollusca, was a member of the Conchological Society and continued to publish papers on snails into the 1930s. While working on Diptera, she was particularly interested in Calliphoridae and wrote several taxonomic papers on this family including a revision of the genus *Lucilia* (1933. *Journal of the Linnean Society of London* (*Zoology*) 38: 389-436). She was also a co-author of the book on this family in the "Fauna of British India" series (Senior-White, R.A., Aubertin, D. & Smart, J. 1940. *Diptera. Family Calliphoridae*. In: Sewell, R.B.S., ed. *The fauna of British India, including the remainder of the Oriental Region*. Vol. VI. Taylor & Francis, Ltd., London. xii + 288 pp).

Ethelwynn Trewavas (1900-1993) was not a dipterist, so presumably went as a collecting companion. She had worked on frogs and toads while at King's College (later Queen Elizabeth College), London in the 1920's. She joined the museum staff in 1928 and published on Enteropneusta (acorn worms) of the Great Barrier Reef in 1931, but was primarily an ichthyologist during her many years at the museum. Richard Fortey (2008. *The Secret Life of the Natural History Museum. Dry Store Room No 1*. 338 pp. Harper Collins, London) made some comments (pp. 135-137) about the latter part of her career, describing her as redoubtable. She became Deputy Keeper of Zoology from 1958 till 1961 but continued to work on fish for many years into her retirement. She specialised in the cichlid fishes of the East African lakes, on which she produced several monographs (the latest published in 1989 together with D.H. Eccles) and she made a number of collecting expeditions to Africa in search of them.

The photograph above shows Ethelwynn Trewavas in 1986.

Peter Chandler

Dipterists Forum

Membership Matters

This year has been another successful year as regards membership, the figures detailed below reflect the hard work and organisational skills of many on the Dipterists Forum Committee, some of whom attended the Dipterists Forum Stall at the Amateur Entomologists Exhibition; whilst, here and elsewhere, our Publicity Officer has once again, produced various publicity leaflets & adverts. The Dipterists Forum Website has also stimulated much interest and has contributed towards this year's success, with an increasing number of application forms downloaded.

The Number of Members & Subscribers on the 29th December 2009 is as follows :

Dipterists Forum Members 335 as on 29th December 2009

Dipterists Digest Subscribers 322 as on 29th December 2009

These figures include some 31 New Dipterists Forum Members, 19 of whom are also Dipterists Digest Subscribers, plus one who is a Dipterists Digest Subscriber only. This makes a total of 32 individuals.

There are some 26 former (2008) Members of the Dipterists Forum, including some 13 subscribers to the Dipterists Digest; who have either resigned, or have yet to respond, to renewal requests for this year.

All this amounts to a net gain of some 5 New Dipterists Forum Members and 7 Dipterists Digest Subscribers, there are also an additional 3 current Dipterists Forum Members who have upgraded their Membership to include the Dipterists Digest. The steady growth in the readership of the Dipterists Digest is especially pleasing in the light of printing problems in the production of the Dipterists Digest. The figures listed for the Dipterists Digest are the highest ever!

In addition, there are some seven new Dipterists Forum Members whose membership starts on the 1st January 2010. Four of these are also Dipterists Digest Subscribers.

It is envisaged, that once again, that there will be a Dipterists Forum stall at the Amateur Entomologists Exhibition, however, at the time of writing (29th December 2009) there is no confirmation of date! Therefore, an update will be published in the Autumn Bulletin and on the Dipterists Forum Website.

Membership & Subscription rates :

Members and Subscribers are reminded that Subscription Rates are as follows:

Home

Dipterists Forum £6 per annum and Dipterists Digest £9 per annum

Unfortunately there are still a very small number of members & subscribers who have paid at the old pre 2005 rate, I would be grateful, if those who have yet to top up their membership fees could please do so. Pay me in person if you wish. I plan to be at all the Dipterists Forum Events this Spring & Summer. Updated Bankers Order Forms are available on request either by post or by e-mail attachment

Overseas

There are a number of important changes in the Overseas rates for all Dipterists Forum Members and Subscribers to the Dipterists Digest. The steady rise in Overseas mailing cost has regrettably necessitated a review in the overseas Membership and Subscription. As a result, the Dipterists Forum will now have only one category of Overseas Membership. For overseas Members, this will be a joint Dipterists Forum & Dipterists Digest Subscription category only (there will no longer be a separate membership for the Digest or The Forum). The rate for this new category will be £20.

New Overseas Rate

Dipterists Forum & Dipterists Digest £20 per annum

I wish you all the very best and good luck in 2010!

Mick Parker, Membership Secretary.

Dipterists Digest

Scope

Dipterists Digest is the journal of Dipterists Forum and publishes papers and notes on British and European Diptera. All items offered are subject to review, where possible by specialists in the field concerned. It is a scientific journal but is intended for amateur as well as semi-professional and professional field (as well as deskbound) dipterists.

The purpose and scope of the journal are stated on the inside cover page preceding the instructions to authors. The scope is wide, the common factor being the emphasis on new observations and many items that appear in Recording Scheme newsletters would merit inclusion, often with little further work required. The principal subjects covered are behaviour, ecology and natural history of flies; taxonomic revisions including descriptions of species new to science and notes on identification; new and improved techniques; the conservation of flies; accounts of scarce species and of those new to regions, countries etc. and local faunistic accounts. Each issue also contains details of changes to the British and Irish checklists.

Since the Second Series began in 1994, a volume comprising two issues has been published each year, so in 2009 we reached Volume 16. Publication date is irregular and has been largely determined by the availability of material and this has led to some recent issues being published in the year following that of the volume concerned but in 2009 we caught up by publishing three issues in the year. As predicted at the AGM Volume 16 Part 2 was published in December and was distributed before Christmas to those subscribers who had paid the full 2009 subscription.

Request for contributions

Material for the next issue is always eagerly awaited. The 2009 issues included all items received up to the time they went to the printers. Further contributions had started to come in by the end of the year and it is hoped that enough will be submitted during the winter months to produce the first 2010 issue on time by midsummer. A steady stream of papers and notes throughout the year is needed to assure that the schedule is maintained.

Please read the instructions to authors on the inside cover page and follow the layout of recent issues before submitting any papers or notes.

Highlights from latest issues

Only one issue has appeared since the previous Bulletin. It included 18 varied papers and notes, as well as the usual checklist updates. Four species new to the British list were reported, two of them Tachinidae, a family that has repaid the increased effort put into its study in recent years and a note on the first occurrence of *Parasetigena silvestris* in Britain since 1936 reinforces this per-

ception. The other additions were a mosquito that has evidently been overlooked due to close similarity to a sibling species, and an agromyzid mining *Astrantia*, that has apparently been in Britain for some time but it had not till recently been appreciated by those familiar with it that a species new to the list was involved. A sciomyzid new to science from the Balearic Islands is also described. This and a paper on saproxylic Brachycera new to Greece provide the international element to this issue. Evidence was presented that the army worm *Sciara militaris* had spread to northern England and an interesting observation of a possible association with the phorid *Borophaga femorata* at one of its Scottish localities was also reported. Other notes provided distributional information on *Dorycera graminum*, *Myolepta potens* and *Dolichopus excisus*, as well as new food plant records for agromyzids on *Pedicularis* species, a new host record for a hippoboscid and an account of swarming behaviour by the chloropid *Thaumatomyia notata*. The issue is, however, dominated by three longer papers of a more historical nature. One of these, by Alan Stubbs, arose from his recognition of the significance of habitat photographs of Dorset heathlands published in the three volumes of *Typical Flies* (1915-1928), with respect to the changing fortunes of the bombyliids and tabanids characteristic of these sites. The submission of that paper led me to research Ethel Pearce, the author of *Typical Flies*, and resulted in the account of her life and contribution to the study of Diptera that follows Alan's paper. Inclusion of a paper drawing attention to the collection and diaries of Henry Andrews that, together with those of Cyril Hammond, constitute the main dipterological resources of the BENHS, enabled a full sized issue to reach the printers for publication within 2009.

Printing problems – an apology

Once again I am sorry to report that there were some problems with the printing of the Digest, this time concerning the latest issue, Volume 16 No 2, which delayed distribution by a week. Before distribution it was noted by Mick Parker that a good proportion of the stock received by him had some pages duplicated and others missing. In the affected copies pages 101-116 and 157-172 are duplicated, while pages 117-132 and 141-156 are missing.

The copies for distribution were returned to the printers, who checked them and reported all to be complete. Since distribution, however, one subscriber has reported that he received a copy with these pages duplicated, which may mean that some others have also been overlooked. So far we know that 49 of the 500 copies printed were affected. The cause has been identified and appropriate action to avoid any recurrence has been taken. Could anyone who has not yet read their copy please check it to determine if they have such a copy. If they do have one please inform Mick Parker, who will send a replacement.

The other problem was that many copies had some smudges on the white part of the cover. These are not part of the photograph, which should have a completely white background. This problem was noticed when distribution was taking place but too many copies were affected to avoid distributing them and we cannot unfortunately replace copies affected by this defect. The printers have agreed to apply a thin layer of lacquer to seal the cover in future at no extra cost to avoid any repetition of this problem. As the BENHS have been using the same printer for a longer period than us, and have not had cause to complain about the quality of printing, we must conclude that the problems we have experienced are not symptomatic of their overall performance and anything further of this nature will be extremely unlikely!

Peter Chandler

Review Publications

Reflections on the series *Studia dipterologica* and *Studia dipterologica Supplement* and their future

by Frank Menzel, Andreas Stark & Barbara Ismay

The following text will be published either as the same or as a very similar text in a future volume of Studia dipterologica:

In 1994 '*Studia dipterologia* - Journal of taxonomy, systematics, ecology and faunistics of Diptera' (ISSN 0945-3954) and 1997 '*Studia dipterologica Supplement* - dipterological monographs' (ISSN 1433-4968) were founded by Dr. Andreas Stark (Halle an der Saale) and Dr. Frank Menzel (Müncheberg). Both journal series aim at promoting dipterology:

"Manuscripts submitted to Studia dipterologica should be not longer than 50 printed pages. Larger monographs of more than 50 pages should be submitted to Studia dipterologica Supplement. Original papers on taxonomy, phylogenetic systematics, faunistics, biology, ecology, zoogeography and behaviour, provided they are concerned with Diptera, will be regarded as relevant. Furthermore, biographies of famous dipterologists (CVs, Festschrifts, obituaries, bibliographies), reports on dipterological excursions or expeditions, papers on dipterological collections, catalogues and checklists of selected Diptera groups, announcements of dipterological events, meeting and congress reports, short notes and book reviews with dipterological content may be published. The Supplements can also include dissertation or habilitation theses if the scientific text has not been published."

Reflections

From 1994 to 2009 11,722 pages with dipterological content were published in both journal series. 7,175 pages were included in the 15 volumes of *Studia dipterologica* and 4,547 pages in the 18 volumes of *Studia dipterologica Supplement*. In the last 16

years authors described 1,248 new taxa in 67 Diptera families (see 'New Taxa' under http://www.studia-dipt.de/newtaxg.htm). The journal *Studia dipterologica* is of interest to anyone interested in the study of Diptera in the whole world. Its subscribers live in 30 countries and are distributed globally. Both journal series are included in Zoological Record (BIOSIS), CAB Abstracts (CABI) and VINITI (Moskau).

Since 27th January 1999 *Studia dipterologica* and *Studia dipterologica Supplement* have a webpage, 'www.studia-dipt.de', edited by Frank Menzel (Müncheberg) and programmed by Fritz Geller-Grimm (Frankfurt / Main). This is searchable in English and German and offers a wealth of data and information, which includes guidelines for authors, full lists of contents, copies of the 'Abstracts – Zusammenfassungen'; search functions for all 'Key words – Stichwörter', information on newly described taxa (including bibliographies), pricelists and order forms. Each year the number of registered hits is more than 560,000 and the number of sessions is more than 62,000. These positive reflections, the consistently high number of submitted manuscripts and the partially completed restructuring of the editorial work allow us to have an optimistic view of the future of the journal.

The Future

In future the publication and editorial work will spread among more people. For this reason the publication, the editorial board and the distribution of *Studia dipterologica* have been restructured. The journal became an official publication of the Senckenberg Deutsches Entomologisches Institut (SDEI) within the network of the Senckenberg Research Institutes and Natural History Museums (SFN) on 1st October 2009. **The SDEI, Müncheberg (Germany) will produce, distribute and invoice for Studia dipterologica from volume 16 (2009) onwards. The frequency, purpose and content of the journal will remain unchanged.** The editors are Frank Menzel (Müncheberg), John Kramer (Oadby) and Andreas Stark (Halle / Saale). Six people will constitute a larger editorial board with clearly defined tasks. These are Fritz Geller-Grimm (Frankfurt / Main), Frank Menzel (Müncheberg), Adrian C. Pont (Oxford), Barbara Ismay (Long Crendon), Andrea Thiele (Müncheberg) and Andreas Stark (Halle / Saale). Currently 22 experts constitute the scientific advisory board; these are from Australia, Belgium, Denmark, Germany, the United Kingdom, the Netherlands, South Africa, Czech Republic and the USA (for more information see http://www.studia-dipt.de/introe.htm). Jointly with changing the publisher of the journal, the place of publication will also change with volume 16 (2009); it changes as follows: volume 1(1) to 15(1-2), Halle / Saale (Germany), from volume 16(1) onwards, Müncheberg (Germany). The monographic series *Studia dipterologica Supplement* will still be published by Ampyx-Verlag, Halle / Saale (Germany). The editors of the Supplement series will still be Andreas Stark and Frank Menzel (for further information see http://www.studia-dipt.de/sintroe.htm).

Please send manuscripts, enquiries and orders for the journal *Studia dipterologica* in future to Dr Frank Menzel (menzel@studia-dipt.de). Please contact only Dr Andreas Stark (stark@studia-dipt.de) regarding the monographic series *Studia dipterologica Supplement*.

Dr Frank **Menzel**, Senckenberg Deutsches Entomologisches Institut, Eberswalder Straße 90, 15374 Müncheberg, Germany;
Dr Andreas **Stark, AMPYX-Verlag, Seebener Str. 190, 06114 Halle (Saale),** Germany;
Barbara **Ismay, 67 Giffard Way, Long Crendon, Aylesbury, Bucks, HP18** 9DN,UK

Manual of Central American Diptera Volume 1. 2009.

Edited by B.V. Brown, A. Borkent, J.M. Cumming, D.M. Wood, N.E. Woodley & M.A. Zumbado. NRCE [National Research Council of Canada] Research Press, Ottawa. 714 pp.
Available from NHBS Environment Bookstore (www.nhbs.com) at £67
(*or Pemberley Books at www.pembooks.demon.co.uk/ for £60 - ed***)**

This is the first of two volumes and covers the Nematocera and Lower Brachycera (including Empidoidea). A second volume covering the Cyclorrhapha is expected to be published early in 2010. Like all such Regional Manuals it has involved the collaboration of specialists in the families concerned and this volume is the work of 45 authors, including 6 from Central and South America, 26 from North America, 1 from Australia and 12 from Europe, including three from Britain (Graham Rotheray is a co-author of the larval key, Geoff Hancock is senior author of Anisopodidae and sole author of Ptychopteridae, while the late David Greathead was senior author of Bombyliidae).

This volume also includes a general introduction to the Regional Diptera fauna and chapters on Adult Morphology and Terminology, Natural History, Economic Importance and Phylogeny. These introductory chapters are of interest with respect to Diptera in general. They are followed by keys to families of adults and larvae. The adult keys include all 106 families of Diptera recognised in the two volumes of the Manual (42 of which are covered in this volume). These keys are restricted to families occurring in the Neotropics and are important as being the first keys treating the entire Diptera fauna of this Region. Although they were devised to be used particularly for the fauna of Central America and the Neotropical part of Mexico, they are also projected as being comprehensive for the Caribbean and South America, except in relation to the temperate parts of Argentina and Chile.

The composition of families largely follows that of the Nearctic Manual so the cranefly families are all included under Tipulidae and only two families (Empididae and Dolichopodidae) are recognised in Empidoidea, which may be useful in assisting identification in these groups, particularly for non specialists and likely users within the Region. However, the fungus gnats which were all in-

cluded in Mycetophilidae in the Nearctic Manual, are divided into 5 families plus the unassigned *Ohakunea* group; the families differ from those known in Europe by including Lygistorrhinidae but not Bolitophilidae. The *Heterotricha* group is not included except for a mention under Diadocidiidae of *Heterotricha*, said to be south temperate. This is incorrect as South American species are now assigned to the genus *Chiletricha*, which is also represented in Brazil so should have been included in the keys to give complete Neotropical coverage. Also Mythicomyiidae is separated from Bombyliidae and given the English name Micro Bee Flies (also two words, not hyphenated for Bombyliidae).

All families are given English names, some differing slightly from those familiar to European readers, e.g. Trichoceridae and Ptychopteridae are respectively Winter Craneflies and Phantom Craneflies, and terms such as Apiocerid Flies are used where no English name exists. Curiously only a few families are assigned Spanish names: craneflies (Tipulidos), not surprisingly the biting groups (Culicidae - Zancudos, Simuliidae - Bocones, Ceratopogonidae - Purrujas, Tabanidae - Tabanos) and the Asilidae, which rejoice in two Spanish names – Moscas Cazadoras and Moscas Ladronas.

Each family chapter includes a whole insect habitus drawing and a diagnosis. Other introductory sections cover biology, classification and identification. The main part comprises a key to all genera known in the Region, followed by a synopsis of the fauna with notes on each genus, generally stating the number of species and their distribution, as well as any points of interest. Where keys to species level exist they are mentioned, so that identification may be extended beyond the generic level using the literature cited.

The family keys and the chapters on individual families are well illustrated throughout. While some figures were newly drawn, a high proportion of the line drawings are reproduced from the Manual of Nearctic Diptera so are often of species (or even genera) not found in the Region covered. This was unfortunately essential to ensure publication within a reasonable time frame. The family key to adults is followed by 144 colour photographs, which show examples of live insects representing most of the families covered. These are of species found in the Region and demonstrate the remarkable range of form shown by Neotropical Diptera. They are, however, arranged twelve to a page so are often too small to perceive diagnostic characters and it is a pity that a larger format was not possible to achieve. One of these colour photographs, of a *Heptozus* species (Stratiomyidae), was selected to adorn the cover so the beauty of that species at least can be fully appreciated.

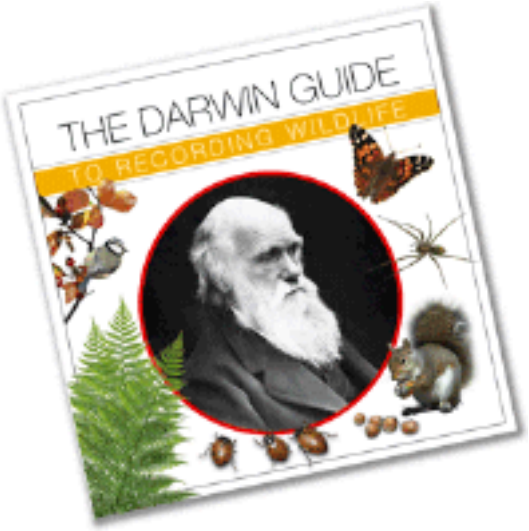
This work has been in preparation for several years and is evidently a thorough and comprehensive account of the Regional fauna, as well as being essential for the study of the Neotropical fauna in general. The editors and authors should be congratulated on this remarkable achievement. It should provide a stimulus to further study of Central and South American Diptera and will hopefully encourage more local workers to become dipterists in the future.

Peter Chandler

The Darwin Guide to Recording Wildlife

Randall Keynes, Trevor James, Alister Hayes, Mandy Henshall, Mandy Rudd

http://www.nbn.org.uk/Useful-things/Publications.aspx#Darwin



Many thanks to Jo Purdy of the NBNT for informing us about this publication in her Christmas message to the network. It is produced by the NBN Trust and written and supported by The Charles Darwin Trust, Greenspace Information for Greater London, London Borough of Bromley and Defra.

Beautifully illustrated and well designed, this is just the sort of thing we need to stimulate wildlife recording. I trust Erica McAlister is not letting her visitors out of the NHM unless they are clutching one of these.

It begins with a background about Darwin and launches straight into "Why record wildlife" and "Getting involved in recording wildlife" so its purpose is very clearly an attempt to recruit the next generation of naturalists through their fascination in the works of Darwin. It has avoided the risk of trivialisation very well, going on to detail all the broad groups that one might take an interest in and saying a few words about fieldcraft for each. Flies do get a mention although we seem to have dropped to "5000+ flies" in the section summarising invertebrates. There's a selected list of Recording Schemes too, the ones run by the Peterborough people plus the Tachinidae are "in" - all the rest are "out" regardless of how active they are (it wasn't Trevor James who made this selection). It might have been better too, to have included a website link than to tell us that the specialist interest of the Whale and Dolphin Conservation Society is Whales and Dolphins. There are very good sections on the "why" and the "how" of recording but sadly very little specific guidance as to where one might go next, no website link for Local Records Centres and just the NBN and the CEH links to enable readers to find National Recording Schemes like ourselves - so we'd better make sure that these are up to date.

This is just the sort of thing that would be useful to have on our desk at the various public exhibitions - provided one of our publicity leaflets were firmly stapled inside, they can be obtained free from NBNT at the above link where it's also possible to download a pdf copy.

Darwyn Sumner

Reports

Autumn Field Meetings

Scottish Borders

12-19th September 2009

This meeting was highly experimental because our autumn field meetings rarely occur in northern regions. Would there be any interest? And would we get anything? were two key questions. From the response from members it seems that this sort of meeting is unlikely to attract a large following – many of the "regulars" did not attend, but a small hardy band comprising Alan Stubbs, Peter Chandler, Andrew Halstead, Malcolm, Mary and Mia (the Collie) Smart, and yours truly ventured north. We were met on the Wednesday by Richard Eagles, a local member who joined us for one day and introduced us to Knowetop Lochs which proved to be the most productive fungus gnat site of the week. The dates in mid-September were thought to be ideal as autumn starts earlier in the north. Our recording subsequently indicated that for craneflies and fungus gnats, this was probably too early in the year, but it was a good time for autumnal hoverflies.

Dipterists Forum at Glen Trool Visitor Centre. L-R Andrew Halstead, Peter Chandler, Alan Stubbs, Malcolm Smart, Mary Smart + Mia

Going such a long distance meant that we needed to make the most of the travelling – and so a full week was planned, with two venues chosen: Newton Stewart & Galashiels. Fortunately we went to Newton Stewart first – this was much more equable landscape with much softer features and a lot more accessible habitat that lent itself well to the wonderful sunny days that we experienced. On some days I scanned the Galloway hills and could just about make out the landscape of John Buchan's "39 Steps". – Richard Hannay was made of stern stuff to go on foot through that country. On many days we had temperatures above 20°C. Though there was limited broad-leaved woodland, we were able to visit a wide range of habitats, mostly punctuated by coniferised sections that suited the hoverfly recorder and nobody else!

Despite reservations about the available habitat, the decision not to prepare a list of possible SSSIs to visit, and the slightly wonky timing, the meeting proved to be remarkably successful. Day one yielded a total of 56 fungus gnats and 26 craneflies plus some 30 hoverflies and the lists grew well as time progressed: 80 gnats by day two, 98 by day three and one hundred and two by day four. At least we made the 100 species in the first four days, as this has been a struggle in recent years. The total of fungus gnats for the shorter stay at Galashiels was 74 species.

In my note of this year's Spring field meeting I likened the group to the characters of "Last of the Summer Wine" and we were able to continue this theme in Scotland. Malcolm proved himself adept at getting stuck in the mire (over wellie-boot depth). Alan heard his plaintive cry for help and left him to his struggles, assuming that Malcolm was musing on "how hard it was to fight heroically through habitat where no human, let alone a dipterist, could have possibly fought through before".

Meanwhile, Alan thoughtfully left his boots outside on the first night in Galashiels to air – he got more than he expected because the guesthouse turned on the hoses to water the hanging baskets and duly filled his boots with water! Our hosts kindly took the boots in to dry them but rather jibbed at his socks! Meanwhile, yours truly returned from supper to find that the key to his room did not work (and before you jump to conclusions he only had two pints of rather vinegary Black Sheep!) – our hostess had given me the wrong keys.

And what about the flies I hear you screaming – surely this is a Dipterist's meeting and not a remake of a comedy based in Holmfirth? The flies were there and provided much entertainment.

One that was particularly remarkable was the tiny Dolichopodid *Micropygus vagans*, which was added to the British list on the Ayr meeting in 1995. This introduction from New Zealand is now very well established in southern Scotland, having turned up in a very large number of samples both in Newton Stewart and in Galashiels. It is really very distinctive, being small, around the size and shape of *Sympicnus* but with darkened wings which set off the contrasting pale cross vein that forms the discal cell.

Visiting two contrasting areas was also interesting because there were obvious differences in the immediately recognisable fauna. For example, Heleomyzids were quite scarce around Newton Stewart but proved to be abundant around Galashiels. Also, *Opomyza florum* (usually a sign of proximity to intensive agriculture) was readily noted at Galashiels but singularly absent from Newton Stewart. Doubtless many other differences will become apparent when the data are analysed.

A key purpose of field meetings is to undertake surveys for the recording schemes and in particular for the cranefly and fungus gnat schemes. In this respect we were remarkably successful with 131 fungus gnats recorded and 53 craneflies. There were few surprises, however, as the fauna proved to largely comprise ubiquitous species, but filling gaps on distribution maps. The most interesting records being *Dziedzickia marginata* (which occurred at four sites in Galloway), *Exechiopsis dumitrescae* from Maxton and *Pseudorymosia fovea* found at Cardrona Forest.

Normally mid September would be too early of most of the Autumn *Tipula* species on the basis of many mid October field meetings in England and Wales, including the Lake District. Thus it was a surprise to find that *Tipula paludosa* had virtually finished and *T. pagana* was out, about a month ahead. The great oddity was the near absence of *T. staegeri* and *T. signata* despite plenty of mossy tree trunks (where larvae ought to thrive) in Galloway, and little better about Galashiels where such moss was less in evidence. The most interesting records were *Dicranota gracilipes, D. guerini, Pedicia staminea, P. occulta, Paradelphomyia fuscula*,and *Tipula alpium.*

The list of hoverflies also proved to be quite remarkable with a total of 43 species but there were no real surprises. *Eriozona syrphoides* turned up at flowers in plantations on three occasions. It might be a lot more widespread than this but we tried to minimise time looking at Devil's-bit Scabious. *Didea fasciata* also proved

to be widespread in the Newton Stewart area, and *Arctophila superbiens* was also noted on several occasions but was far from abundant. Another of the big and bold species noted was the calliphorid *Cynomya mortuorum*, which we saw once. We spent a fair while photographing this specimen (photos) as it really is quite spectacular with its golden yellow face and iridescent blue abdomen (when viewed from behind).

Alan photographing *Cynomya mortuorum* with Malcolm waiting to grab the specimen.

Cynomya mortuorum – a very large Calliphorid with very distinctive golden face.

Overall, this was a remarkably successful meeting that encourages me to think about further twin-venue trips (people don't have to do both venues). Next year we are going to Devon, so maybe we will manage both the north and south coasts?

Roger Morris

Autumn Field Meeting - Bridgnorth

10-14th October 2009

This was a rather hastily arranged meeting that was intended to provide an alternative for those members who found our Scottish jaunt too far away. A group of nine comprised four from the Scottish expedition and five members who found the Bridgnorth venue more convenient. Our base in Bridgnorth was new to many, but was almost home to Malcolm Smart who lives nearby and joined us for a couple of days. Similarly, Nigel Jones from Shrewsbury joined us as a day-visitor.

One key objective of this trip was to explore some of the deep ravine woodlands within the Severn Valley and its tributaries. In keeping with organisation of other recent meetings we worked on the basis of prospecting for sites rather than establishing a set route. Although there are definite advantages to this approach, there are drawbacks and this was one trip where they became apparent. Ravine woodlands were not hard to find, but they were extremely variable in quality. Also, if it is damp they are far from ideal because they remain damp. And so it was that Alan and I looked at several possible sites on the trip to Bridgnorth, only to find that the weather the following morning was far from ideal. Damp, overcast, with soggy vegetation and fly soup in the net. It was going to be hard work!

Our journey from Peterborough to the Bridgnorth area on the Saturday was uneventful. A few uninspiring sites provided the requisite records, with the high point for me being a field with an oak stump sprouting a wonderful array or large *Armillaria* fruiting bodies. Bliss for me as I pooted around a dozen Platypezids (*Protoclythia modesta*) and swept a reasonable number of gnats. Not much else for the day however, as there were few gnats, and craneflies seemed thin on the ground. As experienced in Scotland, the genus *Tipula* was very scarce on this and subsequent days.

We managed four sites on the first full day (Sunday); two ravine woodlands, a dry secondary birch-oak woodland and a reclaimed former brownfield site with dense broadleaved planting. Flies were scarce and it took a lot of work to assemble a respectable haul. My technique these days is to hoover everything up in one of Ken Merrifield's patent pooters. Ken has perfected the art of creating suction – his pooters can easily intercept a muscid in flight and they make a satisfying thump as the fly reaches its destination. You know your quarry has been secured! These pooters allow me to catch the odd cubic inch or so of black grot at each site. Lots of *Limonia nubeculosa* and an assortment of others. This means lots of sorting in the evening but I can now be relied upon to make a reasonable contribution to the gnat and cranefly data; which is why I am there.

A Dipterists field meeting would not be complete without the occasional point of amusement and Erica McAlister provided some of us with the amazing sight of a gravity-defying VW golf with one wheel a couple of feet off the ground as she chose to turn the car around over a steep bank! Alan, Kim Goodger and I could only look on in amazement! Yet another for the annals of the Forum and something for your historian to relate. Sadly I did not have a camera handy as it would have been good to share the moment with readers. Still no-one came to any grief and that is the main concern.

Day two arrived in a blaze of sunshine – one of those wonderful crisp mornings where the smell of damp leaves mingles with warm

sunshine to provide the evocative sights and smells of autumn. Our target was a suite of woodlands close to Shrewsbury that held great promise but proved to be remarkably unrewarding. Site one, a woodland that Nigel Jones has found to be very productive for hoverflies was too deeply in shade and only started to warm up by the time we left. We lingered along a sunlit hedge watching assorted flies sunning themselves and hoping for platypezids – Malcolm maintained his reputation for taking these elusive animals: a single female *Protoclythia modesta*.

Examining the catch. L-R Erica McAlister, Malcolm Smart, Peter Chandler, Alan Stubbs & Nigel Jones

On to Earls Hill, which again held promise but yielded nothing. Fungus gnats were exceptionally thin on the ground, as were craneflies. Finally, our third site; Poles Coppice for a late afternoon session. Here the sunlight glancing through the trees illuminated little swarms of leggy flies – mainly male *Dicranomyia chorea*, a small yellow cranefly. Thus ended day two with little to report but a very nice day in the autumn sunshine. A little bit of warmth in otherwise cool surroundings is remarkably pleasant.

Autumn really arrived on the Tuesday (day 3) with the first frost of the year and the need to scrape the hoar off the windscreen. This called for a late start to allow the insects and entomologists to warm up. In the interlude we perused the albums of photographs by Austin Brackenbury of Dipterists meetings in the 1980s. We remarked upon the degree to which some of our number had changed, and how others had not. I found myself reminded that I once boasted a full head of hair and a fine moustache. Maybe I should grow the moustache again to compensate for the loss of top-cover! We really must make an effort to re-kindle the recording of meetings and the membership, as these two albums provided a very happy hour of reminiscences.

Our first site on day three was a marvelous heathland; Cramer Gutter, which boasts a particularly rich flora. Although initially unpromising for fungus gnats, the wooded stream running through the bottom of the valley proved to be very productive. A multi-stemmed marsh thistle at this site also provided an object lesson in how not to record hoverfly larvae. Splitting this stem I found a comparatively small *Cheilosia* larva and assumed it to be a late *C. grossa* but having split several other stems and found larvae of a similar size, more careful examination by Alan revealed that this was *C. fraterna*! A useful lesson as these larvae were not in the side shoots but in the basal part of the stem. These larvae, together with a couple of *Sericomyia silentis* and *Neoascia podagrica* took the hoverfly list to beyond twenty.

The next site provided a further lesson, and one that amazed us all. We were using 1980s vintage maps and navigated to what was marked as a large block of woodland – perhaps a hundred hectares or more. On arriving at a distinguishable landmark it became clear that if this woodland ever existed it does not now! What became of the woodland is very unclear because the landscape suggests that it was not there even when the map was first published! We found enough of a wooded gorge to collect a few gnats and craneflies but this was a bit of a poor substitute for the promised venue.

At least we knew Wyre Forest exists and hence our final morning scheduled a visit to this well-known site. Yet another wonderful morning – crisp autumn sunshine drifted through the golden leaves and we set about in search of gnats and craneflies in one of the deeper stream valleys! I took a break and sat on a sunny bank above Dowles Brook. The autumn sun filtering down into the valley was quite magical, whilst the rasping growl of the chainsaw gave that classic countryside ambience: bliss.

As with all other sites, Wyre Forest lacked fungi and gnats and craneflies were very sparse. My haul was pitiful, although Peter Chandler later informed me that of the ten species I secured, only two replicated his haul. So, this helps to show the value of encouraging the non-specialist to take an interest in hoovering specimens of an otherwise unfamiliar family. Perhaps we need to put more emphasis on encouraging para-taxonomists armed with Ken's patent pooters?

Alan Stubbs & Kim Goodger examining decaying *Petasites* for fly larvae.

Whilst this trip was not as productive as on some previous meetings, the fungus gnat list was not as dreadful as I had feared it might be: 73 species. Craneflies were, however, very weak with just 32 species. There were few highlights but some of the more interesting records included the Nationally Scarce fungus gnats *Mycetophila lastovkai* (the most northerly record so far) from Rock Coppice and *Pseudorymosia fovea* (a northern and western species) from Earls Hill and Wyre Forest. *Mycetophila sigmoides*, recently added to the British list and probably a recent arrival in Britain, but already widespread in the south, was found at Kingsford Forest. A very small female of *Keroplatus testaceus* was found around an isolated gathering of logs at Wyre Forest. Most surprising was a male of *Ditomyia fasciata* at Birchley Farm, a new record for Worcestershire; it was recorded in a recent Digest as new to Wales (from last year's autumn meeting) and Gloucestershire.

The platypezid haul amounted to four species, three of which were represented by single specimens. Females of *Protoclythia modesta* and *Platypeza aterrima* came from Birchley Farm where the food

plant honey fungus *Armillaria* was abundant in the streamside wood; a male *Polyporivora picta* from Kingsford Forest and a female of *Agathomyia unicolor* from Wyre Forest completed the assemblage. At Kingsford Forest a colony of *Armillaria* wasn't attracting any platypezids but the anthomyiid *Pegomya geniculata* and numerous *Forcipomyia* sp. (Ceratopogonidae) were there. In addition to the usual range of fungus feeding *Suillia* species the heleomyzids included *S. ustulata* from Stevenshill, *Gymnomus caesius* from Earls Hill and Wyre Forest, *Morpholeria ruficornis* from Stevenshill and Stanmore Country Park and *Eccoptomera obscura* from Earls Hill and Hunthouse Wood.

DF at work while the day warms up. Back to front: Kim Goodger, Chris Spilling, Hannah Cornish, Erica McAlister, Peter Chandler & Alan Stubbs.

Members attending: Peter Chandler, Hannah Cornish, Kim Goodger, Nigel Jones, Erica McAlister, Roger Morris, Malcolm Smart, Chris Spilling & Alan Stubbs.

AES Annual Exhibition

Kempton Park, London
17th October 2009

Mick, Judy, Martin and Howard

Annual Meeting

Dipterists Day

Report on the Dipterists' Day and Annual General Meeting at the Natural History Museum, Cromwell Road, London, November 2009

It was like stepping into the Tardis as we all arrived in the foyer of what appeared to be a cupboard under the stairs (or should that be a C.S. Lewis wardrobe - infested with something because there was this huge cocoon ...) at the Darwin Centre. There we were met by our friends Ian Johnson and David Henshaw plus helpers (and coffee) in a sizable foyer to the modest lecture theatre. Us latecomers had a welcome opportunity to catch up on our breath and gossip before sneaking into Erica's introductory talk which John Kramer and Candace Padmore paid more close attention to ... (ed)

Stuart Ball was in the Chair and about 57 members gathered in the Neil Chalmers Lecture Theatre for the welcome to Natural History Museum and an introduction to the day given by Erica McAlister, Curator of Nematocera and Orthorrhaphous Brachycera at the museum. Erica gave us some impressive statistics, saying that more than 70 million specimens were stored at the Museum which was visited by more than 9,000 scientists a year with over 50,000 specimens on loan.

Most of the Insect specimens are stored in newly built storage facililities in 'the Cocoon' and there are 2,352,000 specimens of Diptera which include 16,000 types. The collections are divided into the World Collection, the British Collection, and the Synoptic (Reference) Collection. Information about the collections is available online, including lists of the rarer species missing from the collection – so dipterists can see what the Museum has and has not got. Any offers to fill these gaps is welcomed. A list will be posted on the Dipterists forum website in January.

Hannah Cornish then told us about the new Angela Marmont Centre for UK Biodiversity, also situated in the Cocoon. Here the Identification Service is housed where members of the public can take specimens to be identified. It also contains an excellent work area with microscopes, for use by visiting amateur naturalists. The facility is free but you need to book on line. The British Synoptic Collection and a reference library are available for reference. The Centre hopes eventually to have a good representation of every group of living organisms in the UK.

The Centre will be open to the public from May 2010, you can book online using: amc-booking@nhm.ac.uk. If you want to book the centre for courses you can book online or call Hannah Cornish on 0207 942 6985

We were then treated to four talks of a very high standard indeed. The first of our talks was entitled:

Dipterology, Yesterday, Today and Tomorrow

Chris Thompson, of the Smithsonian Institution, Washington D.C. (the U.S. Museum of Natural History)

Chris introduced flies by commenting on their beauty, and their importance in the Biosphere as vectors of diseases, as pollinators, biological control agents of pest and a few plant pest. He said that the lineage of flies went back 250 million years and by now over 150,000 species of Diptera had evolved, representing some 10% of global diversity.

Classification, he said, began with Aristotle (384-322 BC) who recognised a group of insects which had one pair of wings. In 1758 Linnaeus, in his *Systema Naturae,* used his binomial system to classify animals and he summarised everything that was known in Europe at the time. Linnaeus named 191 Species of flies, in 10 genera, with 24 authors. It included the Latin names, keys and the literature, but there were no images and the text was in Latin.

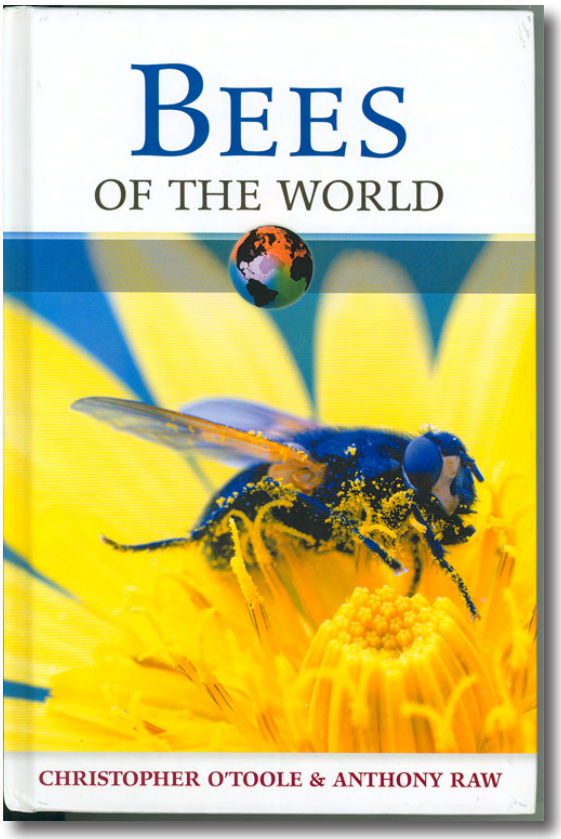
In 1805 Fabricius published his *Systema Antliatorum*, a classification system based on insect mouthparts. He was a student of Linnaeus and he tried to classify all the known Insects. He described 1151 species in 78 genera, and named 46 authors. However, by then, more entomologists in different parts of the world were using the binomial system of Linnaeus, and the job of summarising all of this new knowledge proved to be too big for the efforts of just one person. Perhaps not surprisingly given the poor communication systems of the time, Fabricius missed out many species known by others at that time. As in the *Systema Naturae*, the publication suffered because it lacked accurate images which were very costly to produce.

Today things are very different with highly efficient means of publishing and disseminating information. Field Guides with coloured plates, which could be taken on field trips, did much to stimulate recording. Peterson's *Field Guide to the Birds of Britain and Europe* was cited as an example which had an enormous influence on the popularity of bird recording. In addition there is the development of digital cameras, desk-top and lap-top computers, and the World Wide Web. This means that information can be stored and retrieved very efficiently, and disseminated on a global scale. Examples were given of the website Biosystematic Database of World Diptera (www.diptera.org) now being served from Copenhagen Zoological Museum and the new Diptera site (http://diptera.myspecies.info/)

Biodiversity is now a global concern as ecosystems begin to fail, and most nations signed and ratified the 1992 Convention on Biodiversity at the Earth Summit in Rio, Brazil. However, virtually all countries will fail to meet their goals because they were poorly defined and there was not adequate financial support. But there are also some successes. The All Taxa Survey began in Costa Rica and then was migrated to the USA**.** There are different ways of recording biodiversity and one such is the 'All Taxa Biodiversity Index' or ATBI. The first US ATBI was in the Smoky Mountains and there are now over 24 ATBIs in the world. They are carried out by large number of specialist workers who go to one site and record their specialist taxa from that site. These are long tern efforts. Also there are one day (24 hour efforts) to do the same and are appropriately called a 'Bio-blitz' and that type of survey provides a good description of the biodiversity of that site.

All of this information can be centralised and stored digitally as an '*Encyclopedia of Life'* (http://www.eol.org/), with one page per species. Digital images can be collected from many websites such as Flickr.com. Occurrence data can be collected and disseminated via the Global Biodiversity Information Facility (GBIF). Already more than a quarter of all the occurrence data for flies (Diptera), some half million records, are provided by the UK dipterists! Already much of the old literature has been digitised and made available on the *Biodiversity Heritage Library* site (http://www.biodiversitylibrary.org/). For example, *'Systematische Beschreibung'* by Johann Wilhelm Meigen 1818-1838 or Verrall's *'British Flies'* 1909, can now be searched on line

But what of Tomorrow? The facilities for the recording and dissemination of data are excellent, but what we need now is MORE content!! Chris first thanked all for what the UK dipterists have already provided, But … Surveys of baseline data, eg from Museums, are very important, and new baseline field-work surveys are needed from poorly known areas. The UK benefits greatly from its many societies of 'Citizen Scientists' but the recruitment of new workers is also important. Schemes such as 'National Fish Skin Day' (which perhaps most of us remember) and 'Monarch day' in the US, which focus on 'flagship species', will help in this process. We will then be able to plug the gaps in our knowledge and use the data to further many different worthwhile aims.



Chris also noted how flies do not get their full recognition from the public as many still confuse them with other insects, like bees!

John Kramer & Candace Padmore

Stuart then introduced Geoff Hancock, who gave the next talk

Thoracic spiracular gill structure of pupae of the genus *Lipsothrix* (Diptera, Limoniidae)

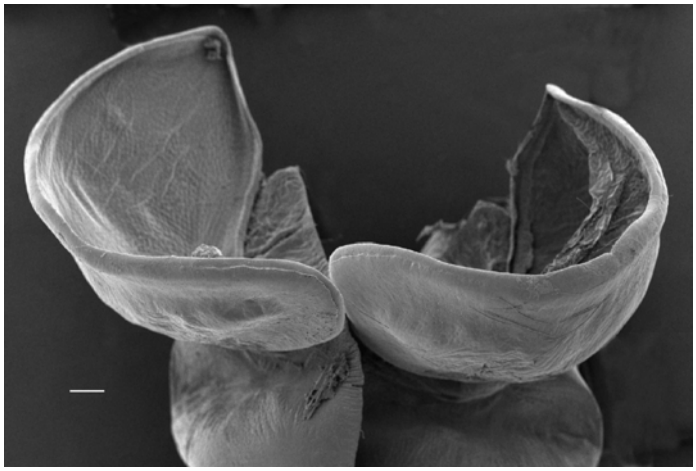
Geoff Hancock, Hunterian Museum, University of Glasgow

The larvae of the genus *Lipsothrix* occur in water-logged wood and this study has arisen out of surveys of saproxylic Diptera carried out by the Malloch Society, based in Scotland,.

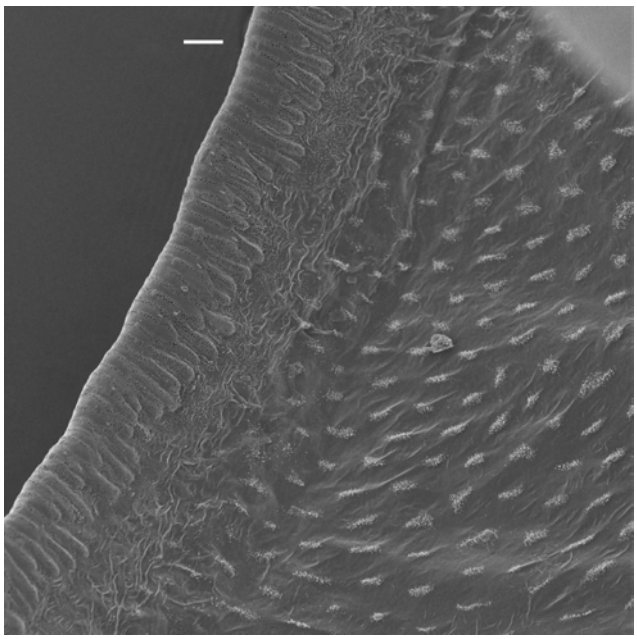
There are five species of *Lipsothrix* (sometimes known as 'Splinter flies') that occur in Western Europe: *Lipsothrix ecucullata*, *L. errans, L. nervosa, L. nobilis*, and *L. remota*. The larvae develop and pupate in the water logged wood, and the pupae move to the surface prior to emergence. After emergence the empty pupae cases protrude conspicuously from the surface of wood and they are therefore relatively easy to collect. Live larvae were located in the wet wood and reared through to emergence so that pupae could be linked to identified adults.

Thoracic spiracular gills, also known as pupal horns, were first described by H.E. Hinton in 1955. They are connected to, and are an extension of the tracheal system and provide an enlarged surface area for the exchange of respiratory gases, while minimising the loss of moisture. Under water, they provide a kind of complex thoracic gill, which prevents water entering the spiracles. On the gill surfaces are rows of pores (aeropyles) opening into lines beneath, which connect to the spiracle and hence through to the tracheae. This kind of structure is called a plastron and was described by Hinton as a constant volume of gas held in position by hydrofuge structures that resist the entry of water under pressure while permitting the diffusion of gases. They are found in insect egg, larval and pupal stages, associated with well aerated water and are also useful structures for insect stages in habitats that are subject to flooding.

Geoff then showed a series of beautiful Scanning Electron-Microscope (SEM) pictures of the thoracic spiracular gills of the five British species of Lipsothrix and pointed out the diagnostic differences in structure which permit identification. These can be seen also in the empty pupal cases and so the various species can be recorded without the necessity of collecting the short-lived adults.



Thoracic gills of *Lipsothrix errans* (Scale bar 0.1mm =100 µ)



Inner rim of the thoracic gill of *Lipsothrix nobilis*. (Scale bar 0.02mm= 20µ)

He offered some explanations of these differences based on the different habitats occupied by each species. *L. remota* and *L. nobilis* are usually close to the river margins and live in wood often partly submerged in water. These habitats are often flooded with silt in water which might explain the microscopic hair-like structures surrounding the aeropyles on the inner surfaces of the gills, thus preventing the clogging of then by particles.

Geoff had also observed some adaptive behaviour by pupae. When submerged in water where the oxygen tension is much lower, the pupae moved to the open end of its channel, projecting and opening the gills. The reverse happened when the pupa was exposed to air. This behaviour could be the subject of further research.

L. ecucullata and *L. errans* are found in wet slopes and seepages which may be more subjected to drying out and the aeropyles could be reduced in these species to reduce water loss. Another explanation could be that the consistently wet climate in the north and west produces a constant moist environment and so the structure of their gills is less complex as they do not need to deal with problem of drying out.

Nothing was known to the Scottish-based Dipterists about the habitat of *L. nervosa* which occurs further south**.** From the structure of its gill it might be predicted that it normally occupies wood away from immediate flooding risk. During questions Alan Stubbs supplied the information that it was indeed a species associated with seepages, thus confirming that hypothesis.

The genus *Lipsothrix* has recently been moved from the sub-family Chioneinae (Eriopterinae) to the Limoniinae on the basis of adult characters, which this research supports. Like the Limoniinae the larvae of Lipsothrix have ventral creeping welts, and similar head capsules. In addition, large thoracic gills with plastrons are confined to the Limoniinae (eg *Geranomyia, Antocha and Dicranomyia*). The full paper will be published at http://www.mapress.com/zoosymposia/ Volume 3 (December 2009): Crane flies—history, taxonomy and ecology.

After a welcome coffee and a 'muffin', (or 'bun', as we call them in Yorkshire) generously provided by Howard Mendel, Head of Collections Management at the NHM, Stuart introduce the second half of the programme of talks.

Functional Morphology of Higher Diptera Larvae.

Graham Rotheray, National Museums of Scotland

Graham began his talk by saying that the larvae of Diptera were often seen as 'featureless' and 'uninteresting' and that one purpose of his talk was to persuade people that the early development of flies was worthy of study. Of course, unlike adults, larvae don't move fast or fly away and this makes observing them relatively easy! Each stage in the life cycle of a fly faces its own set of survival challenges and is adapted through its morphology (structure) to do so. Functional morphology is about how structure is used in the various roles of life, for example, in feeding, respiration, locomotion and defence. The adult fly relies heavily upon fat reserves obtained by the larval stage and Graham focussed his talk on larval feeding processes.

The head capsule of fly larvae takes various forms in the different sub-orders of the Diptera (Nematocera, Brachycera and Cyclorrhapha) but a noticeable trend is for the head to soften and invert and in the Cyclorrhaphan, the head has turned in on itself and become hidden. There are three parts to the sclerotised remnant of the inverted head or head skeleton. At the front, the twinned **mandibles** serve to gather food by scraping and pulling it towards the mouth. The **intermediate sclerite** provides mechanical support for the movements of the mandible while the rearmost, **basal sclerite** is the pump that sucks food in and sieves it. To do this the basal sclerite is elastic and surrounded in muscle. When the muscles contract the roof plate is raised and food is sucked in. When the muscles relax the roof plate goes back to the original shape by elastic recoil and food passes into the gut.

Study of head skeletons is facilitated by the fact that they after the adult has emerged, the head skeleton is left behind in the puparium and can easily be extracted and studied. The sizes and shapes of head skeletons are hugely variable which raises the question, of what this variation means.

Some of the variation is explained by larval feeding mode in that the structure of the head skeleton reflects specific challenges imposed by different diets. **Saprophages** feed on decaying matter and tend to have one hook, and a sieve is present. **Phytophages** feed on plants and have more than one hook in strict (obligate) plant-feeding species, and no sieve. **Zoophages** feed on animal material and have one hook, no sieve and the head skeleton tends to be long and thin. But there are exceptions to all these structure/function associations. For example, some zoophagous larvae are short and thick, phytophagous larvae do not always have more than one hook and saprophages sometimes lack a sieve

A factor that seems to be a much better predictor of the structure and function of the head skeleton is food quality, in particular how much the food is a liquid or a solid. Across fly families the same trends are evident towards enlarged, heavily sclerotised and fused head skeleton components for feeding on hard foods and the opposite for feeding on soft or watery foods. However when examined in detail, this apparent convergence is superficial and each group has adapted in unique and specific ways. This means that for identifying flies using head skeleton characters, analysing functional morphology and investigating phylogeny, head skeletons are a rich source of data.

Food quality also effects more than head skeletons. Other structure/function correlations involve the locomotory organs, the anterior and posterior spiracular organs and even the size and shape of body segments. With so few Diptera larvae known, the field is wide open and even if this is no more than working out what breeding sites flies use, this will be a considerable advance.

Finally Stuart introduced his own talk about work done by himself and Roger:

Recent Work on Hoverflies

Stuart Ball & Roger Morris

The aim of the project described by Stuart's talk was to study the distribution of hoverfly species richness in Great Britain using the data from the Hoverfly Recording Scheme (www.hoverfly.org.uk)

He showed a UK map plotting 600,000 species records to show the number of species per hectad and asked, do these maps mean anything? Are they a measure of species richness, or do they measure only the recording effort?

Maps to show the pattern of recording effort from 1980s to 2000s were then shown. Most of the recording efforts are in the south and this includes the data from the Scottish scheme as well. There was a lot of recording in South Wales in 1980 though less now, and the Gloucestershire Recording Scheme is now active, but not earlier. This kind of thing helps to explain shifts in recording effort over time.

The pattern of visits and species richness are highly correlated so the dots might mean where people have looked so is there an underlying pattern of species richness? The answers to this can help in conservation efforts. Ideally, a Species Accumulation Curve should be used for each hectad so that the optimal number of recording visits can be used. A Species Accumulation curve is obtained when the number of species is plotted against number of recording visits for each site. This is shown best when people record what they find in their own gardens over a long period of time. There is an initial steep rise, which gradually flattens off as the number of new species gets fewer and fewer.

If this optimal number of recording visits were used for each hectad, his would mean that most of the species present had been sampled from all of the hectads. But clearly this is an enormous task and so statistical techniques can be used to try and smooth the variation in recording effort and estimate the species richness of any given hectad.

Stuart then went through some of the statistical techniques available, such as the analytical formula of Colwell & Mao [2004], Rarefaction, and Thresholding, and noted their drawbacks.

Tentative results from these techniques indicate that recorders go to places where they can find hoverflies. This means that the map of recording effort is probably also a good map of species richness. But in some areas are hard to reach and there are not many people living there, such as in parts of Scotland, so in places like that there will not be a good indication of species richness.

All of this points to the need for good recording, over a year, and over the decades, so that a detailed picture can be built up and monitored.

The talk finished off with a discussion about the importance of negative data. If a species was not recorded, for many possible reasons it does not mean that it was not present at that site. Were you out at right time of year? Do you know what you are looking for? Are you looking at right places? Stuart said that negative data may be a useful piece of information but it must be used with caution. There is a need for more systematic recording ie looking at same place at same part of the year. At present all we have to deal with at the moment, is piecemeal data

After thanking the speakers Stuart closed the morning programme and we went our separate ways for lunch. The coffee and lunch

breaks provided time to make some purchases from David and Diane Henshaw, and from Ian Johnson of Pemberley Books, both of whom had plenty of good things to entice us. It also provide time to view the exhibits and details of these will appear in the Dipterists Digest.

The afternoon session began with the Annual General Meeting of the Dipterists Forum, the Minutes for which appear in this Bulletin.

Following that there were short but excellent power-point presentations from the Organisers of the Stilt and Stalk Flies, Fungus Gnat and Hoverfly Recording Schemes. The Co-organiser of the Cranefly also described the current activities of the scheme.

For the Fungus Gnat Recording Scheme, Peter Chandler reported that the BRC had completed data entry of records passed to them, which comprised most records obtained by the Recording Scheme up to the end of 2008. Overall coverage maps indicated where there were gaps in recording and showed that there were records from 1862 10km squares, of which 235 of the more wooded squares had records of more than 100 species. Example maps of several species were shown to illustrate different distribution patterns. The species maps showed squares with post 1980 records in red while those with only pre 1980 records were shown in blue, but it was noted that more recording had taken place since 1980 than previously. These examples were in most cases accompanied by photographs of the species discussed, obtained from various sources, several of them kindly supplied by Judy Webb. Distribution maps were also shown of the two BAP species, although photographs of them were not available. Roger Morris was acknowledged for having assembled maps and photographs into a powerpoint presentation at short notice. A more detailed account of some aspects is given in the Recording Scheme Newsletter appended to this Bulletin.

The meeting was closed at 5.00pm and about 25 of us found our way to a local Thai restaurant for an excellent meal which started at 6.00pm

John Kramer

(Written from his notes, and those of Candace Padmore. Thanks to all of the speakers who have edited the initial accounts)

Minutes of the Annual General Meeting

of the Dipterists' Forum held at the Natural History Museum, Cromwell Road, London, November 2009

Minutes of the Annual General Meeting of the Dipterists' Forum held at the Natural History Museum, London, on Saturday 28th November 2009, at 2.00pm

Chair: Stuart Ball. About 50 members were present.

1. Apologies were received from, Roy Crossley, Steve Crellin, Simon Hayhow, Adrian Plant, Ian McLean, and Malcolm Smart.

2. Minutes and Matters arising.

The Minutes of the Annual General Meeting of the Dipterists' Forum held at the National Museum of Wales, Cardiff, at 3.00pm on Saturday 22th November 2008, as printed on p32, in the Spring Bulletin, 2008, were proposed by the Chairman as an accurate record and this was accepted unanimously by the meeting.

3. Proposed changes to the Constitution:

a) Proposal that: a post of Assistant Bulletin Editor be created.

Proposed by Roger Morris, seconded by Alan Stubbs.

Voting: accepted unanimously.

b) The changes to the Constitution proposed in the Spring 2009 Bulletin 67 by Malcolm Smart (See p16) were read out to the meeting by the Secretary as follows:

Proposals that:

a. i) Nominations to the Committee of the Dipterists Forum must be made to the Secretary at least 35 days before the AGM election, and confirm that the nominated person has agreed to have his or her name put forward.

ii) Those standing for election shall be announced to members a minimum of 21 days in advance. This announcement requirement shall be deemed to be satisfied by the posting of a notice on the Dipterists Forum website. A postal vote shall be permitted if it reaches the Secretary at least 7 days before the election, as a letter, e.mail or other facsimile transmission. Elections shall be decided on a simple majority at the AGM, taking account of the postal votes.

Acceptance was proposed by Jon Cole, seconded by Roger Morris.

Voting: For - 56 Against -1. Proposal carried

b) Proposal that: In order to cover the extra postage of Bulletins and the Dipterists Digest, the subscription for overseas members be raised to £20 from 1st January 2010.

After the reasons for this were put to the meeting, Acceptance was proposed by Howard Bentley and seconded by Mick Parker.

Voting: accepted unanimously.

4. Secretary's Report - John Kramer

The Forum continues to thrive with a steady increase in membership to 331, at the last count, and Mick Parker and Judy Webb are to be congratulated on their work. There has been a good attendance at all the Field Meetings, and the publications continue to thrive.

Your committee met three times during 2009 – in March, July and November. We were as usual, largely pre-occupied with the organisation of the calendar of events for the year, and many of

the topics we discussed will be raised in the reports by the other Officers or have been reported fully in the Bulletin.

The publications (Bulletin and DD) also continue to flourish and the Editors and new Bulletin Editorial Team are to be congratulated on the high standard.

A change has taken place this year in that the BRC, who post the Bulletins, have now completed their move from Monk's Wood to Wallingford. As a consequence, to reduce transport costs, we now employ a Wallingford firm of printers and new team has taken over the delivery of the Bulletin. John and Barbara Ismay, and Judy Webb have taken over the collection, stuffing and labelling of the envelopes, and delivery to BRC. In addition, to help in the production, a small editorial committee consisting of Malcolm Smart and Judy Webb assist the Editor, Darwyn Sumner, with copy-reading, and with liason with authors. Following a steep and unsustainable rise in printing costs of Bulletin 67 (Spring 2009) members will have noted that the Editor has re-formatted the last edition, resulting in an increase in quality and a reduction in costs.

Serious consideration is being given to the use of capital held by the Forum, and this will be covered by the Treasurer in his Report

The new edition of the Dipterists' Handbook, published by the AES, is already well past the planning stage and many authors have already submitted their chapters to Peter Chandler.

The digitising of the Austin Brackenbury Photo Archive of colour slides has now been completed by Malcolm Smart. These photos of members of the Recording Schemes were taken by Austin on field meetings during the period 1981-1990 and he generously donated the catalogued archive of hundreds of slides to the Forum. Malcolm Smart has passed the colour prints, and the DVDs to PJC for archiving in the BENHS library at Dinton Pastures and Stuart is hoping to prepare suitable images to set up a gallery on the web site. Our thanks have gone to Austin, for the donation, and to Malcolm for all his hard work on this project, which involved cleaning the transparencies, as well as producing prints and digital copies on DVDs.

The Dipterists Forum was formed in 1995 as a forum of **Study Groups and Recording Schemes** and so it is important that we continue to highlight the activities of these groups. We currently have 20 of them on our books, and they are also listed on the back cover of the Bulletin. The active Recording Schemes collect and send records in to the BRC, and some produce Newsletters.

The **Hoverfly Recording Scheme**, (Organisers, Stuart Ball and Roger Morris) supported by the British Hoverflies book (published in 1983) still leads the way in the amount of data collected and processed, with an excellent coverage of the country by the Atlas, so that even changes in distribution over time can be studied. A new Atlas is scheduled for 2011.

The British Soldierflies book was published in 2001 and the **Larger Brachycera RS** (Organiser, Simon Hayhow) is currently compiling the Atlas which he hopes to finish this Winter. Simon says that he still welcomes records. He is looking to retire as Organiser during 2010, and therefore hopes to hand over the scheme to someone else. **Any interested volunteers should contact Simon.**

Excellent progress has been made by **The Fungus Gnat R.S..** Organised by Peter Chandler and he is actively collecting data. Data entry of 88,500 records is complete to the end of 2008, and so a good set of maps will soon be available on the NBN Gateway. Publication of an Atlas is planned.

The Cranefly R.S. has 110,000 records on the BRC database and is also actively seeking data. Distribution maps are available on the Gateway. Hopefully, after a pause, the Book 'British Craneflies' authored by Alan Stubbs, will begin to move forward once again, and, in readiness for publication, comments are now sought on Alan's draft keys that have been available and distributed to members for many years now. Thanks to Stuart, anyone who is interested can now obtain these keys as pdfs from the DF website. Thanks are also due to Peter Brown, and then Björn Beckman at BRC for a new edition of the record card which will soon be available. In addition, Alan has requested photographs of Craneflies in the field for possible inclusion in the book.

The **Empid and Dolichopodid R.S.** is currently active and regularly receiving data. They have approx 90,000 empid and 30,000 doli records. The Organiser, Adrian Plant, currently working in Thailand, **asks for a volunteer to be Co-organiser** and to be responsible for the records of Dolichopodidae.

Chris Raper reports that the **Tachinid R.S.** is still very active, as is the **Sepsid R.S.,** organised by Steve Crellin. Steve appeals for data. Michael Ackland sends news of the **Anthomyiid SG** and he would welcome contact with any new students of this group. A provisional set of keys and genitalia figures are available for downloading from the Tachinid site, on the DF website.

Both the **Conopid** and **picture-wing R.S.** schemes, organised by David Clements, are active and still collecting records, although the latter is at a fairly low level of activity at the moment. The **Lonchopteridae Study Group** is active but only just, and David has never received many records.

Ian McLean reports that the **Sciomyzidae R.S.** is actively collecting data and with several good sets received this year. He plans to finish abstracting data from the NMH collections this winter and also to publish an atlas towards the end of 2010.

Other smaller but active Study Groups include the **The Stilt & Stalk Fly RS** organised by Darwyn Sumner, and he continues to collect records for the Gateway. There are also the **Chloropid Study Group**, run by John Ismay, and the latest to be formed is the **Oestridae Study Group** initiated by Andy Grayson. Some of the Recording Schemes are on hold at present and about 7 other groups seem to be dormant.

If anyone is not yet sending in records, don't forget, **Your Diptera Need You!** Choose your scheme(s) and send in your records, but don't omit the Grid References !!!

Conservation Issues

Alan Stubbs in a recent letter to the Oct 2009 edition of British Wildlife highlighted the lack of focus on invertebrate faunas, including Diptera, in the management of Britain's SSSIs and Nature Reserves. In particular, when claiming Favourable Conservation status for SSSIs, Alan asks, 'favourable' for what? Favourable only means maintaining what is mentioned on SSSI schedules yet, in addition, there can be substantial invertebrate interest that is not mentioned and therefore not taken into account. And this does not start to consider the important concept of maintaining biodiversity on the national series of sites. It points to a lack of knowledge of the species present, how these change through time, and also to a lack of attention to the significance of these changes.

In the worsening economic situation, when less money is available for professional surveys, this should give purpose to the surveys and monitoring carried out by all of the Recording Schemes. Perhaps we should all try, as a few already do in Reports, to make the significance of our data more explicit, for the conservation and the management of sites. If we don't do it, who will?

Publicity, Recruitment and Support

Mick and Judy continue to do excellent work to publicise our activities and to recruit members.

Material continues to be added to the Website www.dipteristsforum.org.uk which is building up to be an increasingly significant resource. A popular activity is the requesting of ID from digital photographs of flies, which provide some with a way in to the Diptera. It is currently a very useful publicity and recruiting aid but its importance as a channel of communication and a forum for discussion between members will grow even more in the future.

Future Meetings

Our next meeting will be at Preston Montford 5-7 Mar 2010 when Steven Falk will lead the 2010 Spring Workshop on the Muscids. There will also be an Introductory Course led by John and Barbara Ismay.

We hope to hold the Next AGM at either Edinburgh or Liverpool Museum, on Nov 27 2010.

5. Treasurer's Report – Howard Bentley

Income And Expenditure Account 2008

Howard referred to the Balance Sheet which had been distributed, and pointed out its major features. Our main sources of income are subscriptions and sales of the Dipterists Digest, and our major expenditures are the printing and distribution costs of the Digest and the Bulletin, with comparatively small amounts to cover officers' expenses, workshops and so on. In 2008 we also had a little over £400 from our bank, the Alliance and Leicester, in interest, mainly on the capital held in a deposit account. I shall have more to say about this later. We finished 2008 with a small surplus of £202, and at that time our total moneys in the bank amounted to £13,504. Our thanks go to Tony Pickles for once again auditing our accounts without asking for a fee.

Our Present Financial Position

As of yesterday we had £2683 in our current account and £11600 in our deposit account. This totals £14283, an increase of £779 on our cash assets at the end of 2008.

Two main changes account for this increase: first a pleasing increase in membership, which Mick will be outlining in a couple of minutes, and second a reduction in the production costs of the Bulletin. Bulletin no.67 (Spring 2009) cost £919; Bulletin no.68 (Autumn 2009) cost £460. The reduction of very nearly 50% was accomplished without any sacrifice of quality – indeed everyone seems to agree that the latest Bulletin was the best-produced ever. The saving was made by changing the layout to make better use of space, and thus reducing the number of pages, and by changing our printer following a comparison of estimates from several companies.

Unfortunately there is one change in the opposite direction – in 2008 we received £412 in bank interest. The present rate of interest on our deposit account is now 0.1% per annum, so this year's figure is not expected to come anywhere to matching that.

Future Plans

We intend to establish a new current account specifically to cover deposits and the advance costs of our field meetings. Until now Roger, our field meetings secretary, has put his own money on the line to do this, and this is clearly a burden which he should not have to bear, especially as we have the necessary cash simply sitting in the bank. We do not expect that this will materially change our financial position at the end of each year.

Finally, at our last committee meeting it was noted that when it comes to the funding of research projects in entomology the Diptera are usually sadly neglected. We hope to make a sum of money available to cover expenses for people who carry out research projects focussing on the Diptera. This is in the very early stage of planning, and we have not yet considered the details of how much we could give, or of how projects could be assessed for their suitability, but we hope to be able to make a modest contribution to future fly research.

Andy Grayson asked whether the purchase of bonds had been considered, as a means of raising slightly more by way of interest. Howard said that they had been considered, but it would tie up capital, and our present discussion was about how best to use it. He said that bonds would be re-examined when we had decided how much to set aside in longer-term savings. Stephen Miles raised the question of travelling expenses for committee members, saying that perhaps more would volunteer if these were available. Howard replied that it was not custom and practice at present. Jon Cole said that the facility had been approved by the committee for travel to events in order to promote the Forum.

There were no further questions or points raised for discussion

The motion that the accounts be accepted by the AGM was proposed by Ray Uffen,, seconded by Andy Halstead, and carried unanimously.

6. Membership Secretary's Report – Mick Parker

Mick said that the membership had continued to show a healthy growth and currently stood at 331, with 318 subscribers to the Dipterists Digest. He asked the meeting for questions and a member, **Colin Le Boutillier,** asked whether there was an age profile for members of the DF. Mick replied that there was not !!

7. Dipterists Digest Editor's Report – Peter Chandler

Last year I said that the second part of volume 15 was to be published early in 2009 and that I then hoped to get back on schedule by producing both parts of volume 16 during this year.

The second part of volume 15 appeared in February and apart from checklist changes, consisted entirely of an article on the Diptera of the Western Isles by Peter Skidmore. I have already reported in the Bulletin that production of that article involved considerable effort by the author while he was seriously ill. It was the result of his many years of interest and activity in the Isles, so I was pleased that he was able to see this come to fruition. He was sadly unable to return to the islands, as he had hoped, to continue his work there. The first part of Volume 16 appeared in July, including 32 varied items. Like last year's summer issue it included all contributions that I had received by the time it went to the printers. It was uncertain at that time whether enough material would be available to produce another part this year. I am pleased to report that the second part is now with the printers and should be printed next week to enable distribution before Christmas.

This part will include 18 papers and notes of a diverse nature but most of these are short. It has only been possible to produce another part this year by including two long papers by myself, which take up more than half the issue. Both are biographical about dipterists of the first half of the 20th century, Henry Andrews, whose collection the BENHS has at Dinton Pastures and Ethel Pearce, author of the three *Typical Flies* volumes. The latter follows on from a paper by Alan Stubbs relating to changes in the habitats

of heathland flies in Dorset, that were illustrated in her books, so together with this it has become a mainly historical issue.

Only one item for the next volume has so far been submitted. While it is expected that sufficient material will come in during the winter to produce a midsummer issue next year, a steady stream of contributions will be necessary to ensure that two issues are produced each year on a regular basis.

Roy Crossley will be unable to carry out the distribution of the next issue as he is still recovering from his operation and Julie Locke has kindly volunteered to help with this. Roy expects to resume this duty with subsequent issues. Once again I would like to thank Mike Pugh for proof reading, Mick Parker for boosting the number of subscribers and all authors for contributions received.

Chris Thompson asked whether the DD was available on the net. PJC replied that it was not, as yet, and that we used the sale of back copies to supplement our income. CT replied that if the decision was made to make copies available, then help could be had from the Biodiversity Library.

8. Election of Officers:

The Chairman proposed that the proposed committee, listed on the Agenda be elected en bloc, as follows:

Office	**Officer**
Chair	Stuart Ball
Vice Chair	John Ismay
Secretary	John Kramer
Treasurer	Howard Bentley
Membership Secretary	Mick Parker
Field Meetings Secretary	Roger Morris
Indoor Meetings Secretary	Malcolm Smart
Bulletin Editor	Darwyn Sumner
Assistant Editor	Judy Webb
Publicity Officer	Judy Webb
Website Manager	Stuart Ball
Conservation/BAP Officer	Barbara Ismay
Committee Members	

1. Erica M^{c}Alister (Proposed)
2. Martin Drake (Proposed)
3. Chris Spilling (Proposed)

The Committee was duly elected unanimously.

9. Any Other Business.

a) Roger Morris – Field Meetings 2010

The 2010 Field Meeting had been arranged for 12-19 June at Stackpole, Pembs. There is no caterer on site, but an external caterer had been arranged. There is a limit of 26 places. A £40 deposit secures a place but full payment of about £280 is needed by the NT 12 weeks in advance, by March. As the Summer meeting is early, there is to be no Spring meeting, but a meeting based at Wells Cathedral School has been organised for 22-23 July, and a one day visit to Windsor Great Park in May, the information for which will be on the DF website. It was hoped to arrange the Autumn Meeting for Honiton and to base the Summer meeting for 2011 at Exeter.

b) Barbara Ismay – Conservation Issues

The final drafts of the two remaining Reviews of Scarce & Threatened Species, Acalyptrates, and Calyptrates, have been completed by the Authors and should be published some time in the New Year.

Defra Funding is available for work on BAP species, as part of a large project. Anyone interested should contact BI so that bids can be co-ordinated. Deadlines are 18 Dec for Wildlife bids, and 31 Jan for BAP bids.

Duncan Sivell said that Species Action Plans were still needed, by 4 March 2010, for 18 species which had been added to the list. He said that some funding for work on Species Action Plans may be available from Buglife.

A vote of thanks to the Committee for their work was proposed by Mike Bloxham, and passed unanimously.

There being no other business, the Meeting closed at 2.55pm.

John Kramer

Forthcoming

Events Calendar 2010

Dipterists Forum & selected meetings

Check the Dipterists Forum website for changes and meetings added after publication of this Bulletin, www.dipteristsforum.org.uk)

13th February 2010, Diptera workshop on Tachinidae led by Chris Raper & Matt Smith. BENHS, Dinton Pastures, Hurst, Reading. For up to 20 people. Bookings to: Ian McLean [ianmclean@waitrose.com]. See also www.benhs.org.uk

20th February 2010, Diptera Workshop on Ephydridae led by Martin Drake & Tony Irwin. BENHS, Dinton Pastures, Hurst, Reading. For up to 20 people. Bookings to: Ian McLean [ianmclean@waitrose.com]. See also www.benhs.org.uk

3rd March 2010, Verrall Lecture. 'Insects and Climate Change; ecological and evolutionary dynamics at shifting range boundaries'. Darwin Centre, Natural History Museum, London. See www.royensoc.co.uk

5-7th March 2010, DF Identification Workshops. Beginner's workshop on 'Introduction to Fly Families', Advanced Workshop on Muscidae, Preston Montford Field Studies Centre, Shrewsbury. Details in this issue and posted on the DF website and on FSC website: www.field-studies-council.org/prestonmontford

13th March 2010, BENHS AGM and Presidential Address. University Museum of Natural History, Parks Road, Oxford OX1 3PW. See www.benhs.org.uk

15th-17th April 2010, NFBR (National Federation for Biological Recording) Annual Conference and AGM, theme: 'Biological Recording in Freshwater'. Belsfield Hotel, Bowness-on-Windermere, Cumbria. See www.**nfbr**.org.uk

17th April 2010, One day BENHS meeting with the University Museum of Zoology, Cambridge 11.00 to 16.00. Main theme Fenland Insects. See www.benhs.org.uk

24th April 2010. AES Members Day and AGM.: Angela Marmont Centre for UK Biodiversity, Darwin Building, Natural History Museum, London, UK. Talks, workshops, displays, member exhibits, tours and a children's insect craft table. See www.amentsoc.org/

22nd-23rd May 2010, Proposed 2 day DF Spring Field Meeting to Windsor Forest and Great Park. Details yet to be finalised – on the DF website as soon as known. Contact Roger Morris to book, 7 Vine Street, Stamford, Lincolnshire PE9 1QE, roger.morris@dsl.pipex.com

12-19th June 2010, DF Summer Field Meeting, Stackpole, Pembrokeshire. Contact Roger Morris to book, 7 Vine Street, Stamford, Lincolnshire PE9 1QE, roger.morris@dsl.pipex.com . £40 deposit reserves a place, **full payment needed by 27 Mar 2010.**

20th June. Annual Exhibition of Microscopy, Northamptonshire Natural History Society. The Humphrey Rooms, 10 Castilian Terrace, Northampton, NN1 1LD. Tel 01604 602242

21-27th June 2010, National Insect Week, See: www.nationalinsectweek.co.uk

22-25th July 2010, DF Short Summer Field Meeting, Somerset Levels & Mendips, based at Wells Cathedral School. Limited to 15 people. Contact Roger Morris to book, 7 Vine Street, Stamford, Lincolnshire PE9 1QE, roger.morris@dsl.pipex.com

8-13th August 2010, 7th International Congress of Dipterology which will be held in Costa Rica. The official website is: http://www.inbio.ac.cr/icd7/

20th -23rd August 2010, Hoverflies Identification Workshop led by Stuart Ball and Roger Morris. Preston Montford Field Studies Centre, Shrewsury. Details on FSC website**:** www.field-studies-council.org/professional/2010/courseinfo

DF Autumn Field Meeting. This meeting has yet to be fully organised. Watch the DF website for details which will be posted as soon as known.

October 2010, AES Annual Exhibition and Trade Fair, Kempton Park, London. DF will have a publicity stand and publications for sale. Details on website as soon as date known.

13th November 2010, BENHS Annual Exhibition and Dinner, Imperial College, London. DF members invited to exhibit flies. See www.benhs.org.uk

27th November 2010, Dipterists Day and DF AGM. Location to be finalised.

BENHS Dinton Pastures Open Days in the Pelham-Clinton Building, Hurst, Reading. Sundays on the following dates in 2010, (open 10:30-17:00): **14th February**, **28th February, 14th March, 28th March, 11th April, 25th April, 9th May, 13th June, 11th July.** We encourage you to bring along your pinned flies and use the Diptera Collections and library for identification. Other Dipterists are usually present meaning good chat and assistance with identifications may be possible. The grid reference for Dinton Pastures is SU 784718, turn left off the B3030 driving North from Winnersh. When parking in the Country Park, BENHS members are entitled to free car parking if they display a BENHS notice (available from the display desk in the Pelham-Clinton Building). The site is about 15 minutes walk from Winnersh station, which has trains running on a half-hourly service from Reading and Waterloo. See www.benhs.org.uk

Judy Webb

Invitation to a joint meeting of AK DIPTERA

(Association of German Dipterologists and Dipterologists in Germany) and the Nederlandse Entomologische Vereniging (NEV), Sectie Diptera (Dutch Entomological Society, Section Diptera)

25th to 27th June 2010 in Buurse (Overijssel), Netherlands

The meeting of the German and Dutch dipterologists will be from 25. to 27. June 2010 in Buurse (County Haaksbergen, Netherlands) – located ca. 8 km southwest of Enschede and near the Dutch-German border. The organisation in Buurse will be done by Jan H.C. Velterop (Enschede). The meeting will be presided over by Dr. Frank Menzel (Senckenberg Deutsches Entomologisches Institut, Müncheberg). All interested parties are invited to the meeting of dipterologists (this is also the 27th meeting of the AK DIPTERA).

The talks will be given on 25. June 2010 (13.00 -21.00) in the house 'Langenberg' of the holiday park 'de Pol'. On Saturday, 26. June 2010 (9.30-18.00), there is a dipterological excursion (with permission to collect). In the evenings there is time for individual

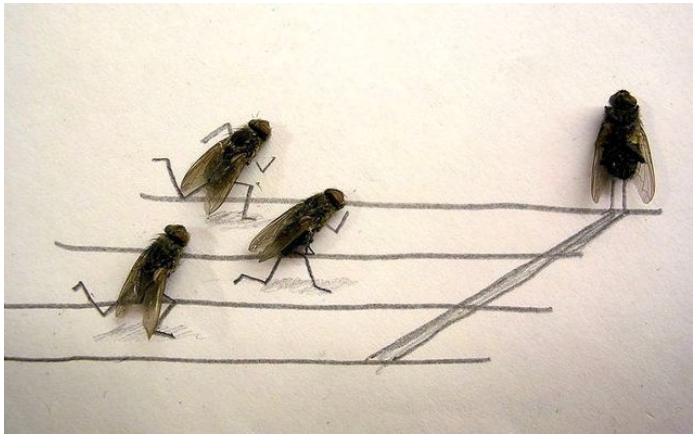
technical discussions or to share experiences.

Participants will stay in the houses / apartments of the holiday park. 60 beds have been reserved in the holiday park 'de Pol' (http://www.de-pol.nl). Single rooms are not available at the meeting venue. These can be booked individually in the close vicinity (Bad Boekelo, Haaksbergen or Enschede). Full board is offered to the participants. The holiday park has several guest houses with varying room sizes and interior (2 to 12 persons), hence the different price categories. You can find the booking form as well as more detailed information on timing and prices on the homepage of AK DIPTERA (http://www.ak-diptera.de/einladung/einladung2010.php). The availability of a room in the preferred price-category can only be guaranteed as long as places in this category are still available. Hence, please book as early as possible. Offers of talks (ca. 20 minutes) on all dipterological topics are welcome. A slide projector and a laptop with beamer (for a computer presentation) are provided. Please send your signed booking form before 15. February 2010 in writing to Dr. Frank Menzel, Müncheberg, Germany (e-mail: frank.menzel@senckenberg.de; Fax: 0049-33432-736983706).

International Congress of Dipterology

Costa Rica, 8-13 August 2010

Adrian Pont draws our attention to this event with a link:
http://www.inbio.ac.cr/icd7/



and he also sent this

Details of the Dipterists Forum meetings

Diptera Identification Workshops 2010

Preston Montford Field Studies Centre

Friday 5th - Sunday 7th March 2010

Do you know anybody who might benefit from some help in starting with the Diptera? If so, why not pass the details of the following on to them?

Beginner's Workshop – Introduction to Diptera (Two-winged Flies)

Led by John & Barbara Ismay

Arrive Friday in time for supper at 6.30pm - depart 4.00pm Sunday.

This is an introductory course on the Identification of Fly Families. It is designed to help people getting started with identification and recording of this fascinating group of insects which are very varied in their behaviour and they can be found in nearly all habitats. They can also be used in the assessment of the quality of many different types of habitat.

The course is aimed at absolute beginners and will guide them through many hurdles, both as a group and as individuals. Each attendee gets a lot of individual help and will work using a microscope on their own individual set of specially prepared flies which are examples of all the Dipteran families. A set of keys with colour illustrations has been specially produced for this course and these in themselves have been much sought after! Each attendee leaves with their own set of valuable keys plus advice on how to collect and pin flies for identification and for retention as voucher specimens.

All materials and equipment (microscopes, lights etc.) will be supplied by the Field centre.

Advanced Workshop – Muscid flies

Led by Steven Falk with assistance from Mike Bloxham

Arrive Friday in time for supper at 6.30pm - depart Sunday afternoon.

This workshop will deal with flies in the housefly family (Muscidae). This is a rather neglected family of approximately 280 British species, similar in numbers to the hoverflies and presenting a similar level of challenge - much of the family is relatively

straightforward to identify using external morphology and is served by good published literature. The Muscidae contains some of our most abundant, conspicuous and synanthropic flies including the almost cosmopolitan Housefly Musca domestica and a plethora of species associated with dung and fungi, but other members of the family exhibit a wide variety of life cycles and habitat requirements. Many habitat specialists are present, including some associated with important habitats such as saltmarsh, mire, coastal dune, montane, wetland and ancient woodland. Some of these species prefer the oldest and most pristine examples of such habitats and have potential to act as ecological flagship species (a situation recently formalised with the UK BAP Phaonia jaroschewskyii (Peter Skidmore's 'Hairy Canary'). There is an RES Handbook (Fonseca 1968) supplemented by some good European literature, notably Gregor et. al. 2002 (see article in the Spring 2009 bulletin. Additional test keys may be available amongst support material provided at the workshop. Find out how to separate Muscidae from similar groups such as Calliphoridae and Anthomyiidae.

The workshop will follow the standard format of presentations, informal discussion and practice running through test keys, either with prepared material (specimens provided) or flies you have brought along yourself so bring your material, problem specimens, or images.

If you have your own microscope, lamp etc. then please bring them along. The centre does have some, so don't feel that you cannot come along if you don't have them.

Fees & Booking Procedure for either workshop

Dipterists Forum members:

Single Room Resident:	£160 full board accommodation
Shared Room Resident:	£140 full board accommodation
Non-resident:	£75 incl. packed lunches & evening meals

Non Dipterists Forum members (fees include one year's membership):

Single Room Resident:	£240 full board accommodation
Shared Room Resident:	£220 full board accommodation
Non-resident:	£155 incl. packed lunches & evening meals

If you are not a Dipterists Forum member and wish to attend, note that it is well worth joining the Forum before booking as it will result in a considerable cost saving!! (contact Membership Secretary or visit DF website.

To book a place on either of these workshops please urgently contact

Preston Montford Field Centre, Montford Bridge, Shrewsbury, SY4 1DX
Tel: 01743 852 040 Fax: 01743 851 066
Email: enquiries.pm@field-studies-council.org

You will be required to pay a deposit of £50 (cheque payable to Field Studies Council) to the address above. Payment of the balance of the course fee will be due 30 days before beginning of course. Cancellation after this date may leave the customer liable for the full amount - a condition which is accepted when the booking is confirmed.

Organiser: Malcolm Sm

2010 Field Meetings

The following details of our meetings for 2010 were published in the last Bulletin. They are repeated here and remain essentially unchanged thanks to Roger Morris' efficiency.

Early Summer

Stackpole, Pembrokeshire

12-19 June 2010

Pembrokeshire has been beyond our reach until now as a suitable central venue has never been available. However, one of the premier National Trust estates in the county is at Stackpole and it is now offering the accommodation that would suit - hence we have jumped at the chance.

The arrangements for the meeting will differ a little from previous meetings because there is a need to organise external caterers. To save money we propose not to book breakfasts – I suspect very few of us actually eat cooked breakfasts at home and so it should not be too much of a hardship to bring cereals, bread and coffee etc to provision ourselves. Those who wish to indulge in a cooked breakfast might want to club together to create a traditional fry-up.

Accommodation will be in a series of cottages that sleep variable numbers. Details can be found on the website: http://www.stackpolecentre.org.uk/accommodation.htm. We have been allocated Kingfisher House which sleeps 17 in single rooms or utilising one twin and one double for couples it could accommodate 19. In addition, three cottages have been allocated: Rosemary, Lavender and Thyme which in theory would sleep six each but given the membership's predilection for single rooms the package gives us between 26 and 28 places in total. The package will cost:

Assuming 26 rooms filled accommodation is quoted at £22.00 per person per day (£154 per week). It will inevitably be more if fewer rooms are filled. If necessary I will cancel rooms in March to avoid a major surcharge on costs, so please book early! There will be an additional charge for a workroom, which I have estimated, to breakdown to approximately £20.00 per head (possibly reduced to between £14 &15 depending on numbers attending). In addition I will organise external caterers to provide an evening meal, the cost of which is likely to be in the order of £12.00-15.00, bringing the overall cost of the meeting to between £255 & £275.

As the costs of catering are dependent upon the size of the group the costs quoted are for all group members accepting the external caterers. I have also looked at alternative eating arrangements as there is a very nice looking pub nearby that does high-quality meals that are likely to exceed the caterer's prices. I have therefore concluded that this is not a viable option apart perhaps from the arrival day when people might arrive late and would therefore miss the meal this option could be factored in closer to the time and dependent upon what people want. Quotes for the rooms received to date include VAT at 15% so it is likely that there will be a small increase as higher VAT rates are likely to have been imposed by then.

The agreement with the National Trust requires payment in full, **TEN** weeks in advance of the meeting and consequently **I SHALL BE SEEKING FULL PAYMENT BY 27 MARCH 2010. A deposit of £40 made payable to Roger Morris can secure a place.** Stackpole is mid-way along the south coast of the Tenby peninsula, with calcareous lake, marsh, cliffs and sand dunes. The peninsula is mainly composed of Carboniferous Limestone and Old Red Sandstone, with plenty of high quality habitats including saltmarsh, cliff seepages, lots of sand dunes etc. Thus although the location is less suitable for a wide radius of travel, it is felt that there is plenty of popular habitat at hand. There is a toll bridge at nearby Pembroke for those who wish explore further afield.

Roger Morris

Additional Field Meetings 2010

As the main field meeting falls relatively early in the year, it is difficult to schedule a spring meeting sufficiently far apart from the main meeting to give space to breath. Consequently I have looked at a change to the programme and have therefore organised accommodation for a three-day break in late July in Wells, Somerset, which will hopefully appeal to a few members who cannot make the main meeting. In addition, I have started to look at some additional possibilities. If I can secure permission I will organise a meeting at Windsor Great Park over one weekend in May 2010. This meeting will be over the full weekend but I will not be organising accommodation – those members who want to travel to the meeting and stay overnight will need to organise their own accommodation. I will, however, need to know who is attending in order to make sure permits are properly organised. As part of the organisation for this meeting I asked Alan Stubbs to pen a brief account of Windsor Great Park (below).

I have yet to organise a venue for the Autumn meeting in 2010 and will advertise this in spring 2010. Meanwhile, the Autumn meeting this year comprises two trips; one to southern Scotland in mid-September which will have passed before this bulletin is published; the other will be to Bridgenorth from 10-14 October. Unfortunately it is likely that this notice will not appear until October and by this time I will not be able to organise accommodation for any additional attendees – anyone wishing to participate will have to arrange their own accommodation.

A further idea Alan and I have had is to revive the Leckford survey that was carried out in the late 1960s and early 1970s. This is a more challenging task and I expect that a small scouting party will be organised for 2010. It will not be a proper DF meeting on this occasion but hopefully we will arrange something more comprehensive in due course. Meanwhile Alan has also penned a brief note on this exciting venue and the history of the Leckford survey.

Short Summer Field Meetings

Wells Cathedral School

22-25 July 2010

This is an excellent opportunity to visit Somerset and a wonderful ancient venue. The Cathedral School offers accommodation in a range of rooms that could be single or shared. I have booked us for single rooms, which means that the maximum size of the group is constrained to between 12 & 15 working on single occupancy. Rooms may have a wash basin but don't have en-suite.

At this stage I have booked us as a group for between 10 and 15 people in single rooms. We may secure a bigger group if some of us were to share (I expect the Peterborough Mafia will bunk together). Prices to be confirmed but the costs look to be in the order of £35.00 per night plus whatever the charge is for the lab.

Wells is well placed for the limestone of the Mendips and also for the Somerset Levels. We last visited the area in 1985 and many of our current group will not have been there.

Please contact Roger Morris to secure a place. Vacancies are extremely limited.

Windsor Forest and Park

22 - 23 May 2010

The Royal Estate at Windsor includes three prime entomological components lying adjacent to one another:

Windsor Park, a deer park with many veteran oaks, one of the major such concentrations in Europe. A public road runs through the park and extensive public access leads to acid grasslands, scrub and secondary woodland, which can be productive in flies.

Virginia Water, a dammed valley with patches of good lakeside vegetation, surrounded by woodland which includes old beech and streams. This too is popular with the public for walking and is contiguous with the parkland.

Windsor Forest, pasture woodland with veteran beech and oak. Much has been planted with conifers but there are some important stands of ancient trees, especially at High Standing Hill. Since many of the special flies prefer beech rather than oak, and woodland rather than open parkland, this is the area most famed for its fly fauna. This area is closed to public access.

Public access to some of the best parts have been restricted. Historically, it was only those entomologists who were able to get a grace and favour permit that had sufficient access. The coleopterist Donisthorpe first brought the area to fame through recording in the first half on the 20th century. As regards Diptera, seemingly Cyril Hammond (co-author of 'British Flies') was the pioneer going back to the 1930s. He had a permit (possibly eased by the fact that his sister was in service at Haughton Hall, Norfolk), seeming as rare as bird's teeth since you had to have connections. Thus he invited Peter Chandler & me to join him in the early 60s, prepared to discretely become inconspicuous should a member of royalty come by on horseback. By the 1970s we each had our own permits and things loosened up so much that non-royal horse riders became a regular sight.

It is still a matter of privilege to get a permit for a group. Thus this is a rare opportunity for others to experience a visit to this hallowed ground, one of the top saparoxylic fauna sites in Britain. May is a prime time for the hoverfly fauna and much else. This meeting, once organised, will be advertised on the Forum Website and in the Spring Bulletin.

Leckford Estate

This magnificent section of the River Test Valley is very private, best known for its fly fishing rather than Diptera fauna. John Spedman Lewis, the founder of the John Lewis Partnership stores network, acquired the estate. He made a collection of insects on the estate during the Second World War and the estate was left to the Partnership. Ted Lockett, one of the leading spider experts moved to a house on the estate in his retirement. He discovered that John Lewis had bequeathed a sum of money to promote natural history, a concept in limbo.

With fellow arachnologist Eric Duffey, and Warren Gilchrist, a lepidopterist who had retired from the navy to enter senior management of the partnership, they set off the John Spedmen Lewis Trust fund. In the ensuing period they converted the village bathhouse into a field centre (a work room and collection room) and launched a survey of the estate. In autumn 1969 an invertebrate survey team was convened, including myself as dipterist: a promptly roped in Peter Chandler for such a big remit. Eric Philp (a member of DF) came down on a few occasions to record molluscs and some minor groups. The estate comprises about 2 square miles, with high quality valley fen and chalk grassland as major ecological components, small 'reserve' areas being demarcated with a view to seeing how they fared within an estate otherwise managed commercially as farmland, fishing beats and a golf course.

The main period of recording activity was 1970-4 (including review of the collection and notes made by Lewis between 1940 and 1945). In essence, a period of 40 years will have passed if renewed survey were to be instigated 2010-14. The idea of the 2010 advance visit is to determine the practicalities of establishing generating sufficient interest to make an annual visit at different dates in the season over a 4 or 5 year period. For those who took part in the 1970s it was a magical place with many exciting species.

And now ...

Courtship

There are an amazing number of ways that flies have devised to ensure that the right type of male meets the right type of female.

This ranges from the male pouncing on anything that may be a female of the same species, soon resolved after a brief encounter with the male not looking the least embarrassed that he made the wrong choice.

Then there is the more subtle approach involving the equivalent of male after-shave or ladies perfume. At least they do not have to buy the stuff at grossly inflated prices.

Another approach is for the male to bring the female a present. I am not sure how this started but some flies have fallen for the advertising, such as the James Bond character who makes ridiculously bizarre and dangerous exploits in order to get the lady a box of 'Black Magic' chocolates. No doubt male *Hilara* empids are very macho in catching another small fly, and even wrap the present in silk to get maximum Brownie Points.

Readers of a recent issue of Dipterists Digest will have seen the account of courtship by the robberfly *Choerades marginata*. It is the equivalent of a girl behaving very provocatively in order to lead a boy behind the bicycle sheds. No privacy, we are even told what happens next.

Such thoughts were provoked during 'Dipterists Day' at the Natural History Museum. Out of discretion, I shall not give the full name of the lady concerned, so I shall just call her Erica. It soon emerged that she had offered to marry an extra-ordinary number of men in the lead up to the meeting. Apparently this luring bribe was used to get replacement speakers and other such help in preparing for the meeting. It worked, though sorry chaps, it was all a deception. I am sure there must be a fly equivalent but as yet I have not formulated one. But be very afraid if Erica invites you to give a talk on the ephydrid *Ochthera mantis*, or any other subject including the word mantis.

Alan Stubbs

How to contribute articles

Text

1. Articles submitted should be in the form of a word-processed file either on disk (3.5", CD or USB Flash) or via E-mail which should have the phrase "DF Bulletin" in the Subject line. Email text alone will not be accepted.
2. Please submit in native format (http://en.wikipedia.org/wiki/Native_and_foreign_ format) and in "text-only" Rich Text Format (.rtf) and additionally send pictures in their original format. An accompanying print-out (or pdf) would also be useful.
3. Please note the width of the borders used in Dipterists Bulletin; for conformity with style would newsletter compilers please match this format.
4. **Do not** use "all capitals", underlining, blank lines between paragraphs, carriage returns in the middle of a sentence or double spaces.
5. Scientific names should be italicised throughout and emboldened only at the start of a paragraph.
6. Place names should have a grid reference.

Illustrations

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

Tables

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

When to send (deadlines)

Spring bulletin

17. Aims to be on your doorstep before the end of February, contributions should therefore be made to the editor **by the middle of December**, it will be printed then distributed in February in time for the March workshop meeting (which may by that time be fully booked). Please note that the date for contributions is now 1 month earlier than for previous Bulletins.

Autumn bulletin

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

Where to send

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

Traffic congestion - an analogy

Liken the material that authors submit via email to road traffic all headed for the same tiny seaside resort on the same day. Despite the signposted road that leads to the large car park, most traffic seems to head directly to the beach, causing traffic jams. The car park is called "DF Bulletin" (see 1. above) to allow all the traffic to get off the main road, the traffic jam is caused by huge volumes of traffic all arriving at the same time and blocking the main road - the police have slapped "[IMPORTANT] Your mailbox is full" messages on the cars. The main car park doesn't have space for continental juggernauts so some authors will find they have to pack their weekend gear into a number of smaller vans. Seems that the police have impounded two flashy vehicles without numberplates.

Anthomyiidae Study Group

Newsletter 8 Spring 2010

Recent progress

A number of excellent revisions of various genera and species groups of Anthomyiidae have been published between 2007 and 2009. These are by Verner Michelsen (Zoological Museum, Copenhagen) and cover mainly European species (including British). The following genera are covered: *Egle* (catkin flies), and *Paradelia* (Eurasian species). Some species groups in *Pegomya* and *Botanophila* are also revised. Full details of these and other additions and changes to the Anthomyiidae in the British List will be the subject of a forthcoming paper in Dipterists Digest.

Project to improve the British distribution records of *Chirosia*

If there are any members of the Dipterists Forum who have not previously attempted to collect and identify anthomyiid flies, I thought that a restricted scheme, confined to a fairly easy genus might be useful. I think that *Chirosia* would be a good start, as the species are fairly easy to identify, the larvae all feed on various species of ferns (hence sweeping these will generally produce several species). In addition all the females of the twelve included species are known. Several species are known only from a few localities, including one species only recorded from Ben Lawers. The adults mainly occur in spring and early summer.

Any dipterist who is interested in this project can email me at mackland@btinternet.com for a mini pack in PDF format, of keys, male genitalia drawings and distribution data as presently known. By the time this newsletter is published I should have been able to extract all the keys and data relating to *Chirosia* from my main anthomyiid pack, so the resulting "mini-pack" should not be too large to send to interested dipterists as an email attachment.

Here is a real opportunity to increase our knowledge of the distribution of part of a poorly known family which has at present very few specialists world-wide. I will be willing to check any identifications of specimens sent to me, provided I don't have to return the material! Specimens in 70% alcohol will be acceptable.

Michael Ackland
5 Pond End, Pymore, Bridport, Dorset, DT6 5SB
Tel.01308 420254
mackland@btinternet.com

Illustrations of *Hylemya vagans* (top) and *Anthomyia pluvialis* kindly provided by Les Butler

Cranefly Recording Scheme Newsletter

Newsletter 20 Spring 2010

John Kramer

Notices:

Thanks to Björn Beckmann and Stuart Ball, Alan's draft **keys to Craneflies** are now available as down-loadable pdfs on the Dipterists Forum website:

http://www.dipteristsforum.org.uk/t464-Draft-keys-Craneflies.html.

Any feedback about any difficulties with these keys would be gratefully received so that modifications can be made where appropriate. Note that they were designed for use by amateurs using a hand lens. Technical terms and optically obscure features should be avoided where possible.

A new edition of the **cranefly record card** is also available and hopefully active recorders will already have received some in preparation for the new season. Other members can apply to me, or download their own copy from the website. Regarding the names used on the Record Card, please note that *Neolimnomyia* sub-genus *Brachylimnophila* has now been reallocated to the genus *Dicranophragma*. (See #18). For questions about the different forms of the species *Neolimnomyia nemoralis* (now *Dicranophragma nemoralis*) and *Dicranomyia mitis*, see Alans keys, and the note below.

The Cranefly RS is still actively seeking data, and a **distribution map** for each species is available on the NBN Gateway. (www.searchnbn.net) Hopefully, after a pause, the Book '**British Craneflies**' will begin to move forward once again, and a publication date in Autumn 2011 is a possibility. Again, anyone with suitable **photographs** of species which they would be happy to have published in the book, should send them to either Alan Stubbs, or John Kramer.

The original intention was to publish atlases about two years after the book. These would contain, for each species of cranefly, a distribution map, a phenology chart and ecological notes. We are still collecting **your records** and so far 110,000 cranefly records have been received by the Biological Records Centre. Please don't forget to include the grid references of sites.

FIELD WORK REPORTS

Tipula gimmerthali Lackschewitz in Cumbria – Steve Hewitt

This account is based on a note published in the *Carlisle Naturalist* (Hewitt, 2009).

On 4th October this year I was on Little Fell (NY7821) in the Cumbrian north Pennines with a botanist friend, Jeremy Roberts, who was surveying populations of Yellow Marsh Saxifrage *(Saxifraga hirculus)* as part of a wider survey for Natural England. This plant requires upland base-rich flushes and the north Pennines are a stronghold of its British distribution. Whilst searching one such flush for the plant we noticed large numbers of vestigial-winged female craneflies, accompanied by fully-winged males. I collected a couple of examples of each sex to take home and later identified these specimens as *Tipula gimmerthali*. This Nationally Rare (RDB3) species is mainly recorded from the Scottish mountains. The only previously published English location for this species is Moor House NNR in the north Pennines, where it was reported by Coulson (1959), but has apparently not been recorded since 1979 (Falk, 1991). This montane insect is said to be restricted to base-rich flushes above 300m a.s.l. and adults occur during October - possibly accounting in part for the paucity of records for the species.

Spurred by this information, I visited another Yellow Marsh Saxifrage site at Knock Ore Gill on 11th October and then walked south over Knock Fell and Dufton Fell. Short-winged female craneflies were noted and sampled together with associated males, at base-rich flushes and also on turf in limestone pits and sinkholes. Later examination revealed two species had been collected: *T. gimmerthali* was recorded from base-rich flushes at Knock Ore Gill (NY7130) and Dufton Fell (NY7529), whilst males and females of the widespread *T. pagana* were collected from turf in limestone pits and sinkholes on west Knock Fell (NY7230) and Dufton Fell (NY7430). *T. pagana* males were also frequently encountered on intervening blanket bog across the area.

T. gimmerthali and *T. pagana* are best separated on microscopic characters of the genitalia. However there are some field characters which, with familiarity, can be a useful guide to identification: Whilst the females of both these species have vestigial wings, those of *T. gimmerthali* appear generally even more stunted than in *T. pagana*, with the more closely approximated veins in the less-expanded wings of female *T. gimmerthali* making them appear darker as well. Perhaps most obviously, both sexes of *T. gimmerthali* usually have obvious dark stripes on the mesonotum which are generally less prominent in *T. pagana*.

Encouraged by these finds in the Pennines, I wondered if *T. gimmerthali* might also occur in the Lakeland fells. On 13th October I visited Brown Cove on Helvellyn where some of the finest base-rich crags and flushes in the Lake District are found. *T. pagana* was again common and widespread and I was pleased to also find numbers of *T. gimmerthali* on the mossy cascades of the beck below the Brown Cove Tarn (NY3316) and more frequently on and around the mossy stream and flushes draining from the base-rich crags and mine dumps at the head of the cove (NY3215).

Meanwhile, in the course of his continuing his botanical studies in the Pennines, Jeremy Roberts collected further examples of *T. gimmerthali* from base-rich springs and flushes at NY7132 on east

Great Dun Fell and NY7130 on west Knock Fell on 12th October. He also obtained voucher specimens of this species from a base-rich flush on the Bullman Hills (NY7038) on 15th October.

These records establish that *T. gimmerthali* is widely scattered but very localised in the north Pennines and support its stated requirement for high quality base-rich flushes. The discovery of the species on Helvellyn in the Lake District represents a notable extension of its known range in England.

Voucher material is deposited in the collections of Tullie House Museum.

References

Coulson, J.C. (1959) Observations on the Tipulidae (Diptera) of the Moorhouse Nature Reserve, Westmorland. *Trans. Roy. Ent. Soc. London*, Vol.3, part 7.

Falk, S.J. (1991) A review of the scarce and threatened flies of Great Britain (Part 1). *Research and survey in nature conservation*, No. 39. JNCC, Peterborough.

Hewitt, S. (2009) The cranefly *Tipula gimmerthali* Lackschewitz new to the Lake District, with some additional records for the north Pennines, *Carlisle Naturalist* **17** (2), 44-45.

Stephen Hewitt, Tullie House Museum, Carlisle

Future Fieldwork

Our next Summer field meeting will be held from 12-19 June 2010, based at Stackpole, near the coast of Pembrokeshire (G.R. SR984964). This south-west corner of Wales is an interesting area, but a good reason for going there is that this area is under-recorded. There are plenty of good sites on the Tenby Peninsular and within range so it will be interesting to see what they yield. Novices please note that there will be plenty of experienced dipterists around to help you. (See the Bulletin and Website for booking details.)

Some Interesting Records

Phylidorea bicolor.

This species is included in the draft keys, placed there in the hope that it might be an additional British species. It has been found at one site in Cumbria, (John Parker) and two sites in NW Suffolk, (Ivan Perry). The common feature is that the habitat is clay woodland, rather than bog as in the closely similar *P. squalens*. Thus it would be good to hear of any other records, and that includes a prompt to check identification for any '*squalens*' records from clay woodland (*squalens* is normally in open bog habitat but can occur on bog woodlands).

Alan Stubbs

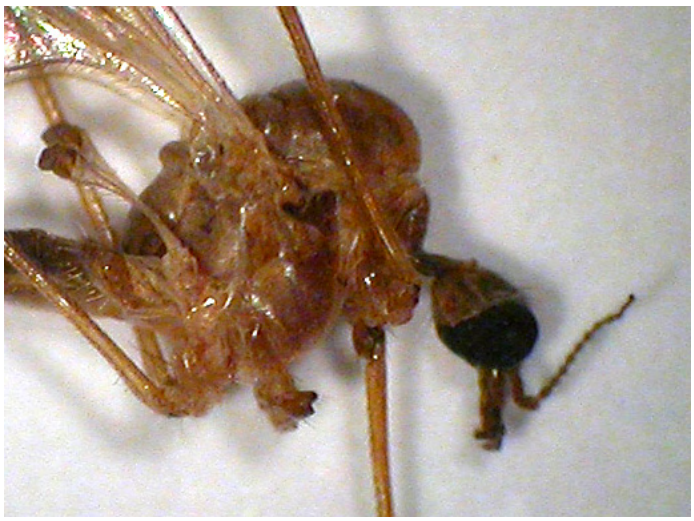
***Dicranota robusta* (Pediciidae)**

In the last Newsletter (#19) Geoff Hancock wrote about *Dicranota robusta* (Pediciidae) in Scotland. Their usual larval habitat is in fast-flowing upland streams with low nutrient levels and a stony/shingle margin. They are also known, unsurprisingly, from the Pennines, the North York Moors, and from Dartmoor. Following this piece, Martin Drake drew my attention to a record of his from April 2008 when he collected a male specimen of *D. robusta* on the edge of the Mendips, North Somerset. The habitat was unusually by a calcareous steam, and at about 175m altitude, so not upland, and in nutrient-rich water. This is an early Spring species, and these kinds of limestone stream habitat would be worth checking. Geoff described turning over stones at the stream margins to find them sheltering beneath, so this method is worth a try, especially in cold/windy weather.

Martin Drake's records for 2009 contain many interesting Notable and RDB species. East Norfolk fens yielded *Cheilotrichia imbuta, Erioptera meijerei, Molophilus bihamatus, Pilaria scutellata, Dicranomyia danica, D. ventralis, Helius pallirostris* and *Paradelphomyia czizekiana*. This latter was added to the British list in 2002 and is a rare find. *Limnophila pictipennis* was found on West Sedgemoor (S. Somerset) and Smallhanger Waste in S. Devon yielded *Tipula yerburyi, Gonomyia conoviensis, and Eloeophila trimaculata.* His records of Cylindrotomidae include *Diogma glabrata* from Novers Common, Bristol, and *Phalacrocera replicata* from Otmoor in Oxfordshire. And there are many more, so thank you for those, Martin.

The *Dicranomyia mitis* problem

F.W. Edwards in his 1938 paper, in addition to *D. mitis* Meigen 1830, described two other different forms of this species. These were, var *lutea* Lackschewitz 1928 and var *affinis* Schummel 1829. The problem is that the male genitalia of these forms, originally proposed as species, are very similar, and hence they were grouped as one species by Edwards, and other workers.



lutea – 17/6/07, By the Kinlochewe River. Scotland. Coll. John Kramer.

I have included pictures of what I have previously identified as extremes of the forms of *Dicranomyia mitis*, using the keys currently available to me. In all specimens there is only a stigma spot on the wing, and the darkened tip to the femora is dark to the tip (although the density is variable). The length and shape of some parts of the genitalia vary with the viewpoint. eg. In the form *affinis* below, each of the pair of the thin sickle-shaped (dorsal) dististyle are the same shape, though the terminal up-curve on one of them is not visible.

D. affinis

D. lutea

It is interesting to note that Paul Lackschewitz who worked in Litau, Latvia, when it was part of the USSR, observed two forms of *D. mitis*, a spring form, which was larger and greyer, (*affinis*) and an autumn form which was smaller and yellow (*lutea*). However, he notes that due to intermediate forms (*mitis/lutea*), and the fact that both forms may fly together, strict separation is not always possible.

affinis – 19/6/07, Talladale. NG917704 Scotland. Coll. Mick Parker

In his key to the Limoniinae, (January 1998) and in the new checklist, Alan has again proposed that we use these as specific names. He separates them according to the colour of the sides of the thorax (pleura), and the relative lengths of the pair of spines on the dorsal dististyle. If we use Alan's key to try and separate the 'forms' named above, we can further test the hypothesis that these form are indeed different species in the UK. Are there constant differences? Do the different forms occupy different ecological niches? Do they interbreed to produce intermediate forms? Do the field work, use the key, identify your specimens and join the debate !!

Identification Problems - Look- Alikes

Alan begins his key to the genus *Tipula* (Feb 1996) by first dealing with the sub-genus *Acutipula*. This is justified because these species are large, distinctive and easy to identify, once you have seen them. However, until then, you may confuse *Tipula (Acutipula) vittata* with the smaller *Tipula (Lunatipula) vernalis*. The former is a species of wet woodland, while the latter is a grassland species, but both emerge in the Spring and both have wings with pale streaks along their length.

Tipula vittata wing

Tipula vernalis wing

To avoid confusion Alan stresses the fact that *T.vittata* has a black stripe on each side of its grey abdomen. To help identification I would add that its 'lookalike', *T. vernalis* has no lateral stripes but instead a thin dorsal line down the length of its abdomen. Also, whereas the wing length of *T. vittata* is around 19mm, that of *T. vernalis* is smaller at around 14mm, and a wing streak of *T. vittata* have a yellow tinge, whereas those of *T. vernalis* are white.

Museums Focus – The Natural History Museum, London

We had a very enjoyable Annual Meeting in November at the Natural History Museum, in London. The new Darwin Centre is an excellent resource, and, together with the collections, there is the Angela Marmont Centre. In the Centre there is a room where workshops can be held by amateur groups FREE !!!! That seems to me to be a wonderful facility, so if people near London want a **Cranefly Workshop**, for a day, just let me know. Bookings start in May, and I can see that the Centre will be in big demand by many clubs and societies near London. As soon as I get eight interested people I will try to make a Saturday booking during the winter period.

Information about the NHM collections is available on line, including lists of the rarer species, either in low numbers, or missing from a collection – so that dipterists can see what the Museum has and has not got. Any offers to fill these gaps are welcomed. A list will be posted on the Dipterists forum website in January and Erica M^{c}Alister would be pleased to hear from anyone with rarer species of Craneflies to offer to the NHM.

As an example, below are listed some species of Tipulidae which are in short supply in the collections and would be gratefully received.

Nephrotoma lunulicornis

Tipula alpina, T. helvola, T. laetabilis, T. livida, T. peliostigma, T. selene.

T. nodicornis,

T. luridorostris, T. pabulina, T. truncorum,

T. pseudovariipennis,

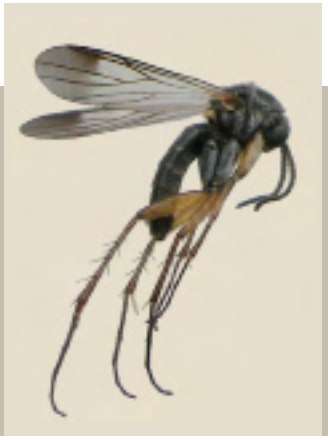
T.alpium, T. cheethami, T. gimmerthali,

T. grisescens, T.holoptera, T. serrulifera,

T. hortorum, T. nubeculosa,

T.coerulescens.

The Next Copy Deadline is 20 June 2010



Fungus Gnats Recording Scheme

Newsletter 4 Spring 2010

Progress on Distribution Maps of Fungus Gnats of the British Isles

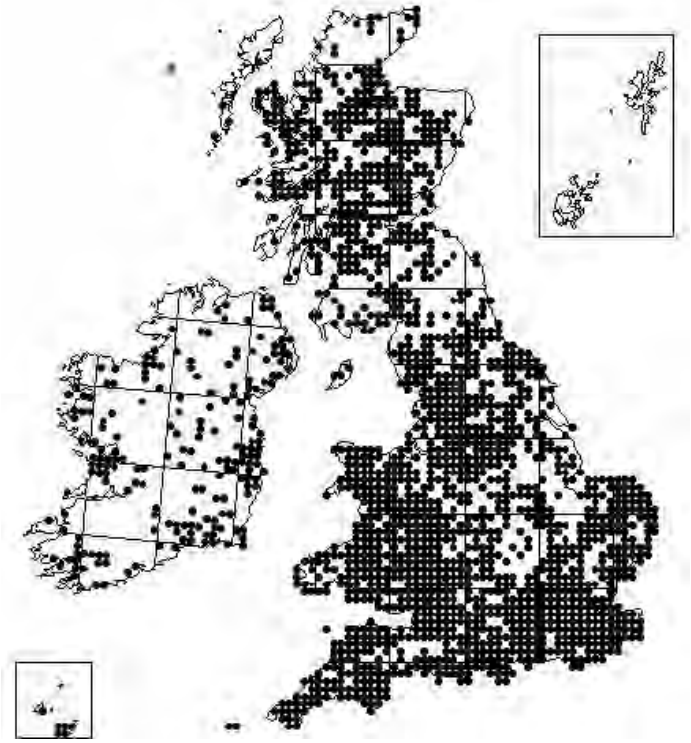


Fig. 1. Coverage of Fungus Gnat Recording Scheme.

Since the update regarding input of data in the previous newsletter, maps based on the records now included in the database have been made available by BRC. A presentation based on these latest maps was given at the annual meeting in November. Since then the remaining record cards have been returned to me and BRC has also supplied me with a CD with all the records they have so far entered included, so that the database can be compared with the source information. This has been invaluable in resolving discrepancies that were apparent on the maps, which were principally due to the inevitable problem of a single wrong digit in the 5 figure code sometimes being entered, resulting in the wrong species name appearing on the database. It will not be practicable to eliminate all such errors but it is hoped that all those affecting the range of a species will be eliminated. Harder to explain are some cases where either a correct record on the database has somehow failed to appear on the map, or a square on the map has no corresponding record in the database.

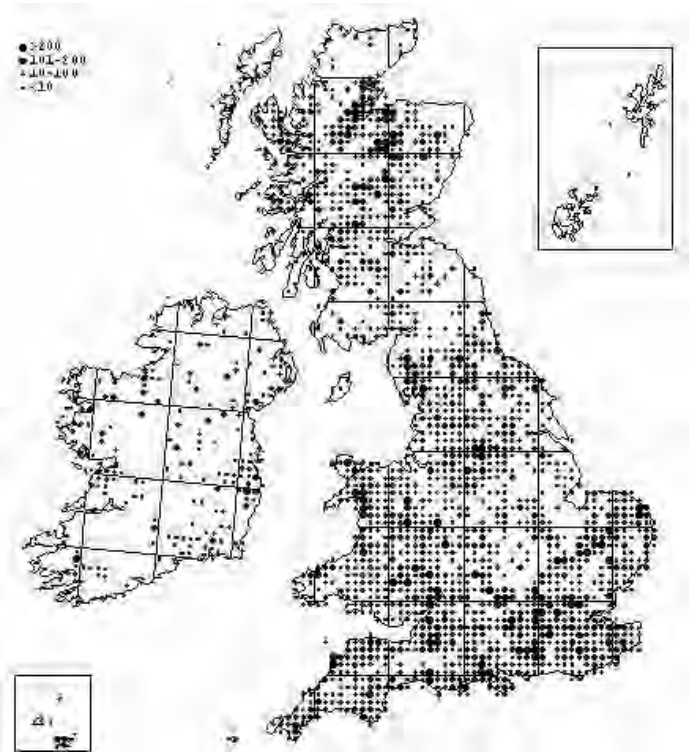


Fig. 2. Number of records per hectad (10km square).

Statistics of the Data so far processed by BRC

In November it was reported that the database presently included 88,591 records and that was the number of individual records that had been input by BRC, potentially covering all data that had been passed to them for records made up to the end of 2008. The actual number of records on which this was based was, however, actually well in excess of 100,000 because for all localities that had been recorded consistently over a period of several years a single species list was given to them for each 10km square involved (if more than one) to speed up the data entry process. Where for some of these sites, e.g. Burnham Beeches, Leckford Estate, Windsor Forest, records existed for the periods both before and since 1980 a distinction was made for any species not recorded since 1980.

The present situation is displayed on the two overall maps. Altogether the total number of 10km squares in the British Isles with records is 1862 (Fig. 1). Gaps in recording are most apparent in the north of Scotland, the Scottish borders, parts of the Midlands and large parts of Ireland.

The second map (Fig. 2) shows the number of species recorded

per hectad within the following categories (in descending order of the size of symbol employed):

Number of 10km squares with 201+ species recorded 105

Number of 10km squares with 101-200 species recorded 130

Number of 10km squares with 10-100 species recorded 823

Number of 10km squares with less than 10 species recorded 804

As most fungus gnats are woodland insects the best recorded squares, with in excess of 100 species recorded, are not surprisingly in the most wooded areas and Fig. 2 demonstrates this quite well. Although some species occur in grassland, moorland or high mountains, those squares without any woodland will have relatively few species of fungus gnats; wetlands may have a rich fauna but this is usually concentrated in the more wooded parts. Nevertheless, the maps show where further recording needs to be targeted.

Although this cannot be shown in the printed version of this newsletter, the maps that have been produced are in two colours, red for hectads that have records post 1980 and blue for those for which only pre 1980 records exist. There has been much more recording since 1980 than was carried out before, with many species newly recognised and added to the British list in that time, so a direct comparison to indicate whether changes in distribution have occurred is difficult. However, of the 546 species of fungus gnats currently recognised as occurring in the British Isles, 15 have not been recorded since 1980, but most of them are only known from one or two British records so their status is unclear.

The species only recorded before 1980 are as follows, with the date of their most recent occurrence: *Bolitophila fumida* (1931), *Macrocera aterrima* (1969), *M. inversa* (1923), *M. propleuralis* (1936), *Mycomya digitifera* (1933), *M. punctata* (1970), *Palaeodocosia alpicola* (1923), *Gnoriste longirostris* (1964), *Docosia morionella* (1904), *Brevicornu arcticum* (1971, Ireland only), *B. canescens* (1913), *B. rosmellitum* (1968), *Trichonta fusca* (1972), *Phronia sylvatica* (1976) and *Sciophila cliftoni* (undated, locality unknown). There are several other cases where there are fewer post than pre 1980 records. There are also cases of recent records of species that had not been recorded for a long time so it cannot be certain that any of these species has disappeared from our fauna. Conversely 20 species have been added to the list since the 1998 checklist and some of these are apparently recent arrivals, some of which have become established and are apparently spreading (see below).

The species with most records are shown in the two following maps. *Boletina trivittata* (Fig. 3) with 1620 records (in 668 10km squares) is the most frequently recorded species, while *Mycetophila ocellus* with records from 683 10km squares is recorded from the largest number of squares. While both are generally distributed, *B. trivittata* is found mainly in damp woodland, which explains the greater density of records in Wales and the south-west; its larval biology is unrecorded but it is probably not a fungus feeder. On the other hand *M. ocellus* is dependent on presence of rotten wood bearing the saproxylic fungi in which it develops and is less restricted by the type of woodland.

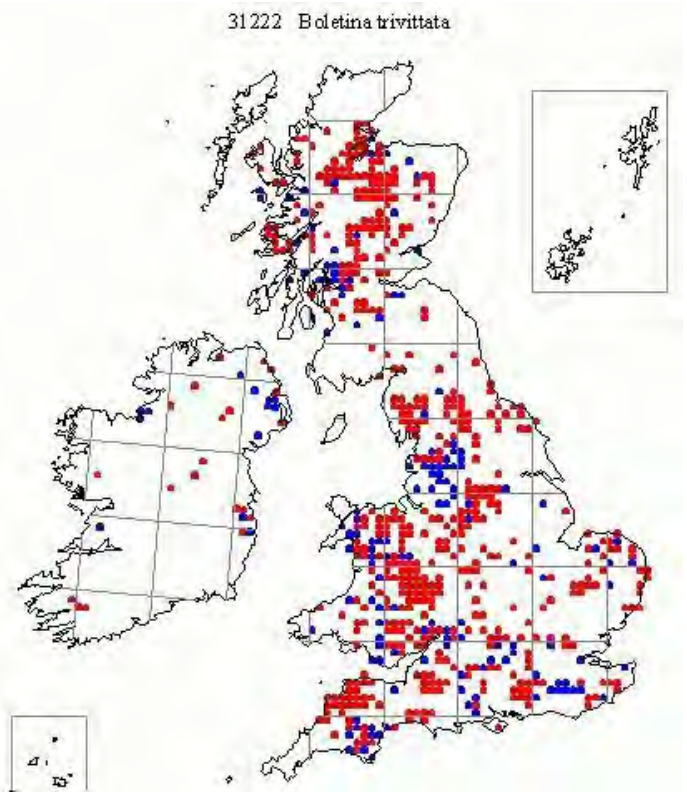


Fig. 3. *Boletina trivittata*, records to end of 2008.

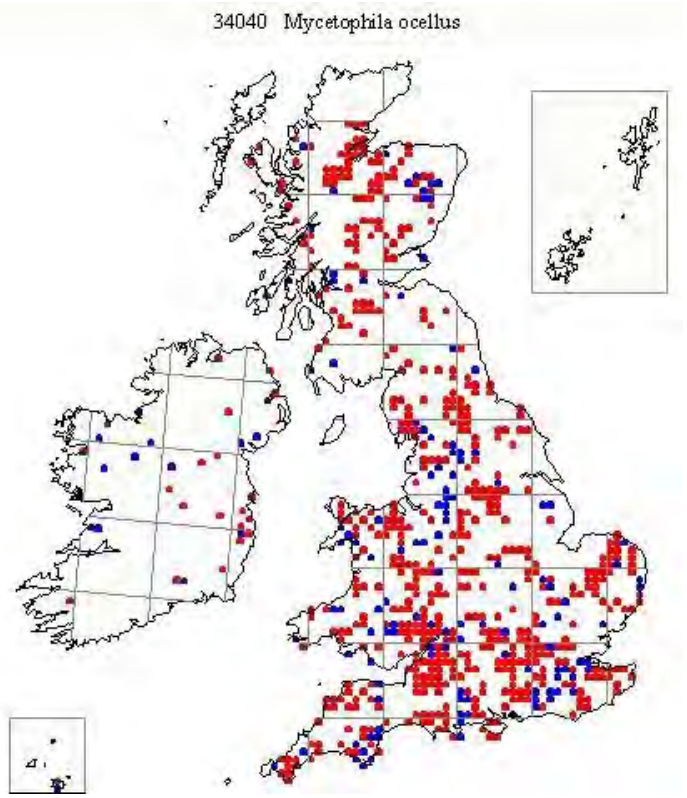


Fig. 4. *Mycetophila ocellus*, records to end of 2008.

Putting Fungus Gnat Recording Scheme data on the NBN Gateway

It is hoped to resolve all significant discrepancies before the Recording Scheme database is made available on the NBN Gateway, where individual recorders will be able to check that their data has been processed accurately. When the data is put on the Gateway it will be as a separate entity to avoid mixing with fungus gnat data that has already been put there from diverse sources. These sources and the resulting records sometimes coincide with the Scheme database, but there are also a number of sources that have been used which have not been incorporated in the Recording Scheme. In some cases verification of the accuracy of identification would be desirable and no detailed evaluation of existing records on the Gateway has yet been possible.

Examples of different distribution types

Several examples of differing distribution types that could be discerned from the maps were presented in November. Four of these, representing three families, are given here.

Ditomyia fasciata (Ditomyiidae)

Ditomyia fasciata (Ditomyiidae) was illustrated on the cover of Digest Volume 16 No 1, with a photograph by Judy Webb of a live gnat that she had reared, and it was then recorded as new to Wales. Only one of the Welsh records and neither of the two Gloucestershire records then published, appear on the current map.

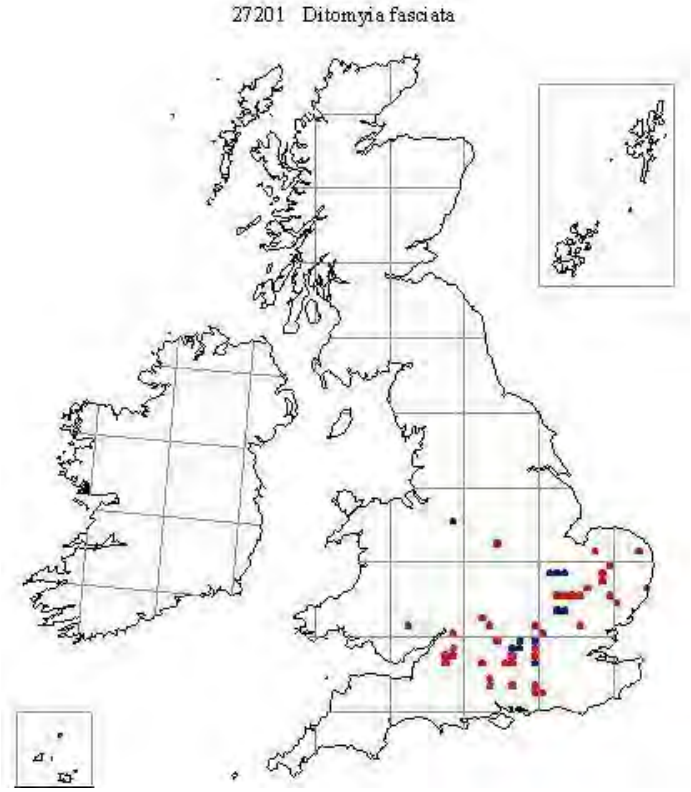


Fig. 5. *Ditomyia fasciata*, distribution map.

Fig. 6. *Ditomyia fasciata*, lateral view of male.

Fig. 6, taken by Bryan Formstone, is a third Welsh record (a male from Denbighshire in 2009) and shows the profile of the genitalia. The distribution map (Fig. 5) shows that it is a southern species in Britain, which is mainly restricted to central areas with extensions into East Anglia. As it favours drier woodlands, where it develops in several species of polypores, its apparent absence from Kent and adjacent parts of the south-east is surprising.

Platyura marginata (Keroplatidae)

Platyura marginata (Keroplatidae) is a large glossy black gnat, which occurs mainly in damp woodland and near woodland streams. It is present in Kent but does not extend far up the eastern side of the country, having a mainly south-westerly distribution. It is evidently widespread in Wales but doesn't extend any further north than the southern part of the Lake District (Fig. 7).

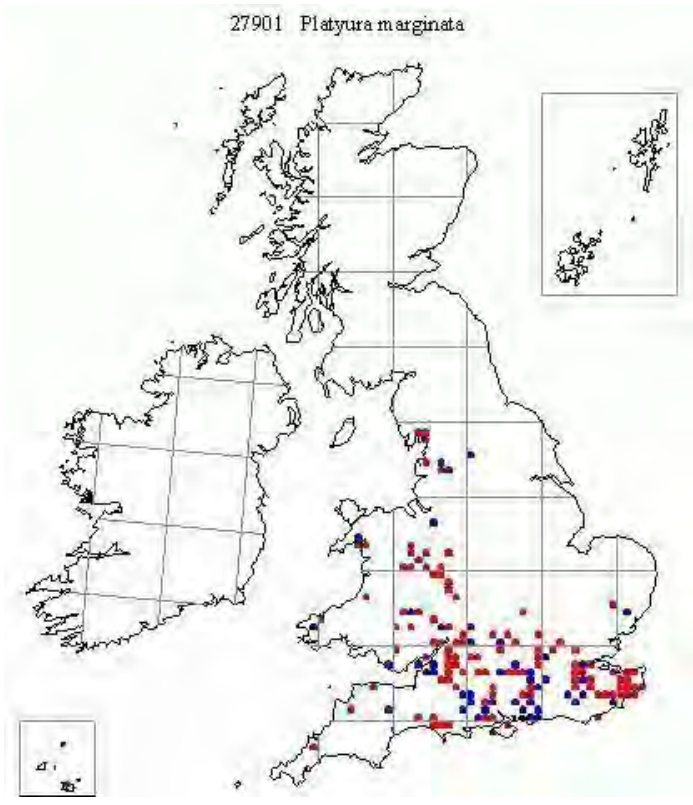


Fig. 7. *Platyura marginata*, distribution map.

Gnoriste bilineata (Mycetophilidae)

Gnoriste bilineata (Mycetophilidae) is one of those species that in the British Isles is restricted to Scotland (Fig. 8). It inhabits damp broad-leaved woodland, particularly in mossy areas and is evidently widespread within its range. It has a very long proboscis, extending beyond the hind coxae, and is presumably a flower feeder but nobody has observed it feeding.

There are 46 species of fungus gnats that, within the British Isles, are presently recorded only from Scotland. Some are restricted to Caledonian pine forest and others to high mountains, while some like *G. bilineata* are found mainly in broad-leaved woodland. Many other species have a mainly northern distribution in Britain, but as there is a large boreal fauna in Europe it is perhaps surprising that there is not a larger proportion of the British fauna in this category.

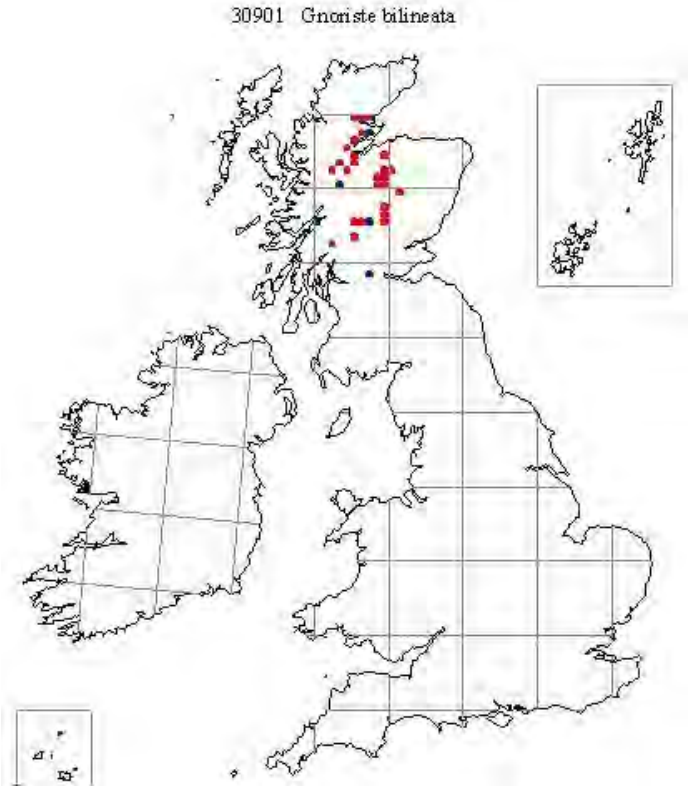


Fig. 8. *Gnoriste bilineata*, distribution map.

Leptomorphus walkeri (Mycetophilidae)

Leptomorphus walkeri (Mycetophilidae), of which another of Judy's photographs is shown in Fig. 9, is a large conspicuous gnat that is widespread in Britain, although with only one fairly old Scottish record. Although it is distinctive and often collected even by entomologists who are not primarily dipterists, most records are of single individuals and it is not considered significant that 27 of the 65 squares for which records are shown on the map (Fig. 10) are pre 1980.

Fig. 9. *Leptomorphus walkeri*, male.

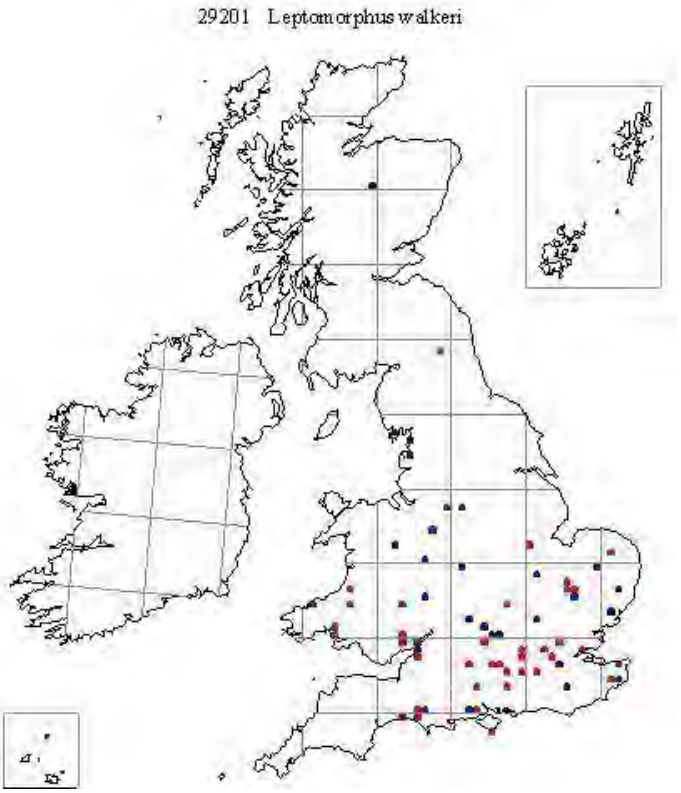


Fig. 10. *Leptomorphus walkeri*, distribution map.

It was finding a specimen in Scrogginhall Wood at Bromley (TQ46) on 29 June 1964 (Chandler 1966) that started my interest in fungus gnats and I only later realised that it wasn't a typical member of the group, most of which are less spectacular in appearance. Edwards (1925) said that the larvae are more easily found than the adults; they occur in webs on the surface of wood encrusting fungi and the pupae are suspended by a thread from this web, without a cocoon unlike some other species with similar larval habits.

Some recent additions to the British list that are spreading

In previous newsletters accounts have been given of two recent additions to the British list, *Greenomyia mongolica* and *Mycetophila sigmoides* (both Mycetophilidae). These appear to be recent arrivals in this country and, as there have been further records of both during 2009, BRC have kindly prepared up to date maps (Figs 11 and 13).

Greenomyia mongolica is a distinctive shining black gnat that has the legs yellow apart from the mid and hind coxae and a dark tip to the wing and Judy's photograph is depicted at the heading of this and other recent newsletters. The first British record was by Graham Collins in 2007.

Ivan Perry found it at three more sites in 2009, in Surrey, Cambridgeshire and Suffolk, bringing the British total to 7. In Surrey he found it at wild parsnip (*Pastinaca*) flowers on the North Downs, and it was already known to be a flower feeder, having been found at ivy flowers in the Czech Republic. It is curious in view of Ivan's experience that no other recorder turned it up in the year.

Has anyone else seen it?

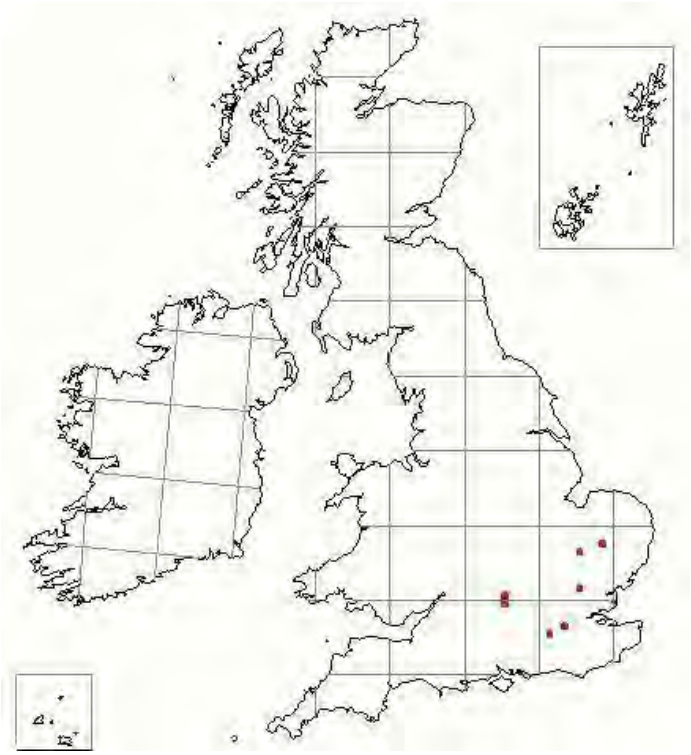


Fig. 11. *Greenomyia mongolica*, distribution map.

Mycetophila sigmoides was added to the British list only in 2009 by David Gibbs, but was found from examination of collections to have been present here at least since 1998. It is evidently still spreading and was found by Roger Morris at a site in Shropshire on one of the 2009 autumn field meetings. Although similar to the widespread species *M. cingulum*, which develops in the soft polypores *Polyporus squamosus* and *Grifola frondosa*, *M. sigmoides* differs in larval biology as it develops in tougher polypores such as *Trametes* species.

Judy's photograph (Fig. 12) is of one reared from *Daedaleopsis confragosa*, from a site not yet shown on the map.

Fig. 12. *Mycetophila sigmoides*, male.

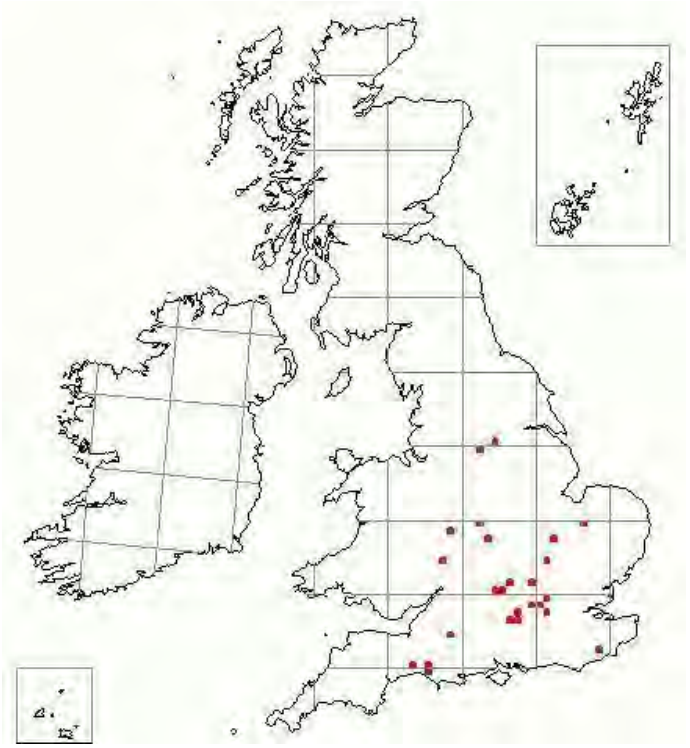


Fig. 13. *Mycetophila sigmoides*, distribution map.

Distribution of the Truffle Gnat

In the previous newsletter the development of *Stigmatomeria* species in truffles was discussed. It was noted that the only rearing record of the British species *S. crassicornis* was from truffles as cited by Edwards (1925). This is a widespread species and common in woodland throughout the British Isles (Fig. 14).

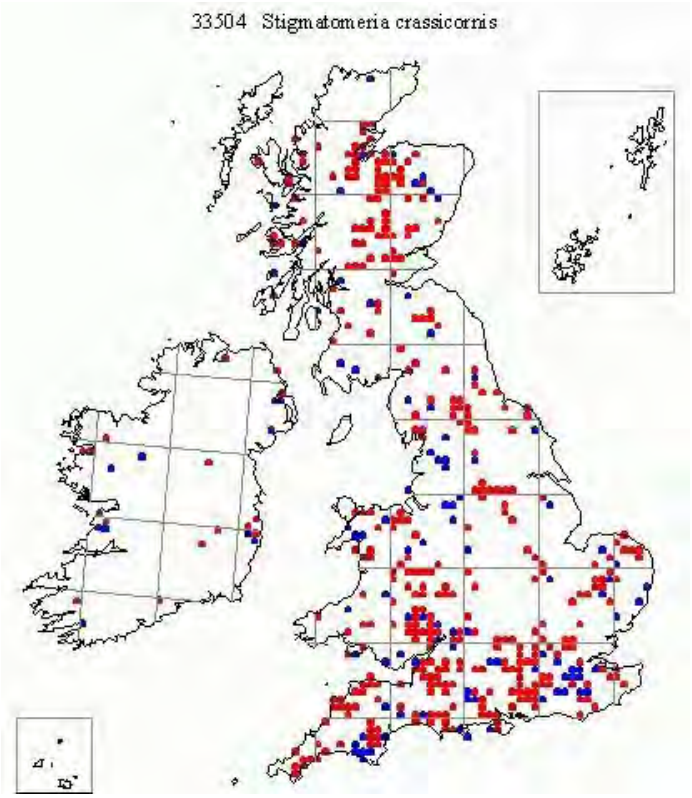


Fig. 14. *Stigmatomeria crassicornis*, distribution map.

If it is confined to truffles they must be more frequent than generally perceived. Or perhaps any subterranean fungi will suffice.

More species new to the British list

During 2009 I heard of two more additions to the British list, of which full details are yet to be published. Whether these are also recent arrivals, or have simply been overlooked previously, is open to speculation but both are small and dark coloured so are not as conspicuous as the two species discussed above. Both species were identified by their collectors from characters of the male genitalia, as figured by Zaitzev (2003), whose figures are reproduced here.

Exechia spinigera was identified by David Gibbs from a single male that he found in a yellow pan trap at a site on the Gwent Levels. It is close in most respects to the widespread species *E. spinuligera*. The most obvious difference in the genitalia is in the apical part of the longer external lobe of the gonostylus, which is forked in both species, but in *E. spinuligera* the unbristled internal branch is slender while in *E. spinigera* it is nearly as thick as the outer branch (Fig. 15).

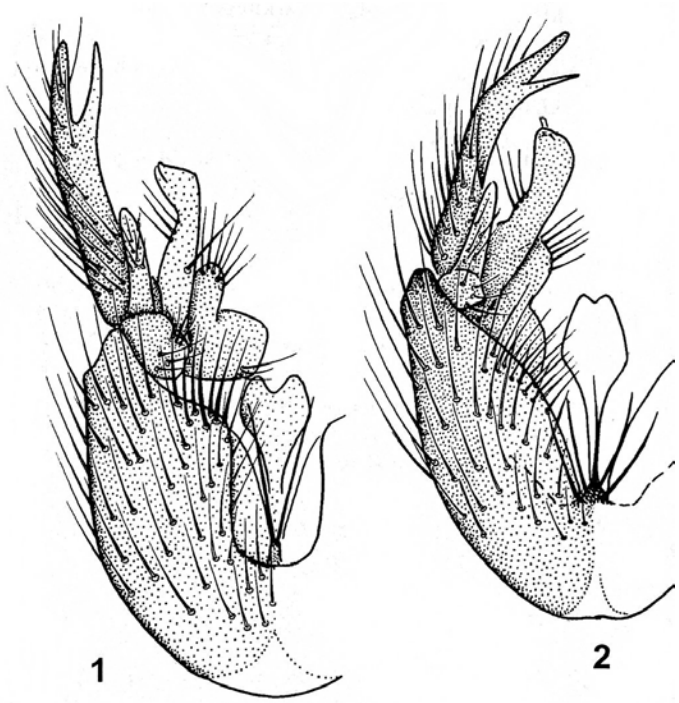


Fig. 15. *Exechia* species, male genitalia: 1, *E. spinigera*; 2, *E. spinuligera* (from Zaitzev 2003).

Phronia forcipula was first recognised as British by John Coldwell, from two males collected in 2009 at Wortley Top Forge in Yorkshire (SK29). Soon after he had sent me a specimen, I identified some of both sexes from flight interception trap samples obtained in 2007 at Langley Park, Buckinghamshire (TQ08) and passed to me by John & Barbara Ismay. It has male genitalia rather similar to the common species *P. humeralis* but among other small differences, the ventral bristly lobe of the gonostylus is more or less rounded apically while it comes to a blunt point in *P. humeralis*, and the median excavation of the gonocoxites is a little narrower and deeper in *P. forcipula* (Fig. 14). Also *P. forcipula* has clear wings while there is usually a brownish patch behind the posterior fork in both sexes of *P. humeralis*.

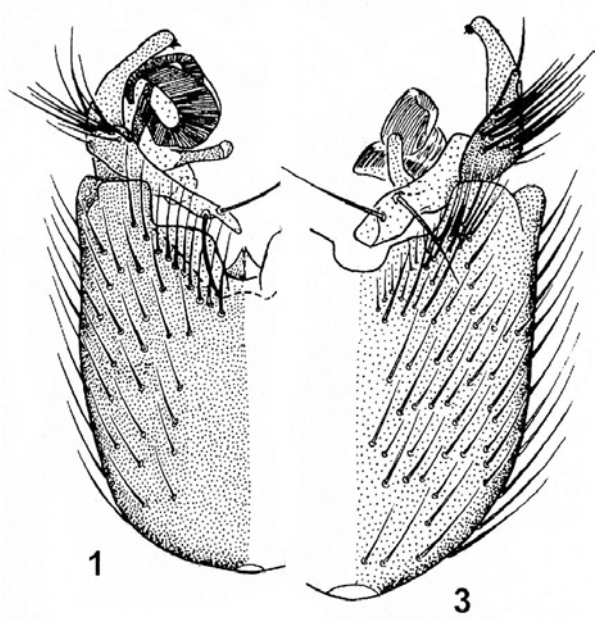


Fig. 16. *Phronia* species, male genitalia: 1, *P. forcipula*; 3, *P. humeralis* (from Zaitzev 2003; taken from different plates, hence numbering).

Acknowledgements

I am indebted to Judy Webb for the use of her photographs, and to Ivan Perry, David Gibbs, John and Barbara Ismay, and John Coldwell for the opportunity to cite their records. I thank Stephanie Ames for providing the updated maps of *Greenomyia mongolica* and *Mycetophila sigmoides* and I am grateful to her and the other staff of BRC, Bjorn Beckmann, Colin Harrower, Helen Roy and Mark Hill, for useful discussion.

References

Chandler, P.J. (1966). *Leptomorphus walkeri* Curt. and other Mycetophilidae (Diptera) in Kent. Entomologist's Record & Journal of Variation 78: 80-81.

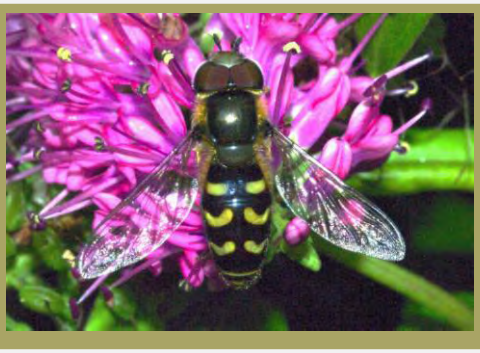
Edwards, F.W. (1925). British Fungus-Gnats (Diptera, Mycetophilidae). With a revised Generic Classification of the Family. Transactions of the Entomological Society of London 73: 505-670.

Gibbs, D. (2009). Two Fungus Gnats (Diptera, Mycetophilidae) new to Britain. Dipterists Digest (Second Series) 16: 7-13.

Zaitzev, A.I. (2003). Fungus gnats (Diptera, Sciaroidea) of the fauna of Russia and adjacent regions. Part II. International Journal of dipterological Research 14: 77–386.

Peter Chandler

Hoverfly Newsletter
Number 48
Spring 2010
ISSN 1358-5029



I am grateful to everyone who submitted articles and photographs for this issue in a timely manner. The closing date more or less coincided with the publication of the second volume of the new Swedish hoverfly book. Nigel Jones, who had already submitted his review of volume 1, rapidly provided a further one for the second volume. In order to avoid delay I have kept the reviews separate rather than attempting to merge them. Articles and illustrations (including colour images) for the next newsletter are always welcome. Copy for **Hoverfly Newsletter No. 49** (which is expected to be issued with the Autumn 2010 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 May 2010. Please note the earlier than usual date which has been changed to fit in with the new bulletin closing dates.

Hoverfly Recording Scheme update December 2009

Stuart Ball
255 Eastfield Road, Peterborough, PE1 4BH, stuart.ball@dsl.pipex.com
Roger Morris
7 Vine Street, Stamford, Lincolnshire, PE9 1QE,
roger.morris@dsl.pipex.com

This has been quite a remarkable year for a variety of reasons. As reported last time, *Myolepta potens* made a surprise appearance in Gloucestershire and made everyone's year. At the same time, the year was punctuated by poor weather so it was amazing that very much was found; yet it was. There were several new records of *Eriozona syrphoides* (see later article on the autumn field meetings) and Rob Wolton, a recently recruited member, has made amazing inroads into the ecology of *Microdon myrmicae*. Hopefully Rob will describe his work in due course so we must not steal his thunder. These few snippets tell us that hoverfly recording is alive and well and hopefully greater things will emerge next year.

This newsletter marks the transition from the first to the second decade of the 21st Century, and therefore there is some merit in reviewing progress in the past ten years. The highlight is undoubtedly the level of data arriving each year. As this note goes to press, the database stands at 599,795 records and we look forward to it passing 600,000 very shortly! This is quite amazing when you look back to the provisional atlas in 2000. At that time, we had assembled 375,000 records, so (with an additional 40,000 records available from Kenn Watt's Scottish scheme) the dataset has expanded by 71% in ten years. Not all of these records come from the past ten years of course, but the graphs generally indicate that recording effort has been maintained at a similar level to the 1990s – although we have not been able to attain the levels reached in the 1980s.

There have been a few notable changes as some of the old guard such as Eileen Thorpe and Austin Brackenbury have reduced their activity and a number of newcomers have arrived. For example, there is now much more active recording in Shropshire (Nigel Jones), Northamptonshire (John Showers), Worcestershire (Harry Green *et al.*) and Bedfordshire (John O'Sullivan). Mick Parker and Ted & Dave Levy continue to supply large numbers of records for Dorset and Somerset, whilst Gloucestershire (David Iliff *et al.*) now vies with Dorset for the most detailed recording effort.

Looking at the modern maps, the level of coverage is a good deal more even, although there are still big gaps in what are now emerging as less interesting parts of the country. Our own efforts have shown that places such as Radnorshire, the Fens, the Pennines and the southern lowlands of Scotland are genuinely poor in hoverfly diversity. We have a lot more to do, however. One of the jobs we are doing is checking and identifying material for a variety of university projects. Roger recently completed examining some 10,000 dry specimens assembled by Leeds University (he has a similar number of wet specimens to do still) and over Christmas identified more than 2,500 specimens from a UCL PhD project. Hopefully these data will be forwarded to the scheme in due course, especially as the UCL project yielded records of *Eupeodes lundbecki* and *Dasysyrphus hilaris*.

Another important advance over the past ten years has been our knowledge of the fauna itself. There have been numerous additions: *Cheilosia ahenea*, *C. caerulescens*, *C. ranunculi*, *C. psilophthalma*, *Eupeodes goeldlini*, *Heringia senilis*, *Microdon myrmicae*, *Orthonevra intermedia*, *Paragus constrictus*, *Platycheirus*

aurolateralis, *Syrphus rectus* and *Trichopsomyia lucida* come immediately to mind. There have been other changes, most notably the phenomenal range changes exhibited by *Rhingia rostrata*, *Volucella inanis* and *Volucella zonaria*. Climate change is real and its impact is a matter of considerable interest both in terms of recording effort and as a way of promoting hoverflies as important environmental indicators.

The hoverfly symposium scheduled for Glasgow in 2011 offers a really important opportunity for UK hoverfly enthusiasts to show what we can do. Chris Thompson illustrated the effectiveness of the Hoverfly Recording Scheme in his talk for Dipterists Forum's AGM. In that talk he showed that we contributed around 25% of the two million Diptera records held on the GBIF (Global Biodiversity Information Facility). This of course is based on the last time we updated the hoverfly data on the National Biodiversity Network database; and there are many more records now!

Another major change in the past ten years has been the work we have been doing to train new hoverfly enthusiasts. Prior to 2000 we ran occasional workshops for the Field Studies Council but now we travel more widely. In the next few months we will be doing courses for Glasgow Naturalists, Cardiff Museum and the Northamptonshire Wildlife Trust. We are also scheduled to run a three day course at Preston Montford in August. If you know of other regions who might like to host a course then let them and us know that this is a possibility.

Finally, we are still working hard on other fronts. We have linked up with WILDguides and are in the process of writing a guide to hoverflies. There are likely to be two versions: a junior guide to parks and gardens, and a more comprehensive version covering about 60% of the British fauna. Neither will replace Stubbs and Falk which remains the definitive guide, but hopefully these simpler guides will help to stimulate more interest in hoverflies amongst field naturalists. Hopefully both will be out in 2010.

Analysis of autumn field meeting data 2009

Roger Morris
7 Vine Street, Stamford, Lincolnshire, PE9 1QE, roger.morris@dsl.pipex.com

This year we tried a different format for the autumn field meeting. Firstly we went to Scotland, which is a novelty in itself. Secondly, we went for a week; and finally we made it a split venue meeting with the first half in south-west Scotland (Newton Stewart 12-15 September 2009) and the second half in south-east Scotland (Galashiels 16-19 September). The weather mirrored this split to some extent too: fantastic sunny days for the first half of the week and largely cloudy the second half. Hoverfly recording mirrored this split but I wonder if the split was wholly down to the weather.

South-west Scotland is much wilder with comparatively little agriculture in the Galloway Forest area. Conifer forests, deciduous woodlands and moorland punctuate the landscape, whereas south-east Scotland is predominantly agricultural with much less woodland that is often confined to the steepest slopes and gills. True, there are areas of afforestation and of course the Border Mires, but my general impression is a landscape that is much harder to work for Diptera and hoverflies in particular.

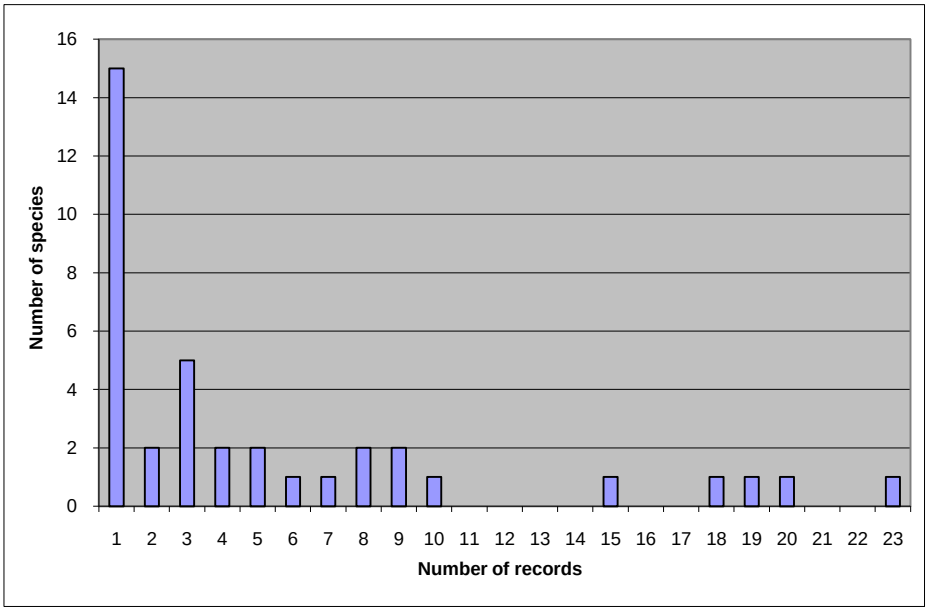


Figure 1. Numbers of records for individual species at Newton Stewart

A total of 38 species were recorded at Newton Stewart, with good numbers of commoner species but a remarkable array of species that we often regard as scarce. *Didea fasciata* was almost a "regular" and *Eriozona syrphoides* showed up on three occasions. Clearly the conifer forests of southern Scotland are a stronghold. What was more surprising was the very low number of *Arctophila superbiens*.

Species recorded at Newton Stewart:

Arctophila superbiens (3), *Baccha elongata* (1), *Cheilosia bergenstammi* (1), *Cheilosia pagana* (1), *Dasysyrphus tricinctus* (1), *Didea fasciata* (6), *Epistrophe grossulariae* (1), *Episyrphus balteatus* (19), *Eriozona syrphoides* (3), *Eristalis arbustorum* (8), *Eristalis horticola* (2), *Eristalis nemorum* (9), *Eristalis intricaria* (5), *Eristalis pertinax* (20), *Eristalis rupium* (1), *Eristalis tenax* (18), *Eupeodes latifasciatus* (2), *Eupeodes luniger* (1), *Helophilus pendulus* (15), *Lejogaster metallina* (1), *Melanostoma scalare* (23), *Meliscaeva cinctella* (1), *Neoascia podagrica* (3), *Platycheirus albimanus* (8), *Platycheirus clypeatus* (4), *Platycheirus granditarsus* (4), *Rhingia campestris* (5), *Scaeva selenitica* (1), *Sericomyia silentis* (10), *Sphaerophoria interrupta* (1), *Sphaerophoria philanthus* (1), *Sphegina clunipes* (1), *Syritta pipiens* (3), *Syrphus ribesii* (7), *Syrphus vitripennis* (1), *Volucella pellucens* (3), *Xylota jakutorum* (1), *Xylota segnis* (9).

Upon reaching Galashiels it became readily apparent that the numbers of hoverflies were much lower and less diverse. Just 16 species were recorded over the following days and lists for individual sites were extremely short. Species such as *Didea fasciata* and *Eriozona syrphoides* were absent

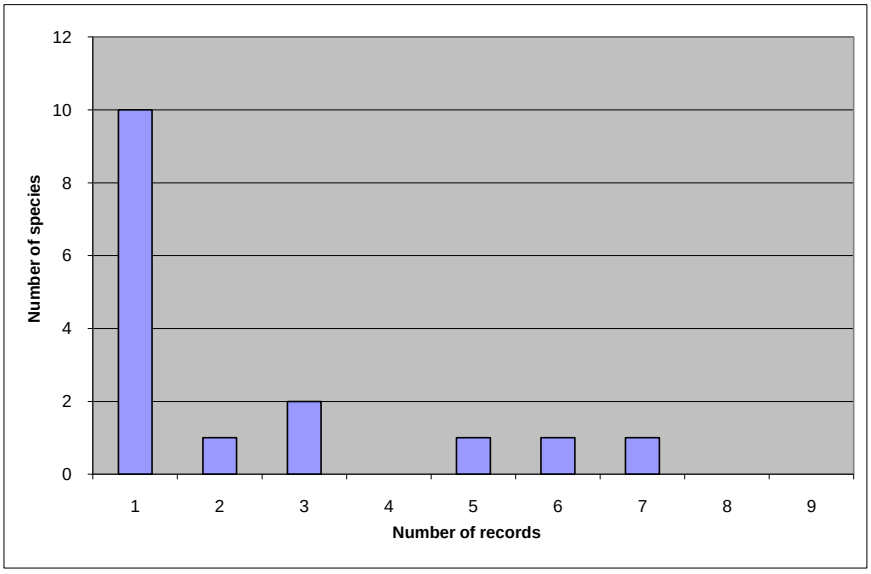


Figure 2. Numbers of records for individual species at Galashiels

Species recorded at Galashiels:

Epistrophe grossulariae (1), *Eristalis horticola* (1), *Eristalis tenax* (1), *Leucozona glaucia* (1), *Platycheirus albimanus* (1), *Platycheirus scutatus* sl (1), *Rhingia campestris* (1), *Syrphus torvus* (1), *Xylota segnis* (1), *Xylora sylvarum* (1), *Baccha elongata* (2), *Helophilus pendulus* (3), *Syrphus ribesii* (3), *Eristalis pertinax* (5), *Melanostoma scalare* (6), *Episyrphus balteatus* (7).

Changes in the weather as well as differences in the habitat type, plus of course the receding summer mean that a comparison of this nature cannot be made in any scientific way. Nonetheless the dramatic difference in the numbers of hoverflies does suggest that the Galashiels area is less rich than the area around Newton Stewart. Is this really the case, or is it more reflective of the comparative absence of suitable flowers as a lure? Perhaps a partial answer can be given by experience on 19 September when Alan Stubbs and I travelled south.

We stopped at several localities and found very little in the way of hoverflies apart from one site (Sweethope Lakes) that supported a sizeable bank of devil's bit scabious. The link between hoverfly numbers and a suitable lure seems to be borne out here as we recorded 11 species. This link is also supported by experience on one roadside verge at Kirwaugh earlier in the week where we stopped for a short look at roadside ivy and found a total of 15 species of hoverfly! This count was particularly remarkable because it was in a largely pasture landscape with little habitat.

These various experiences show that there is a good deal of scope for recording hoverflies in late summer in northern areas. It makes me think that I will have to go north in September and that I must look for areas with devil's bit scabious. Perhaps *Eriozona syrphoides* is commoner than we think?

The Internet as a source of hoverfly records

Roger Morris
7 Vine Street, Stamford, Lincolnshire, PE9 1QE, roger.morris@dsl.pipex.com

The advent of digital photography and easy access to personal websites has led to an explosion in the numbers of wildlife records potentially available to recording schemes. Lots of wonderful photos appear on Flickr (http://www.flickr.com/) but they are rarely accompanied by data. Rather more data can be gained from "Wild About Britain" (http://www.wildaboutbritain.co.uk/) which recently yielded 143 new records from a total of just over 5,000 insect photographs of all Orders. Personal websites (weblogs) abound and these too can be useful sources of information with much more chance of abstracting data and contacting recorders.

I regularly trawl these sites to see what data are available. My technique is to search for a range of hoverfly names and then to follow up hits that look promising. More often than not the end result is unproductive because only a small percentage of the total range of photographs can be linked to specific sites and dates. But occasionally weblogs with usable records emerge.

Common or bigger and readily identifiable hoverflies seem to be much more productive names to search for and these in turn often yield sites with other useful records of other species. In addition, quite a lot of data arise from photographs posted on the Hoverfly Recording Scheme website by comparative novices. Data from the recording scheme website are probably the best because it is possible to chase photographers and secure more accurate data on the date and place the photograph was taken.

The biggest drawback of this sort of recording is that many photos don't reveal key distinguishing characters and I find identifying species from photos rather tricky and doubtless get the odd one wrong! Even so, a small but significant number of records have entered the recording scheme database as a consequence. These are useful data and I therefore thought it might be illuminating to analyse some that I have abstracted in the last two years. This has proved to be highly informative as it illustrates the impact this type of recording can have on datasets.

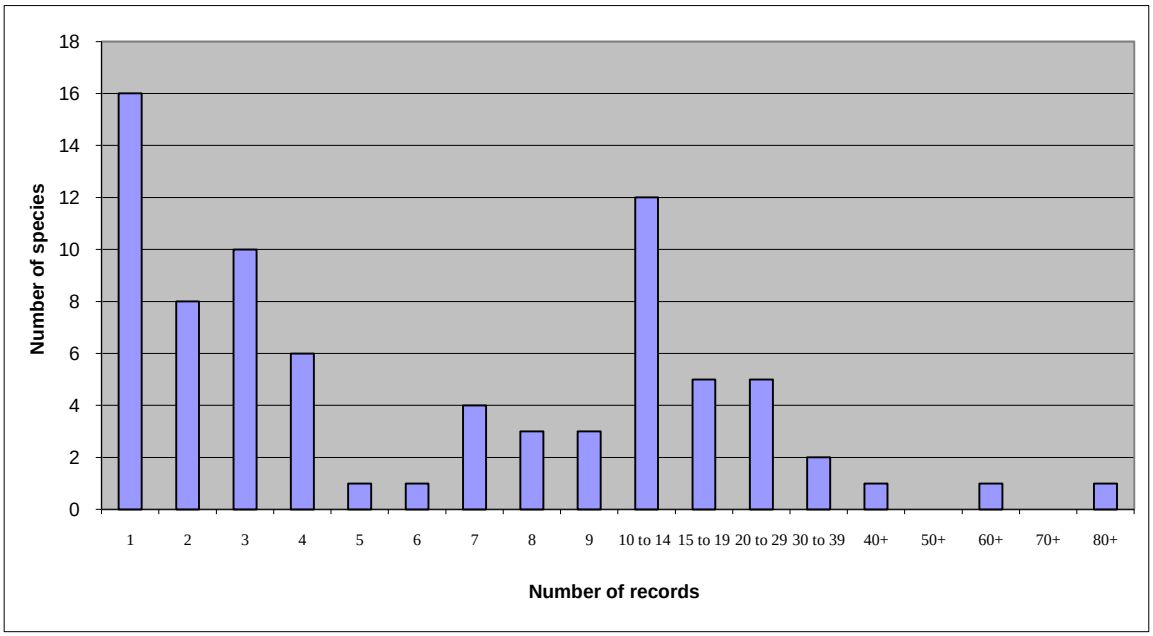


Figure 1. The relative number records attributed to individual species illustrated on websites.

A total of 848 records extracted over the last two years from the dataset analysed for this note. This is a snapshot and is not a comprehensive trawl of records specifically to undertake an analysis of this nature. These records comprise a total of 80 species with the majority of the records (672 records or 79.24%) from 28 species with ten or more records. I do not hold data on the numbers of websites visited or the numbers of records extracted from individual sites and consequently the effort involved in abstracting these data cannot be quantified. They are data that have been extracted at times of day or in inclement weather that would not otherwise have been available to the recording scheme and are therefore a useful addition from effort that is not a distraction from other work.

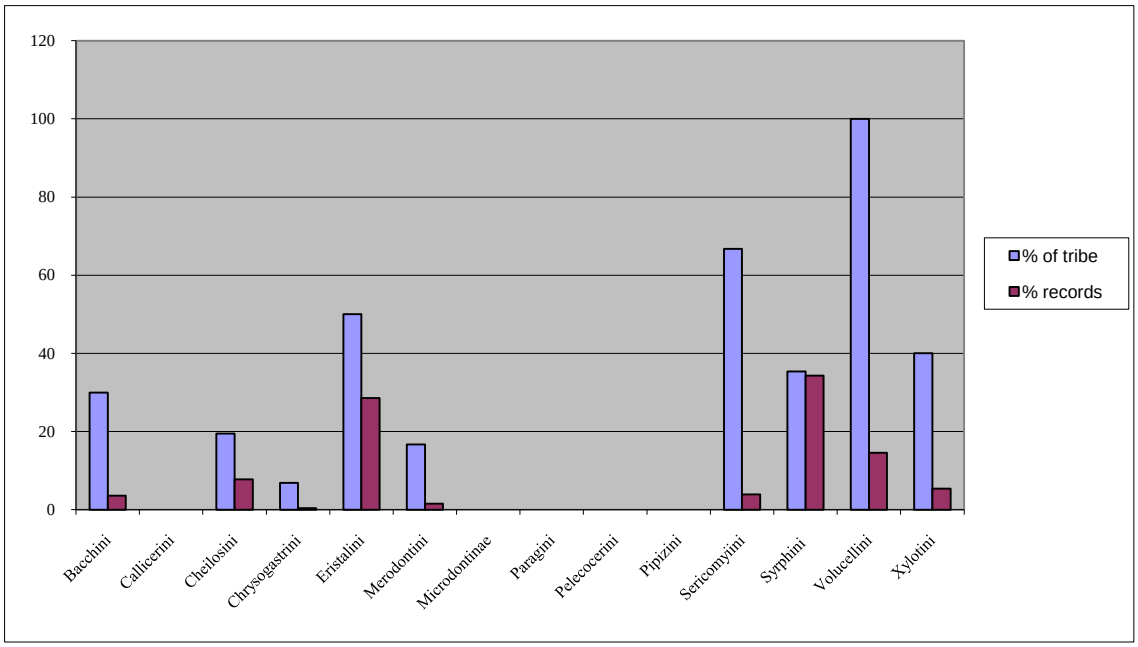


Figure 2. Numbers of species and records by tribe

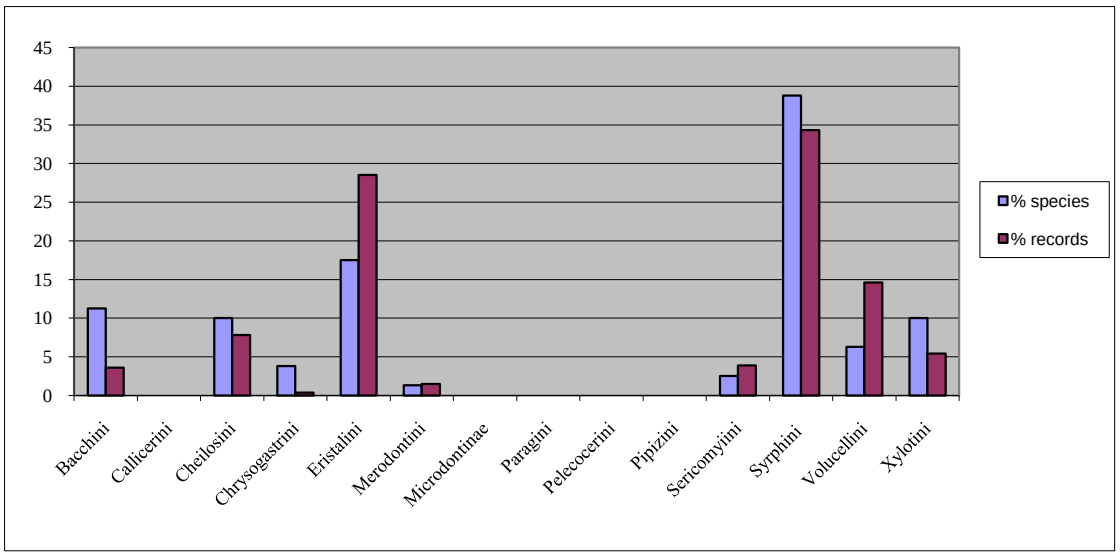


Figure 3. Comparative contributions to overall dataset: overall proportion of species within the dataset and the proportion of the overall number of records.

Quite clearly weblogs and posts on the recording scheme website do provide a useful addition to datasets for analysis of responses to climate change and the distribution of a proportion of the fauna and are therefore to be welcomed. However, the use of photography as an alternative to retention of voucher specimens clearly has important limitations. Firstly the range of species likely to be recorded is much narrower than the overall British fauna (29% is represented in this sample) and secondly this type of recording generally misses many of those specialist species that are associated with scarce or vulnerable habitats. For example, just one nationally scarce species (*Eriozona syrphoides*) was illustrated.

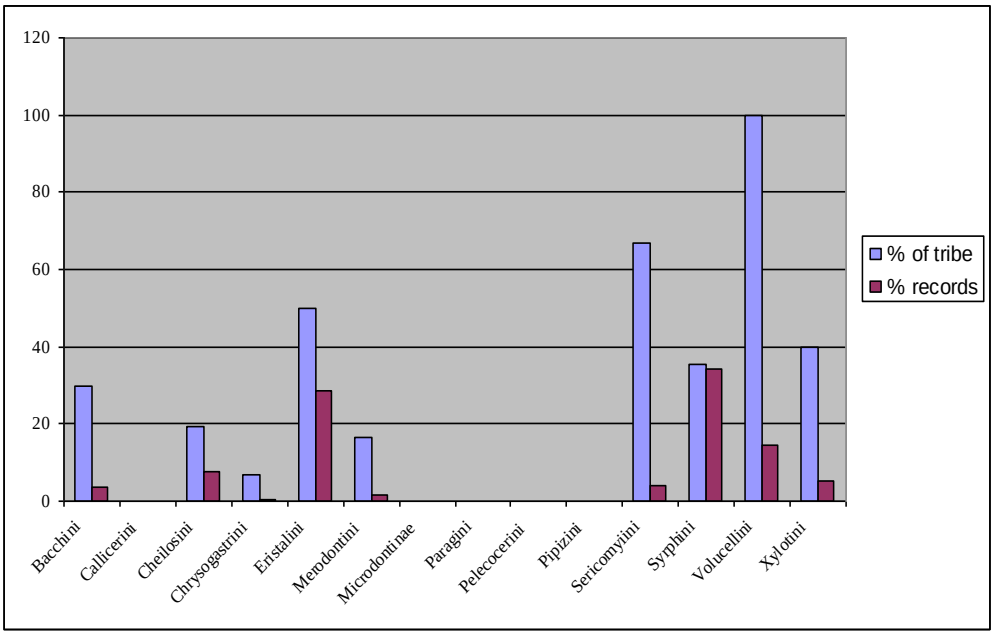


Figure 4. Proportions of tribes relative to overall contribution of records.

These data and the accompanying analysis are extremely crude and would merit more detailed investigation. They do however illustrate that only a small suite of tribes attracts the attention of this sort of recording. The tribes are particularly well represented, the Eristalini, Syrphini and Volucellini. The most noticeable absentees from the lists include those challenging taxa that cannot be identified from photographs such as *Cheilosia*, *Pipiza*, *Sphaerophoria*, and *Platycheirus*. Few of the records involve species of conservation importance and just one species, *Eriozona syrphoides*, is listed in the forthcoming revision of Syrphidae statuses (Ball & Morris in press). A further feature of this source is that it mainly seems to be southern recorders who participate: are there really so few interested naturalists in Scotland?

On the plus side, photo-recording sometimes stimulates much greater interest in hoverflies and leads to a shift from reliance on photography towards the retention of voucher specimens. I have seen this on several occasions and such shifts mean that some very competent field naturalists have started to make important contributions to our knowledge of the hoverfly fauna. Furthermore, it appeals to people who might otherwise not do any biological recording at all.

In conclusion, therefore, let us hope for a continuing interest in photography and encourage really keen proponents to go that stage further – they have huge potential to improve regional knowledge of hoverfly distribution. There are obvious limitations to this form of recording and hopefully this brief analysis will help to inform the debate about the relative merits of photography as a tool for biological recording. Meanwhile, those who don't feel happy with taking specimens but who are happy to make more limited contributions should be encouraged to do so because they will supply data that fills gaps and adds to the overall baseline of information used for conservation management and climate change studies.

Species involved in the analysis:

One record: *Platycheirus peltatus*, *Cheilosia grossa*, *Cheilosia impressa*, *Cheilosia pagana*, *Chrysogaster cemiteriorum*, *Eristalinus aeneus*, *Chrysotoxum cautum*, *Chrysotoxum elegans*, *Didea fasciata*, *Doros profuges*, *Eriozona syrphoides*, *Eupodes latifasciatus*, *Volucella inflata*, *Brachypalpoides lentus*, *Tropidia scita*, *Xylota sylvarum*, **Two records**: *Platycheirus fulviventris*, *Platycheirus manicatus*, *Platycheirus rosarum*, *Platycheirus scutatus* sl., *Chrysogaster solstitialis*, *Melangyna cincta*, *Criorhina berberina*, *Criorhina floccosa*, **Three records**: *Xanthandrus comtus*, *Cheilosia variabilis*, *Anasimyia lineata*, *Eristalinus sepulchralis*, *Helophilus hybridus*, *Dasysyrphus venustus*, *Leucozona laternaria*, *Melangyna umbellatarum*, *Scaeva selenitica*, *Criorhina ranunculi*, **Four records**: *Baccha elongata*, *Platycheirus granditarsis*, *Rhingia rostrata*, *Arctophila superbiens*, *Chrysotoxum arcuatum*, *Chrysotoxum verralli*, **Five records**: *Anasimyia contracta*, **Six records**: *Ferdinandea cuprea*, **Severn records**: *Eristalis horticola*, *Dasysyrphus albostriatus*, *Epistrophe grossulariae*, *Meliscaeva cinctella*, **Eight records**: *Eristalis arbustorum*, *Epistrophe eligans*, *Platycheirus albimanus*, **Nine records**: *Dasysyrphus tricinctus*, *Leucozona lucorum*, *Meliscaeva auricollis*, **Ten records**: *Melanostoma scalare*, *Eristalis nemorum*, *Chrysotoxum festivum*, *Leucozona glaucia*, *Syrphus ribesii*, **Eleven records**: *Eupeodes corollae*, Twelve records: *Eupeodes luniger*, Thirteen records: *Helophilus trivittatus*, *Merodon equestris*, *Sphaerophoria scripta*, **Fourteen records**: *Eristalis intricaria*, *Chrysotoxum bicinctum*, **Eighteen records**: *Syritta pipiens*, *Xylota segnis*, **Nineteen records**: *Cheilosia illustrata*, *Scaeva pyrastri*, *Xanthogramma pedissequum*, **Twenty three records**: *Volucella inanis*, **Twenty six records**: *Volucella bombylans*, **Twenty nine records**: *Sericomyia silentis*, **Thirty records**: *Eristalis tenax*, **Thirty one records**: *Rhingia campestris*, *Thirty four records*: *Volucella pellucens*, **Thirty nine records**: *Eristalis pertinax*, **Forty records**: *Volucella zonaria*, **Forty five records**: *Myathropa florea*, **Sixty one records**: *Helophilus pendulus*, **Eighty one records**: *Episyrphus balteatus*.

Reference: Ball, S.G. & Morris, R.K.A., (in press). A review of the scarce and threatened flies of Great Britain: Part?: Syrphidae. *Species Status* **x**: 1-? Joint Nature Conservation Committee, Peterborough

Hoverflies and mimicry 2

John Badmin
Coppice Place, Selling, Kent ME13 9RP

A number of brief articles have been published discussing mimicry in hoverflies in recent issues of the Hoverfly Newsletter. In all the references on this complex subject I was amazed to discover that no-one had referred to Francis Gilbert's excellent paper on "The evolution of imperfect mimicry (in hoverflies)" published in the proceedings of the Royal Entomological Society's Symposium on Insect Evolutionary Ecology edited by Mark Fellowes, Graham Holloway and Jens Rolff (2005).

The chapter (pp 231-288) discusses poor and good mimicry, the relative abundance of mimics and predators, factors influencing resemblance based mainly on examples from the Palaearctic fauna and a lot more. All those interested in hoverflies should read this chapter - it is a classic and I highlighted it as such in a book review for British Journal of Entomology. The paper can now be downloaded as a pdf from Francis Gilbert's website (www.nottingham.ac.uk~plzfg). I should also say there were some other gems on insect evolutionary entomology published in the same proceedings (for example Mike Majerus's paper on "The Peppered moth: decline of a Darwinian disciple" which combines both science and wit in equal measure).

Rhingia rostrata on carrion in Nottinghamshire

Andy Chick
C50 Thorneywood Road, Long Eaton, Nottingham, NG10 2DY,
Andrew.chick@ntu.ac.uk

A single female of *Rhingia rostrata* (Linnaeus, 1758) was found on the Clifton Campus of the Nottingham University (SK547353), on 26 October 2009. The specimen, which was the first record of *R. rostrata* in Nottinghamshire, was netted from pig carrion in dense woodland on the campus which was placed for a Forensic Entomology project. Stubbs and Falk (1996) note that *R. rostrata* may be erratic in occurrence and possibly breeds in carrion. While no larvae were recovered from the carrion, the state of the carrion may offer a clue as to why the occurrences are erratic. The carrion was at the end of active Calliphorid feeding, but still had plenty of tissue on the bones (unlike in smaller carrion, such as rats in which Calliphorid feeding removes all tissue apart from the hide) and plenty of decomposition fluids had leached into the soil under the carrion which had become a nutrient rich soup, suggesting that *R. rostrata* may require at least medium sized carrion (the pigs were approximately 15kg when they were placed in the field) to breed in.

Finding Brachyopa hoverflies (Diptera Syrphidae) and some notes on behaviour

Nigel Jones
22 Oak Street, Shrewsbury, SY3 7RQ, nipajones@tiscali.co.uk

I previously reported (Jones, 2008) that Roger Morris had provided helpful advice regarding finding *Brachyopa* (Morris, 2008), which helped me find *Brachyopa* at Attingham Park, near Shrewsbury. During 2009 I again put Roger's advice into practice - look at the base of sun-dappled trees at between 18 inches and 3 feet. This certainly proved to be sound advice. I found all four *Brachyopa* species during April and May 2009 and below I provide notes of all my finds. All records are from Shropshire unless otherwise noted.

21 April: *B pilosa* – several males flying about a dead, felled poplar (I subsequently learned that it had been felled three seasons previously) at Stanmore Park, Bridgnorth. This lends further credence to Roger Morris' proposition that cut stumps and log-piles of aspen are important for *B. pilosa.*

23 April – 16 June: *B pilosa* – on seven different days individuals were sighted landing on an oak tree, weeping copious sap, at Attingham Park, near Shrewsbury. Only on one occasion was a female seen. The flies were seen landing on the tree at various heights, to at least twenty feet.

1 May: At Stevenshill, Cound: Several *B. scutellaris* males resting on vegetation at the base of an ash tree and repeatedly rising to hover at four feet height for approximately 30 second periods, then returning to the leaves below. On one occasion a male rose, holding a female beneath it and hovered whilst apparently copulating. Also, a single *B. pilosa* was taken from the vicinity of ash trees.

7 May: Alongside the Borle Brooke near Highley, a single *B. bicolor* resting on an ash trunk. At Stanmore Park, Bridgnorth, four or five *B. pilosa* were present around the felled poplar I previously visited. The males frequently rested on nettles and other leaves close to the tree.

11 May: At Glynmorlas near Ifton, a single *B. scutellaris* hovering at the base of a sycamore.

12 May: Mary Knoll Valley, Mortimer Forest, Herefordshire – several *B. scutellaris* hovered about and landed on leaves close to the base of an ash.

23 May: Two *B. scutellaris* were seen at the base of ash and sycamore, and a *B. pilosa* at the base of an ash in Big Wood, Eaton Mascott.

28 May: Two *B. pilosa* males were still about the fallen poplar previously visited and a *B. insensilis* was taken from a sap run on sycamore.

On most occasions *Brachyopa* were found, as Roger indicated, at between 18 inches and 3 feet height. To refine this fieldcraft advice, I would add that invariably I found *Brachyopa* either going to sap runs at any height, or most frequently resting on, or hovering about leaves of plants growing right at the base of trees, and in the case of a prostrate poplar, on vegetation growing right alongside the felled tree. Sunlit conditions are particularly important, so searching for trees in sunlight, with plants at the base of such trees appears to be a very effective way to find *Brachyopa* species. Ash and sycamore are excellent trees to investigate. Finally, my experience indicates that May is the peak month for finding *Brachyopa*.

References

Jones, N., 2008. *Brachyopa* and *Ferdinandea* at Attingham Park, Shrewsbury. Hoverfly Newsletter 45: p. 6

Morris, R.K.A., A note on fieldcraft required to find *Brachyopa* (Diptera, Syrphidae). Hoverfly Newsletter 45: p. 4-5

Brachyopa pilosa (male) photos: Bob Kemp

A further observation of *Parhelophilus* patrolling trees

Nigel Jones
22 Oak Street, Shrewsbury, SY3 7RQ, nipajones@tiscali.co.uk

In a previous edition of the Hoverfly Newsletter (Jones, 2007) I reported my observation of male *Parhelophilus versicolor* patrolling about leaves of alder trees at some distance from the nearest likely breeding station. In 2009 I again observed *Parhelophilus* males patrolling trees at about eight feet height. On this occasion the species concerned was *P. frutetorum*.

On the morning of 31 May 2009 I visited Mousecroft Community Woodland on the eastern outskirt of Shrewsbury (OS grid reference for the centre of the site: SJ473109). The site contains a large pool, fringed by quantities of emergent vegetation, surrounded by open grass margins, behind which are extensive plantings of native deciduous trees. Both *P. versicolor* and *P. frutetorum* were present on the site, with numerous *P. versicolor* flying about at ground level, amongst lush vegetation at some distance from the pool. These were in the company of very many *Anasimyia lineata* and *Rhingia campestris*, also flying amongst the lush vegetation and nectaring at various flowers. Towards the end of the morning I noticed a few *Parhelophilus* males (later identified as *P. frutetorum*) patrolling around leaves of hazel and oak at about eight feet height, in a very similar fashion to the *P. versicolor* I had previously observed patrolling trees in 2007.

The trees concerned were about 100 metres from the pool on site, which was the most likely breeding station. The trees were at the edge of the site, facing on to a wide ride, so were effectively a woodland edge feature. On walking along the edge of these trees it soon became apparent that there were good numbers of male *P. frutetorum* engaged in this patrolling activity – mostly at about six to eight feet height. After watching this activity for some minutes, I several times noticed single leaves occupied by a single male and a single female, with one of the individuals making a jerky wing-flipping action. This was presumably the male, but unfortunately I did not write down which sex in my notebook and I cannot now be certain which sex was involved. Coincidentally I also witnessed *Parhelophilus* nectaring at elder, a flower I rarely see Syrphids nectaring from.

My observations in 2007 and 2009 indicate that males and females of both *P. frutetorum* and *P. versicolor* utilise trees at considerable distance from breeding stations. This activity appears to be associated with mate-finding, accompanied by courtship taking place on leaves of trees at around eight feet height.

Reference

Jones, N., 2007. A Note on Patrolling Behaviour of Male *Parhelophilus versicolor*. Hoverfly Newsletter 43: p.8

A memorable spring – notes and observations from Shropshire for March-May 2009

Nigel Jones
22 Oak Street, Shrewsbury, SY3 7RQ, nipajones@tiscali.co.uk

The largely dismal weather and general lack of flies that characterised much of 2009 left me with the memory that it had been a rotten year for my favoured prey – the Syrphids. However on looking back through my notebook, I was mightily surprised to find that parts of 2009 had actually been very good for hoverflies in my home patch of Shropshire and nearby areas. In particular the early part of the season provided many interesting records. Following are some notes for the spring.

The winter dragged on interminably, and when the sun finally broke through on 14 March, I dashed out to Lyth Hill, near Shrewsbury and got the new season off to a decent start with a record of *Melangyna lasiophthalma*, which I always think of as the hoverfly equivalent of swallows returning for the spring. With a swift return to the interminable winter weather there was little more in the way of interesting hoverfly action during the rest of March, save a couple more *M. lasiophthalma* at other locations.

April dawned with the gratifying sight of *Cheilosia grossa* in the grounds of Attingham Park on the 3rd. On the 2nd and 5th unusually early sightings of *Ferdinandea cuprea* were made in the Shrewsbury area. During the first week of April, *Epistrophe eligans* and *Cheilosia pagana* had also joined the fray, along with the usual overwintering suspects. Things were getting going. I tried to get out whenever sunshine beckoned (although work too often got in the way), but on a quick lunchtime foray, travelling back from a meeting on 7 April, I was amply rewarded for my efforts by five magnificent *Criorhina ranunculi* feasting on *Salix* flowers around an old quarry, below the Wrekin. This was more like ospreys returning than swallows!

Sunshine put in good appearances for much of April, and on 11 April, in the Habberley area, to the north of the Stiperstones, I took family and friends for what was billed as a walk, but was of course a grand hoverfly hunting expedition. I think the rest of the group pretty much guessed this within ten minutes or so, as I quickly got left behind, loitering about *Salix* trees, with their tempting displays of golden flowers, buzzing with hundreds of *Eristalis tenax*. In amongst the *Eristalis* hordes were a selection of early hoverfly species – a couple of *Criorhina ranunculi*, some *Parasyrphus punctulatus*, *Melangyna lasiophthalma* and a *Cheilosia albipila*. An added bonus this day was a *Tachina lurida*, sunbathing on the ground. This was a Tachinid-fly I had never previously encountered. The season was definitely well underway and over the next few days many more species were on the wing.

On another walk, north out of Shrewsbury, on 12 April, but this time with more impatient friends (there was a real ale pub to reach for lunch), I had to snap flies up and tube them almost without breaking pace, lest valuable drinking time should be lost. Near Astley, probably out of pity for my obvious frustration, one of my friends pointed out some small flies hovering at about eight to ten feet height, close to flower-laden blackthorn bushes. These turned out to be *Platycheirus ambiguus*, a new Syrphid for me, and behaving precisely as scripted in **British Hoverflies (Stubbs & Falk, 2002)**. Later in the walk there was more treasure, as we reached Grinshill Hill and encountered several *Cheilosia semifasciata*. This is a new site for this rare species.

Over the next few weeks, whilst blackthorn remained in flower, I took every opportunity to inspect around such trees for *Platycheirus ambiguus*, but only found them (in good numbers) at one location, near Cross Houses, to the south of Shrewsbury - 15 April, indicating that *P. ambiguus* is very local across wide areas.

On 13 April, by order of the "head of household" I was confined to gardening duties, but my reward for resisting the urge to break out, was a small *Cheilosia* which I had almost ignored on the assumption that it would probably be *Cheilosia pagana*, but on subsequent closer examination it was, very surprisingly, a *C. psilophthalma*, another new hoverfly species for me.

Throughout May I encountered unusually high numbers of hoverflies associated with woodlands. Firstly, on 1 May, in woodland at Stevenshill, Cound I notched up 32 species, including, *Brachyopa pilosa*, *B scutellaris*, three *Criorhina asilica* (one of which I twice saw nectaring on bluebell flowers), numerous *Criorhina berberina*, a *Chalcosyrphus eunotus* and a *Parasyrphus nigritarsis.* On 7 May, in bright sunshine, with two fellow enthusiasts, I visited woodlands in the

Highley area, for what turned out to be a spectacularly successful day hunting for hoverflies. During the day we encountered some forty-seven species (a personal day record), including *Brachyopa bicolor*, *Brachypalpoides lentus*, *Chalcosyrphus eunotus*, *Criorhina asilica*, *C berberina* and *Heringia heringi.* To put the icing on the cake we also saw three splendid *Conops vesicularis* and later in the day we found *Meligramma euchromum* at Stanmore Park, Bridgnorth. I thought that I must surely have exhausted my full season's allowance of hoverfly joy by now, but weeks later, on 23 May, there was more! I had the opportunity to survey Big Wood, Eaton Mascott (actually a small valley woodland). This is a woodland I had long coveted a visit to, but, having no public access, I had to be satisfied for many years with dreaming about what legendary beasts might lurk within its lush, verdant and damp confines. The site lived up to my fantasies, providing unbridled excitement and my first ever record for *Cheilosia chrysocoma*, a species I had craved to see for decades! There were also nine or ten *Criorhina asilica* flying low amongst lush vegetation, a few *C. berberina*, a *C. floccosa*, *Brachyopa pilosa and B scutellaris.* Further reward presented itself in the form of the large and splendidly colourful Tipulids *Ctenophora pectinicornis* and *Tanyptera atrata.*

During May I also discovered *Chalcosyrphus eunotus* in classic streamside situations in the Habberley Valley, near Pontesbury and in Mary Knoll Valley, Mortimer Forest, (Herefordshire). *C. eunotus* is now known from at least eleven locations in Shropshire, but it is seldom seen in numbers anywhere.

On the downside, the spring was noteworthy for the singular lack of *Syrphus* species, which at the time was alarming, but by late June and into July numbers recovered to more usual levels. An unexpected result of the lack of spring *Syrphus* was that I tended to capture any *Syrphus*-like hoverflies I saw, and many of these were in fact *Parasyrphus* – all of which appeared convincingly like small *Syrphus*. I recorded the scarce *Parasyrphus nigritarsis* twice, and five *P. annulatus* – a species I had only recorded once previously. This demonstrates the need to resist dismissing common looking species, but does give the dilemma of possibly having to collect large numbers of common species (when they are abundant), in order to find very similar, but apparently scarce, alternative species.

Brachypalpoides lentus photo: Bob Kemp

-

Criorhina asilica (female) photo: Bob Kemp

Criorhina berberina photo: Bob Kemp

A further observation of *Sphegina sibirica* establishing in the Shropshire area

Nigel Jones
22 Oak Street, Shrewsbury, SY3 7RQ, nipajones@tiscali.co.uk

Over the last few years I have collected the odd few *Sphegina sibirica* in each year, but during 2009 I encountered *S. sibirica* on six occasions, at four different sites. This indicates that *S. sibirica* is firmly establishing itself in the Shropshire area. It also appears to have a long flight season, between May and mid August, indicating that it is at least double brooded in England. My records of this hoverfly for 2009 are:

12 May, 2009, Overton Common, Herefordshire, SO798718
20 June, 2009, Sunny Hill, Clunton, Shropshire, SO3283
25 June, 2009, Eastridge Wood, Habberley, Shropshire, SJ3803
25 June, 2009, Maddox's Coppice, Habberley, Shropshire SJ386036
15 July, 2009, Stiperstones, Shropshire (collected Ian Cheeseborough), SO369984
18 August, 2009, Maddox's Coppice, Habberley, Shropshire, SJ3803

Book Reviews

Nigel Jones
22 Oak Street, Shrewsbury, SY3 7RQ, nipajones@tiscali.co.uk

Nationalnyckeln till sveriges flora och fauna: Tvåvingar: Blomflugor – Vol 1: Syrphinae

Hans Bartsch, 2009, Artdatabanken, ISBN 978-91-88506-50-4 Price around £50 (clothbound edition).
(National keys to the Swedish flora and fauna: Diptera: Flowerflies – Vol 1: Syrphinae)
Text in Swedish with an English key and summaries.

Sumptuous and Diptera are not words associated with each other when describing entomological tomes, but this early volume, in the ambitious Swedish Taxonomy Initiative series, can rightly be described as sumptuous. Illustrated throughout in full colour and of coffee-table book dimensions, this is, for Dipterists, a treat of the kind normally reserved for Lepidopterists and Coleopterists. On first opening the book my eyes were agog at the magnificent paintings, around 6-7 times life-size, and one for every species! Then I alighted on the keys in full colour, which include many accurate colour paintings of some of the more difficult features that can be a struggle to recognise, particularly for beginners. As such, the keys are a huge improvement on the more usual line drawings that necessarily are the norm for Diptera keys. The team of six artists (photographers and painters) must be congratulated on the outstandingly high standard of the illustrations throughout.

The impressive level of production has been achieved probably because the Swedish Taxonomy Initiative, which aims to provide keys for ALL the Swedish multi cellular flora and fauna (an estimated 50,000 species), has been commissioned by the Swedish Parliament. Oh! If only such ambition could be matched in the UK. We must continue to be sustained via scraps of lottery and charitable trust funds combined with the unstinting efforts of unpaid authors, artists and collaborators.
This volume covers the Syrphinae, giving detailed accounts, in Swedish, of 292 species, including nearly all the known UK species. Only *Platycheirus melanopsis*, and two virtually non-existent British hoverflies - *Scaeva albomaculata* and *S mecogramma*, are missing. There are also, inevitably, a few nomenclatural differences to those we are used to in the British Isles. For instance *Melangyna cincta* is promoted to its own genus – *Fagisyrphus*, whilst *Meligramma euchromum* is *Epistrophella*.

The really positive news for UK entomologists is that the keys are in both Swedish and English, and there is also a summary of key facts for each species in English. The species accounts in Swedish average around a page per species, this includes the large illustration (around 60mm length), inset amongst the text, and for reference a

life size illustration as well. The accounts obviously cover much ground and presumably there is much interesting information contained within, but my limited ability to read Swedish means I cannot provide much insight. In each account, there is a useful etymological explanation of the scientific name, contained in a section headed *name-giving*.

In addition to the species accounts, there are introductory sections, well illustrated with colour photographs, covering life histories, and habitat preferences. There is an extremely well produced section on morphology, where most features are illustrated in full colour with the accurate paintings that are a hallmark of this volume. Apart from the key facts, all of the foregoing is in Swedish. If the Dipterists Forum has any spare funds looking for a home, then a translation of this text might be a very worthwhile exercise.

The key utilises the now tried and tested "Aidgap" format, having illustrations placed within the couplets. The inclusion of many full colour paintings makes the keys very easy to use. English text is provided down the right hand side of the page, with the Swedish on the left. Incidentally, this is a helpful arrangement for anyone who wishes to try and translate text elsewhere in the book, as it is reasonably easy to figure out the meaning and nuance of many Swedish words by comparing with the equivalent English text in the language-mirrored couplets.

Notably, the key includes a cautionary key to female *Sphaerophoria*. This is provided with a caveat that some females will fail to run to species, but encourages users to put such specimens aside and return to them later, when more practice has been gained. Unfortunately I rarely keep female *Sphaerophoria* vouchers, so I have not felt able to test this part of the key. Interestingly, where the recent Finnish volume on Syrphidae (Haarto & Kerppola, 2007) contained a key to females in the *Platycheirus scutatus/splendidus/aurolateralis* complex, Bartsch considers females to be inseparable, so perhaps we should be suspect in the use of Haarto & Kerppola's key for these females?

Bartsch has created "vernacular" names for all species, and out of interest I translated a few to English. The genus *Platycheirus* are foot-flowerflies, and *P. albimanus* is the silver-foot flowerfly, *Chrysotoxum elegans* is the splendid wasp-hoverfly, *Eupeodes corollae* is the curious flowerfly, *Scaeva pyrastri* is the white glass-flowerfly and *Syrphus ribesii* is the yellow sun-flowerfly.

The book is rounded off with a series of sixteen plates, displaying all the species at two and a half times life size, facilitating quick and easy visual comparison across the various genera.

Overall, the key is the element of this book that UK workers will find most useful and will undoubtedly provide an essential resource for anyone tackling difficult to separate species. The very well executed line drawings and large colour illustrations make this an extremely useful resource for identifying British Syrphinae. The price of about £50 (probably around £100 for two volumes) is a little off-putting, but rest assured, for hoverfly enthusiasts, hours of enjoyment will be had by simply leafing through the pages, drinking in the marvellous artwork and photos. This is truly an outstanding "five-star" work. All Syrphid enthusiasts will want to own this book and those that don't will certainly covet it!

As I write this review I eagerly await the arrival of Volume 2 (my Christmas gift from my family), which deals with the rest of the Syrphidae in the Eristalinae and Microdintinae – another 240 species. I look forward greatly to seeing how complex genera such as *Cheilosia* and *Pipiza* are dealt with.

Reference
A. Haarto & S. Kerppola, 2007, *Finnish Hoverflies and Some Species in Adjacent Countries*.

Nationalnyckeln till sveriges flora och fauna: Tvåvingar: Blomflugor – Vol 2: Eristalinae & Microdontinae

Hans Bartsch, 2009, Artdatabanken, ISBN 978-91-88506-70-2 Price around £50 (clothbound edition). (National keys to the Swedish flora and fauna: Diptera: Flowerflies – Vol 2: Eristalinae & Microdontinae)

A week after I completed the review of Volume 1, the second volume arrived in the post, so here is a hasty review of the second volume.

The second part of this impressive work is even more of a visual feast than the first, as it contains many of the more spectacular looking hoverflies.

The first of the species accounts deals with *Callicera*, where the paintings admirably convey the lustrous beauty of flies in this genus. Elsewhere there are mouth watering representations of unfamiliar genera such as *Sphiximorpha* (even the name sounds exotic), *Spilomyia* and *Temnostoma*, as well as more familiar genera such as *Criorhina*, *Xylota* and *Chalcosyrphus.* Unlike the first volume and perhaps unsurprisingly, given that the largely amorphous looking genus *Cheilosia* occurs here, not all species are illustrated. This in no way diminishes the value of the book as a visual guide to hoverflies, as all the species displaying significant differentiating characters are illustrated. It is amongst the *Cheilosia* that the only disappointing art work is found. I feel that the illustrations of the orange haired species, such as *C. chrysocoma*, *C. grossa* and *C. bergenstammi* do not quite capture the bright vibrancy of these flies in the manner that Steven Falk did with his paintings for *British Hoverflies* (Stubbs & Falk 1983). However this is the most minor of quibbles and the paintings of these species are still a helpful representation of the flies in life.

Apart from the artwork, the excellent photographic work of Krister Hall really shines through with the wonderful subjects, varying much in form and colours, which this volume covers. I am really struck by Hall's achievement in obtaining first class photos, in life, of several uncommon species. These include *Blera fallax, Hammerschmidtia ferruginea*, *Microdon* (adult, larva and pupa), and *Chalcosyrphus valgus*. Elsewhere there are excellent photos of commoner species and I particularly admired photos of *Eumerus flavitarsis* (showing its white hind tarsi to splendid effect) and a really clear and attractive capture of *Sphegina sibirica*.

The keys will be the element of this book that most British Syrphid workers will find valuable. Most of the British species are again represented, but there are some notable absentees from the Scandinavian fauna, including for example *Eristalis horticola* and *Chalcosyrphus eunotus.* I have not had time to fully compare the two checklists, but on a pre-emptory scan through, there are few omissions. There are of course many non-British species and this work may well prove valuable in alerting British workers to potential new UK species. There are good illustrations of genitalia for *Sphegina*, *Eristalis* and three *Pipiza* species – *austriaca, fenestrata* and *lugubris*. These should make a useful additional aid for separating what can be difficult species complexes. I was particularly interested in seeing how Bartsch would treat the large genus *Cheilosia*, as this is a genus I always relish collecting and I usually enjoy the challenge of running specimens down to species. Bartsch adopts the now familiar approach of lumping species carrying similar features into groups, before further dividing them down to species level.

Bartsch's groups are based on different characters to those we are used to in Stubbs & Falk and there are just four groups:

A. Bare eyed *Cheilosia*

B. Hairy-faced *Cheilosia*

C. *Cheilosia* with only thin hairs around the rim of the scutellum

D. *Cheilosia* with both thin hairs and bristles around the rim of the scutellum

In amongst the detailed key, I noted the regular use of a new character - not referred to in British *Cheilosia* keys - the pattern of "hair spots" on the katepisternum. I'll be interested to see how well this key works when I start determining new specimens in 2010. The high quality illustrations within the keys should again prove to be an invaluable determination aid.

I can only repeat my advice given for the first volume that this is a work that all Syrphid enthusiasts will wish to own. It will be coveted for its magnificent presentation and will often be a first point of reference when confronted by critical species.

In conclusion, and by way of entertainment, here are a few more translations (courtesy of Google's translating tool) of the vernacular names awarded to some hoverflies: *Cheilosia illustrata* – spotted herb-flowerfly, *Cheilosia semifasciata* – bold leaf-hoverfly, *Ferdinandea cuprea* – gold sap-flowerfly, *Chrysogaster solstitialis* – sorrow (mourning?) flowerfly, *Volucella pellucens* – window flowerfly and *Rhingia* are beak-flowerflies.

Reference: Stubbs, A., & Falk, S., 1983, *British Hoverflies*

Interesting Recent Records

Peter Follett:

Chrysotoxum verralli 2 females 16 July 2009, Holmwood
Didea fasciata 1 male 31 July 2009, Holmwood; 1 female 20 September 2009, Beare Green; 1 female 21 September 2009 Holmwood; 1 male 8 October 2009, Holmwood.
Epistrophe melanostoma 1 female 13 June 2009 Holmwood.
Scaeva selenitica 1 female 11 August 2009, 1 male 15 August 2009, both Beare Green.
Cheilosia albipila 1 female 1 April 2009 Capel.
Cheilosia caerulescens 1 female 7 July 2009 Beare Green.
Cheilosia fraterna 3 males 26 April 2009 Oakwoodhill.
Cheilosia soror 1 female 20 July 2009, 2 females, 25 July 2009, 3 females 31 July 2009, all Holmwood.
Rhingia rostrata 1 female 14 August 2009 Holmwood.
Brachyopa bicolor 1 male 6 May 2009 Holmwood
Myolepta dubia 1 male 22 July 2009 Holmwood.
Pipizella virens 1 female 22 July 2009 Holmwood.
Volucella inanis 2 males 22 July, 1 male 14 August 2009 both Holmwood.
Eupeodes bucculatus 1 female on 22 August 2009 Capel Surrey

Leon Truscott:

Chrysotoxum elegans Penlee Battery and Penlee Point, near Rame Head (SX44), eight records between 5th June and 5th July, plus another on 21 September 2009.
Criorhina berberina Keveral Wood, Seaton (SX2955), two on 12 May 2009.
Criorhina ranunculi Two records, both in June. One at Seaton (SX3054) on 2nd and one at Penlee Battery (SX4349) on 5 June 2009.
Leucozona lucorum A second-brood specimen at Penlee Battery on 2 August 2009.
Microdon myrmicae One in the Seaton Valley (SX3055) on 29 May 2009. A new site.
Sericomyia lappona Most Cornish records come from the moors, with a few, such as the following from damp woodlands. One found at Keveral Wood on 12 May 2009: not a new site, but this is the first record from there for several years.
Xanthogramma citrofasciatum Recorded at Penlee Battery on 26 May 2009 - the fifth consecutive year at this site.

David Iliff:

Dasysyrphus friuliensis 1 female 13 May 2009 Storrs Hall, Cumbria (SD391941)
Brachyopa scutellaris 1 female 14 May 2009 Storrs Hall, Cumbria (SD391941)
Meligramma guttatum 1 female 16 August 2009 Lower Mill**,** Gloucestershire (SU026944)

Dasysyrphus friuliensis (female) photo: David Iliff

Meligramma guttatum (female) photo: David Iliff

Erratum: The final word of the first sentence of the article on *Myolepta potens* on page 2 of **Hoverfly Newsletter No. 47** should read "Gloucester" (not "Gloucestershire")

Larger Brachycera Recording Scheme

Newsletter 28 Spring 2010

Welcome to an overdue update from the Larger Brachycera Recording Scheme. I do hope I have been able to answer all the enquiries received but my apologies if some of these have taken a while. Hopefully, service will be improved in 2010. Work has been progressing steadily on the planned atlas as well. My thanks to all those who have sent spreadsheets of records – from a few tens to several thousands. They all feed into the bigger picture and will see their way into the atlas and subsequently the NBN Gateway. Some momentum was lost with BRC moving offices and losing Peter Brown as the contact. Peter had provided much help but we will be looking to timetable in production soon and will keep you posted.

Significant records received

To give some flavour of the data that has arrived during 2009 I have summarised some of the significant records for each family:

Acroceridae

A few records were received for *Paracrocera orbiculus*, *Acrocera* and *Ogcodes* spp. from a scattering of localities across Southern England (MP, KA et al).

Asilidae

Our largest Asilid *Asilus crabroniformis* has been well reported from Cornwall, Dorset, Hampshire, Surrey, Berks, Bucks and Oxford. New records of *Leptarthrus vitripennis* continue to arrive, including Colley Hill, Surrey (KA), Crowsley Park Woods, Berks (CW) and Prestwood LNR, Bucks (TM). Good numbers of records of *Lasiopogon cinctus* and *Choerades marginatus* have been added (AJ, JP, MH, RD et al). North of the border, *Machimus cingulatus* was found on 9.9.09 near Dornoch at Blackmuir wood, Inverness (MM) and *Rhadiurgus variabilis* at Ballinluig Island (SH) and in June 2009 near Dornoch at Meikle Ferry Links (MM). *Machimus rusticus* was reported from Portsdown and Bulford Field, Hants (RD, GE). Star-billing has to go to the discovery of *Machimus cowini*, previously only known from Ireland and the Isle of Man, at a SSSI in South Cumbria in 2006 (RW per SH).

Athericidae

Atherix ibis continues to be sporadically reported while the only reports received of *Atherix marginata* were from Bodmin Moor, Cornwall and Hembury Woods and Holne Wood, Devon in the 1980s and 90s (KA) and four sites in Cumbria (SH) up to 2008.

Bombyliidae

Bombylius major and the much scarcer *Bombylius discolor* continue to be well reported with some good photos and interesting observations reported. 2009 records of *Bombylius minor* came from several Dorset heaths (MP, AP, SR). Records of *Bombylius canescens* were pre-2009 but included Golden Cap, Dorset (KA), Hauxton Down and Great Cheverell Hill, Hants (GE) and 1991 records for 2 South Cumbrian woodlands (SH). *Thyridanthrax fenestratus* was seen at several sites in Dorset, Hampshire, Surrey (MP, IC, RD, SR, AP, SB) and across to Wildmoor Heath NR, Berks (MH). Alan Stubbs' comments on this species in his DD paper 'Pearce's photographs in Typical Flies' produced quite a response and many records were sent through following its publication. This prompts the plea to submit records to the Scheme so that status can be monitored, especially for such scarce species. It is worth emphasising that all records are valuable to the Recording Scheme even if they do not add a dot to a map. They can be used in many other ways relating to research and conservation. *Villa cingulata* (RDB 1) was reported from a BBOWT reserve in Bucks in 2007 and another site just across into Oxfordshire in 2008 (MH).

Rhagionidae

Of the uncommon species, *Ptiolina obscura* was reported from Duncombe Park, Yorks in 2004 and *Ptiolina nigra* from Gait Barrows NNR and Moor House NR (SH). *Rhagio strigosa* was found at its traditional site at Box Hill (KA) whilst MM reported "large numbers" of *Rhagio notatus* along the River Conlon, north-west of Inverness (MM).

Stratiomyidae

Finding *Oxycera leonina* anywhere is good but to see one in your Norfolk garden on 14.7.09 was a notable event (IR). Equally good was the discovery of *Odontomyia argentata* near Bristol on 5.5.09 (AJ) whilst the species was also found at the Lower Test NR in 2000. *O. angulata* was reported from one Norfolk site during 2004-06 (JP) and *O. ornata* from 3 Norfolk sites (JP) as well as new localities in Dorset and Hants (RA). *O. tigrina* was reported from 3 Norfolk sites plus localities in Gloucestershire and Sussex (KA). *Stratiomys chameleon* reports came from a traditional site in Oxford (MH) with *S. longicornis* from Thorney Island, Sussex and North Hayling, Hants (GE). Stratiomyids were well reported generally with good numbers of records of *Chorisops nagatomii* and *Vanoyia tenuicornis*

Tabanidae

After the rediscovery of *Atylotus fulvus* in Glen Moriston in 2007 (JB), it was good to find further specimens nearby in June and July 2009 (JB, RL per MM). *Atylotus latistriatus* was represented by records from Hythe/Calshot Marshes SSSI, Hants in 2003 (MH) and Brancaster Staithe, Norfolk in 2006 (JP). Other Hampshire records from a large batch of mainly malaise trap data from Richard Dickson included *Tababus miki, T. glaucopsis* and *T. maculicornis*.

Therevidae

Two females of *Thereva plebeja* were observed ovipositing in dry sandy soil at the Devil's Spittleful NR, Worcestershire on 12.5.09, with other records from Petersfield, Hants (RD). KM also observed a female *Pandivirilia melaleuca* around an oak stump at Drakes Broughton, Worcestershire. PP and RD found a female *Acrosathe annulata* at Whisby NR, Lincs on 12.7.09 with black erect hairs on the thoracic dorsum, corresponding to Form Y of Stubbs & Falk. *Thereva cinifera* was found at Methyr Mawr Warren on 8.7.09 (MP) and five separate *Thereva handlirschi* were located in Highland Scotland during Aug 2009, including Strathconon, Inverness and Grantown-on-Spey (MM). Pre-2009 records included *Pandivirilia melaleuca* at Churcham Orchards, Gloucestershire and a good set of records of *Spiriverpa lunulata* and *Cliorismia rustica* from river shingles across Northern England, including Cumbria, Cheshire, Yorkshire and Northumberland (SH).

Xylomyidae

Solva marginata was reported from Surrey, Derbyshire and several sites in Hants (KA, RD).

Xylophagidae

There was a larval report of *Xylophagus cinctus* from Beinn Eighe NNR along with quite good numbers of reports of the more common X. ater (KA, RD), especially from Hants.

Recorders

Thanks are due to the following recorders:

Keith Alexander/NT, Robert Aquilina, Jane Bowman, Peter Brash, Barry Brigden, Sam Bosanquet, Gordon Corbett, Ian Cross, Richard Davidson, Richard Dickson, Scotty Dodd, George Else, Peter Floyd-Spong, Robin Harley, Martin Harvey/BBOWT, Steve Hewitt/Tullie House Museum, John Hunnisett, Andy Jukes, Brian Little, Richard Lyzkowski, Murdo Macdonald/HBRG, Kevin McGee, Tony Marshall, Ken Merrifield, Ian Morgan, J. M. Parmenter, Mick Parker, Angela Peters, John Phillips, Philip Porter, Ian Rabarts, Stuart Roberts, Alan Stubbs and Chris Webster.

Rhagio perrisi – species or not?

Keith Alexander has examined an alleged *Rhagio perrisi* in Royal Albert Memorial Museum, Exeter. The Curator, Dave Bolton, let him examine the specimen identified by Audcent (from Stoke Woods, Exeter, 3.vi.1933) and the Museum also has an Audcent identified *R. tringarius* so there must have been something about it to make Audcent distinguish it from *R. tringarius*. However, it is slightly unusual that he does not appear to have published the record nor sought further confirmation.

Séguy (1926) separates the two species on the basis of *R. perrisi* having the femur and tibiae of the hind leg more of less blackish at the apex. The femur and tibia of Audcent's does have some darkening but falls in the middle range when compared with other material. This character does not therefore seem reliable in isolation and it would be very useful if anybody knows of any other named '*R. perrisi*'.

Peter Chandler is not sure that *R. perrisi* is a good species. He advises that it is recognised in Fauna Europaea and recorded from France, Spain, Austria and Switzerland but was omitted, even as a synonym, from the Palaearctic Catalogue and from the Palaearctic Die Fliegen key, possibly due to oversight. *R. tringarius* is very variable in colour and Verrall even regarded darker specimens as a separate species *R. nigriventris*. The Palaearctic Catalogue has that and several other names as subspecies of *tringarius* but with dubious validity. Presumably Audcent named his specimen from Séguy's key but structural differences would need to be demonstrated to accept *R. perrisi* or the Exeter specimen as distinct. (Thanks to Keith for this information)

Simon Hayhow
2 Dreelside, Anstruther, Fife KY10 3EF simon.hayhow@btinternet.com or
simon@scotfishmuseum.org

Oestridae Study Group

Newsletter 1 Spring 2010

Welcome to a somewhat belated first newsletter of the Oestridae Study Group. The establishment of such a group should facilitate dissemination of information, either via publication in future newsletters, or through contact with those stating an interest in the study group.

The study group embraces the traditional *sensu lato* concept of Oestridae, and therefore covers all species placed in Oestridae in the most recently-published British list (Chandler, 1998). The taxonomic position of these species within a single family has not met with general agreement by authors for many decades; hence, many publications attribute only certain species to Oestridae; whilst placing the remainder in other families. Usually this concept is achieved by raising subfamilies to family rank, e.g. Hypodermatinae to Hypodermatidae; but occasionally the concept of splitting Oestridae *sensu lato* has been achieved by transferring genera to existing families, e.g. in van Emden (1954), *Hypoderma* and *Oestrus* were placed in tribe Oestrini within Tachinidae, and *Pharyngomyia* and *Cephenomyia* [Agassiz emendation = *Cephenemyia* Latreille] were placed in subfamily Calliphorinae within Calliphoridae.

Oestridae larvae are internal parasites affecting various animals, and most oestrid species are host-specific to a single type of animal, or to a group of closely-related animals. In the natural world, Oestridae have relatively few enemies, but improved animal husbandry, via the use of noxious chemicals, has drastically reduced their occurrence in domesticated animals throughout many countries. Even before the local and national extinctions caused by widespread use of such chemicals, it is probable that most British and Irish Oestridae species occurred only sporadically and infrequently. Certainly, they have always been rarely-found by entomologists.

The optimistic British entomologist should recognise that, at best, they will only encounter Oestridae in the field on rare occasions. So, in order to avoid losing interest through consistently failing to encounter Oestridae in the field, the enthusiast should regard looking for evidence of Oestridae as a secondary issue to other work, but remain alert to the possible presence of Oestridae.

Oestridae In The Literature

There is no single publication which deals solely with either British and/or Irish Oestridae; however, there are many publications which feature notes and illustrations of species recorded from Britain and Ireland. A lengthy bibliography would be necessary if all such publications were mentioned in this newsletter; and indeed, many books of general entomological interest contain a few illustrations and basic notes. Veterinary books are also of partial relevance, for they invariably feature the Oestridae species whose larvae are injurious to domesticated animals; moreover, some veterinary books contain identification keys to species level and supplementary notes on individual species, e.g. Wall & Shearer (1997). Smith (1931) is another book that is certainly worthy of consultation, but if I was required to recommend a single book to the Oestridae enthusiast, it would definitely be Zumpt (1965), which remains an inspirational, fascinating and magnificent work.

Oestridae on the Internet

Anyone with even a slight interest in Oestridae should peruse the plethora of information accessible via the Internet. This includes many photographs including some which are superb. In addition to photographs of museum specimens, there are many of living insects and larvae, and of larvae within dissected animals, and emerging from 'warbles'. To human eyes, this remains gruesome of course, but is nevertheless a part of the natural world, and such images are educational.

An easy way to access photographs of Oestridae on the Internet is to command a search for a genus, combined with words such as 'images', 'photographs' or 'pictures', e.g. '*Gasterophilus* images'. This seems to have the desired effect of instantly accessing what is available. Fruitful searches for images can also be made for genera such as *Cephenemyia*, *Cuterebra*, *Dermatobia*, *Hypoderma* and *Oestrus*. As might be expected, there are some identification errors, e.g. one '*Cephenemyia*' at rest on a leaf is actually a female *Merodon equestris* (Fabricius) [Syrphidae].

Some Notes On British Horse Bot-Flies (*Gasterophilus*)

Over recent decades, horse bot-flies must have suffered catastrophic declines in Britain due to the widespread and fairly standard practice of 'worming' horses, i.e. treatment via the ingesting of chemicals which are sufficiently noxious to destroy any infestation of *Gasterophilus*. However, it is quite probable that all four *Gasterophilus* species on the British list are still extant in Britain. *Gasterophilus intestinalis* (De Geer) remains widely-distributed, at least in England and Wales, but other *Gasterophilus* species are probably currently very rare in Britain and in some danger of national extinction. The desires of animal husbandry aspire to total eradication of injurious species such as *Gasterophilus*, but this could only be likely achieved in Britain if all potential host-animals were 'wormed' over a time-period sufficient to entirely eradicate *Gasterophilus*. This scenario is very unlikely to be achieved as it would require full and consistent co-operation from all horse-owners.

A practical way for the entomologist to obtain material of *Gasterophilus*, is to examine fresh horse-dung during the late Spring and early Summer period for the possible occurrence of *Gasterophilus* larvae which have recently exited their host. A brief investigation of dung can be completed easily and hygienically by using a suitable twig or stick to break dung apart. Live *Gasterophilus* larvae obtained from horse-dung are fully-developed, and can be allowed to pupariate in a suitable container; whence adult flies should emerge after only a few weeks. There is obviously more chance of finding *Gasterophilus* larvae in fresh dung deposited by horses which have probably not been 'wormed', e.g. semi-wild ponies, or gypsy horses.

Entomologists have mainly noted adult *Gasterophilus* activity either around horses, or on hill-tops. When in the general vicinity of horses, and particularly semi-wild animals, the oestrid enthusiast should consider it a worthwhile activity to investigate any areas of raised ground, and particularly any rocky prominences on, or close to the summit of, hills; as it will be here that adult male *Gasterophilus* are most likely to be encountered. Females are most often noticed ovipositing on their equine hosts, and are difficult to capture in this situation due to horses possessing an aversion to any movement of nets in their immediate vicinity.

Gasterophilus intestinalis was traditionally by far the most common and widespread horse bot-fly in Britain. In this species, the females attach yellowish-white eggs to the legs and torsos of their host; therefore the eggs are particularly conspicuous on dark-bodied horses, and their area of attachment on British animals is acceptably diagnostic of *G. intestinalis*.

Smith (1931), stated that female *G. haemorrhoidalis* (Linnaeus) deposit brownish-black eggs on hairs surrounding the lips of a horse, especially the lower lip; whereas, female *G. nasalis* (Linnaeus) deposit yellowish-white eggs on the hairs beneath the jaws and occasionally on the shoulders of the equine host.

According to most authors, *Gasterophilus pecorum* (Fabricius) females do not attach their brownish-black eggs directly to equines, but instead deposit them in batches on pasture vegetation, whence they wait hopefully for ingestion by a suitable host-animal. *G. pecorum* infestation of equines is best suited, hence most likely to occur, in areas that are continuously grazed by many equines. Material in The Natural History Museum in London proves *G. pecorum* occurred in the New Forest in Hampshire throughout most of the last century.

Adults of *G. intestinalis* and *G. pecorum* have partly or wholly infuscated wings, and are on average noticeably larger than adults of *G. haemorrhoidalis* and *G. nasalis*, which both have hyaline wings.

Extinction in Britain of the Ox Warble-Flies *Hypoderma bovis* (Linnaeus) and *H. lineatum* (De Villers)

The ox warble-flies *Hypoderma bovis* (Linnaeus) and *H. lineatum* (De Villers) must now be considered to be extinct in Britain. Looking for them in any life-stage is therefore a futile exercise. Prior to 1978, both species were undoubtedly widespread in Britain, and warble-fly infestation of cattle was generally considered to be commonplace. In 1978, however, an eradication programme was initiated under the auspices of MAFF, and backed by government legislation. This co-ordinated eradication effort meant that both *Hypoderma bovis* and *H. lineatum* were driven to national extinction in little over a decade. They have likewise been eradicated from much of Europe.

A National Database

Several years ago, I began collating data from specimens held in collections, with a view to establishing an electronic database covering Oestridae *sensu lato* for both Britain and Ireland. The database is established and growing steadily, but is very incomplete in consideration of what should be achieved eventually. Recently, Mick Parker and Mike Bloxham have submitted data from specimens held in their private collections. I am very grateful for these submissions, and would urge other readers of this newsletter to also submit data from any material they either hold or have access to.

Specimens in collections

To date, I have examined Oestridae material held in a fair number of collections, including the two museums listed below. I am grateful to Paul Richards for facilitating access to the collections in Sheffield, and to Adrian Plant for facilitating access to the collections in Cardiff.

Sheffield Museum Stores, Acres Hill, Sheffield

The museum contains 2 adults in storeboxes of British dry material.

Material Without Locality Data

Gasterophilus intestinalis (De Geer): 1 ♂ in storebox no. 17.

Material With Locality Data

Gasterophilus intestinalis (De Geer)

England: Derbyshire (vc 57) or Staffordshire (vc 39): storebox 11 contains a ♀, ovipositing on horse, Flash near Buxton, Derbyshire, 1983, leg. M. E. Shirt, det. A. N. R. Godfrey. N.B. Flash sensu stricto is in Watsonian Staffordshire.

National Museum of Wales, Cardiff

The British material consists of 44 adults and 3 empty puparia. The material is dry, and contained in one drawer. Years of capture range from 1904 to 2001. [BU] = ex coll. Bangor University; [CGN] = ex coll. C. G. Nurse; [PM] = ex coll. Dr. P. Mason, accessioned in 1914.

Material Without Locality Data

Oestrus ovis Linnaeus: 15 specimens and 2 empty puparia; 12♀♀, [PM]; 1♀, leg. D. Taylor, 1982, [BU]; 1♀ & 1♂, bred ex larvae, mid July 1978, leg. R. Dunstan, [BU]; 2 empty puparia [BU]. ***Gasterophilus haemorrhoidalis*** (Linnaeus): 1♀. ***G. intestinalis*** (De Geer): 1♀ [PM]. ***Hypoderma lineatum*** (De Villers): 4 specimens; 2 [PM]; 1 det. A. Grayson: formerly placed under *H. bovis* (Linnaeus).

Material With Locality Data

Cephenemyia auribarbis (Meigen)

Scotland: Forfar (vc 90): 1♂, Glen Doll Forest, Angus, 7.7.1977, leg. M. J. Morgan, det. J. P. Dear, [BU].

Gasterophilus haemorrhoidalis (Linnaeus)

England: Dorset (vc9) or South Hampshire (vc11): 1♀, Bournemouth, 1904.

Gasterophilus intestinalis (De Geer)

England: North Essex (vc 19): 4♂♂ & 4♀♀, Frinton, 8.1919,

leg. C. G. Nurse, [CGN]. West Suffolk (vc 26): 1♀, Timworth, 29.7.1911, C. G. Nurse, [CGN]; 1♀, Timworth, 14.7.1912, C. G. Nurse, [CGN]. West Gloucestershire (vc 34): 1♀, Mitcheldean.

Wales: Monmouthshire (vc 35): 1♀, Trelleck, worrying horses, 12.9.2000, leg. J. Leach. Merionethshire (vc 48): 2♀♀, Maentwrog, 16.7.1976, leg. P. N. Crow, [BU]; 1♀, Tan-y-Bwlch, 6.7.1977, leg. P. N. Crow, [BU]. Caernarvonshire (vc 49): 1♂, Bardsey Island, mountain ridge, 5-13, 8.1985, leg. J. C. Deeming, det. J. C. Deeming 1985; 1♀, Eithinog, Bangor, 18.8.1982, leg. S. Ducker, [BU]; 1♂, swarming at summit of Moel Wnion, 30.8.1962 [possibly corrected to 1961], M.J. Morgan, [BU]: 1♀, Pont Llyfni, 9.9.1978, leg. A. Pennell.

Gasterophilus nasalis (Linnaeus)

England: South Hampshire (vc 11): 1♀ + its puparium, New Forest, Crocford C;umps [sic], SZ3599, 2.7.2001, ex horse dung, reared, coll. [sic] D. J. Mann, emerged in lab 24.7.2001, det. A. Grayson: specimen formerly with no determination label and filed under *G. intestinalis*.

Hypoderma diana Brauer

Scotland: 1♀, Rannoch, 23 or 28 [undecipherable], 5.1912.

Contact List

Oestridae Study Group Organiser:

Andrew Grayson, 56, Piercy End, Kirkbymoorside, York, North Yorkshire, YO62 6DF, ENGLAND. E-mail: andrewgrayson1962@live.co.uk

Oestridae Study Group Members:

Stuart Campbell, 4, The Laurels, Moreton, Wirral, CH46 3SU, ENGLAND. E-mail: stuartcampbell4@tiscali.co.uk

Charles Dewhurst FRES, E-mail: charles.dewhurst@pngopra.org.pg

Martin Love FRES FLS AIEEM, E-mail: martin@halburnecology.co.uk

Please inform the Oestridae Study Group Organiser if you would like to be added to the Contact List as a 'Group Member'.

References

Chandler, P. J. (1998) Checklists of Insects of the British Isles (New Series) Part 1: Diptera. Handbooks for the Identification of British Insects 12. London: Royal Entomological Society of London.

Smith, K. M. (1931) A Text Book of Agricultural Entomology. Cambridge: Cambridge University Press.

van Emden, F. I. (1954) Diptera: Cyclorrhapha: Calyptrata. Handbooks for the Identification of British Insects 10 (4a). London: Royal Entomological Society of London.

Wall, R. & Shearer, D. (1997) Veterinary Entomology. London: Chapman & Hall.

Zumpt, F. (1965) Myiasis in Man and Animals in the Old World. London: Butterworth's.

Andrew Grayson 26.12.2009

Sciomyzidae Recording Scheme

Newsletter 5 Spring 2010

Progress with preparing new identification keys

Unfortunately, due to my health problems during the first six months of 2009, progress was much slower than planned on the finalising the new identification keys that were last tested at the BENHS Workshop on 17 May 2008. However, some work has been done to address the problems identified with the key to genera and the next stage will be to prepare detailed figures for the keys and plates. A new microscope has been ordered to enable digital images to be taken of Sciomyzidae wings and other identification features, so work will resume on preparing the figures and refining the species keys over the coming months in early 2010.

Sepedon sphegea - Judy Webb

Some recent publications on Sciomyzidae

There have been several recent publications from detailed investigations in Ireland into Sciomyzidae in wetland biotopes, which have added a species new to the British Isles and others new to Ireland. This research is also adding to our knowledge of the ecology and status of the Irish Sciomyzidae fauna, this information will help greatly with the future management and conservation of threatened wetlands.

Pherbellia stackelbergi Elberg was reported as a species new to Ireland from an Owen Emergence Trap by Staunton et al. (2008). This species has not yet been seen in Britain, so small (3.0-3.5mm long) *Pherbellia* resembling *P. brunnipes* (Meigen) should be carefully examined. *P. stackelbergi* differs from *P. brunnipes* by possessing a row of tiny hairs along the inner, lower front margin of the eye and hairs between the front orbital seta and the base of the antenna. There are also differences in the structure of the male genitalia (see Rozkošný, 1987) and probably there will be differences between these species in the female postabdomen as well, when these structures are investigated.

Staunton, J., Williams, C.D., McDonnell, R.J., Maher, C., Knutson, L. & Gormally, M.J. 2008. *Pherbellia* (*Oxytaenia*) *stackelbergi* Elberg, 1965 new to the British Isles, with comments on generic and sub-generic placement. *Entomologist's Record & Journal of Variation* **120**: 173-177.

It is quite possible that other additional *Pherbellia* may yet be found in Britain, so it is certainly worthwhile collecting numerous *Pherbellia* and carefully examining the male genitalia alongside the illustration in the standard European publications (listed in the identification references cited below).

Gittings and Speight (2008) reported *Colobaea pectoralis* (Zetterstedt, 1847) and *Pherbellia dorsata* (Zetterstedt, 1846) as new to Ireland from Malaise Trap studies on wetland sites. Both of these species are known from Britain, this paper shows the value of intensive trapping surveys in characterising Sciomyzidae faunas.

Gittings, T. & Speight, M.C.D. 2008. *Colobaea pectoralis* (Zetterstedt, 1847) and *Pherbellia dorsata* (Zetterstedt, 1846) snail-killing flies (Diptera, Sciomyzidae) new to Ireland. *Irish Naturalists' Journal* **29**: 116-118.

Alan Stubbs found a male *Tetanocera montana* Day from Bruern Abbey in the North Cotswolds, England on 9 June 2008 (Stubbs, 2009), following the previous discovery of the species in Ireland (Speight, 2007). This species is most reliably separated from *Tetanocera arrogans* Meigen by carefully checking the male genitalia, although it is likely that there will also be good identification characters in the female postabdomen (yet to be defined and illustrated).

Stubbs, A. 2009. *Tetanocera montana* Day, 1881 (Diptera, Sciomyzidae) new to Britain from Midland England. *Dipterists Digest* **16**: 14.

Speight, M.C.D. 2007. *Rhaphium nasutum* (Diptera: Dolichopodidae), *Pherbellia rozkosnyi* & *Tetanocera montana* (Dip.: Sciomyzidae), insects new to Ireland and *Geomyza balachowski* (sic) (Dip.: Opomyzidae), presence in Ireland confirmed. *Entomologist's Record & Journal of Variation* **119**: 85-91. *Adds* T. montana *new to Ireland from Co. Cork*.

Identification References for European Sciomyzidae

This list is repeated from previous reports for those new to recording Sciomyzidae. Of these volumes the monograph by Vala is the easiest to obtain (currently at £55 excluding postage from Pemberley Books) and this also has the considerable advantage of including all the known British species.

Rivosecchi, L. 1992. *Sciomyzidae*. Fauna d'Italia. xi + 270pp. Edizione Calderini, Bologna. *Keys to British species except* Colobaea pectoralis, Pteromicra angustipennis, P. glabricula, P. leucopeza, P. pectorosa, Pherbellia argyra, P. knutsoni, P. stackelbergi, P. stylifera, Antichaeta brevipennis, Renocera striata, Tetanocera freyi, T. montana, T. phyllophora, T. robusta.

Rozkošný, R. 1984. The Sciomyzidae (Diptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica* **14**: 1-224. *Keys to all British species except* Pherbellia knutsoni.

Rozkošný, R. 1987. *A review of the Palaearctic Sciomyzidae (Diptera)*. University J.E. Purkyně, Brno. *Keys to all Palaearctic species known at the time of publication*.

Vala, J.-C. 1989. *Diptères Sciomyzidae Euro-Méditerranéens*. Faune de France 72. 300pp + 9 plates. Fédération Française des Sociétés de Sciences Naturelles, Paris. *Keys to all British species*.

Processing records for the Recording Scheme

Many thanks to all those who have sent in records to me during 2009, there have been some substantial contributions including from counties with relatively few records previously. These are currently being processed and compiled onto Recorder 6.

It is now realistic for me to prepare distribution maps in 2010 for publication in a new atlas. Therefore, if you have any records of Sciomyzidae and Phaeomyiidae please send them to me as E-mail attachments or on paper for me to process. I plan to abstract data from the material in the Natural history Museum this winter, a task begun some years ago but not yet completed.

Ian McLean, 109 Miller Way, Brampton, Huntingdon,
Cambridgeshire PE28 4TZ.
01480 450554
ianmclean@waitrose.com

Dipterists Forum

Secretary

John Kramer

31 Ash Tree Road, Oadby, Leicester, Leicestershire, LE2 5TE.

john.kramer@btinternet.com

Treasurer

Howard Bentley

37, Biddenden Close, Bearsted, Maidstone, Kent. ME15 8JP

Tel. 01622 739452

howard@hbentley.wanadoo.co.uk

Field Meetings

Mr. R.K.A.Morris

7 Vine Street, Stamford, Lincolnshire PE9 1QE

roger.morris@dsl.pipex.com

Workshops = Indoor Meetings Organiser

Malcolm Smart

"Southcliffe", Pattingham Road, Perton, Wolverhampton, WV6 7HD

malcolmsmart@talktalk.net

Membership

Mr M. Parker

9 East Wyld Road, Weymouth, Dorset, DT4 0RP

jmparker_87@hotmail.com

Conservation / BAP and Adopt a species

Barbara Ismay

schultmay@insectsrus.co.uk

01844-201433

Dipterists Bulletin Editor

Darwyn Sumner

122, Link Road, Anstey, Charnwood, Leicestershire LE7 7BX.

0116 212 5075

Darwyn.sumner@ntlworld.com

Publicity

Judy Webb

2 Dorchester Court, Blenheim Road, Kidlington, Oxon. OX5 2JT

judy.webb@virgin.net

01865 377487

Dipterists Digest Editor

Peter Chandler

606B Berryfield Lane, Melksham, Wilts SN12 6EL 01225-708339

chandgnats@aol.com

Web Manager

Stuart Ball

255 Eastfield Road Peterborough PE1 4BH

stuart.ball@dsl.pipex.com

Recording Schemes & Study Groups

Whilst all schemes will readily accept records in written form the following symbols are used to indicate some of the known (or surmised) methods by which Scheme Organisers may currently receive records electronically:

Recorder **MapMate** **Microsoft Access** **Spreadsheet (Excel)**

Square brackets indicate that the organiser can handle records in the format indicated.

Potential recorders really need to know your preferred recording format so please inform the Bulletin Editor in time for future updates

Chironomidae

Dr P.P. Roper

South View, Sedlescombe, Battle, East Sussex TN33 0PE

Pipunculidae

David Gibbs

6, Stephen Street, Redfield, Bristol, BS5 9DY

davidjgibbs@aol.com

Drosophilidae - Fruit Flies

Dr B Pitkin

c/o Kim Goodger, Dept of Entomology, Natural History Museum, Cromwell Road London SW7 5BD Tel. 020 7942 6986

Anthomyiidae

Mr Michael Ackland

5 Pond End, Pymore, Bridport, Dorset, DT6 5SB

mackland@btinternet.com

Culicidae - Mosquitoes

Jolyon Medlock

Health Protection Agency, Porton Down, Salisbury, Wiltshire SP4 0JG

jolyon.medlock@hpa.org.uk

Dixidae - Meniscus midges

Dr R H L Disney

University department of Zoology, Downing Street Cambridge CB2 3EJ

Chloropidae

John Ismay

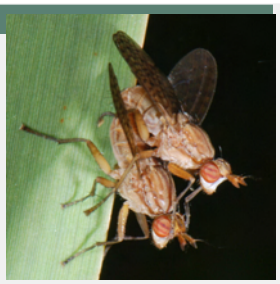
schultmay@insectsrus.co.uk

01844-201433

Please notify Dr Mark Hill of changes:BRC (CEH) McLean Building, Benson Lane, Crowmarsh Gifford, Wallingford, Oxfordshire, OX10 8BB (Tel. 01491 692650) brc@ceh.ac.uk

Dipterists Forum

Sciomyzidae - Snail-killing Flies



Dr I F G McLean

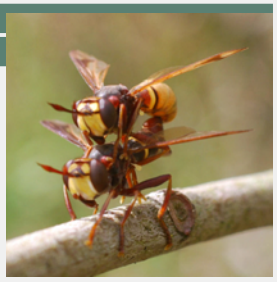
109 Miller Way, Brampton, Huntingdon, Cambs PE28 4TZ

ianmclean@waitrose.com

Darwyn Sumner

darwyn.sumner@ntlworld.com

Conopidae, Lonchopteridae, Ulidiidae & Pallopteridae



Mr D K Clements

7 Vista Rise, Radyr Cheyne, Llandaff, Cardiff CF5 2SD

dave.clements1@ntlworld.com

Sepsidae

Steve Crellin

Shearwater, The Dhoor, Andreas Road, Lezayre, Ramsey, Isle of Man, IM7 4EB

steve_crellin1@hotmail.co.uk

Tachinid

Chris Raper

22 Beech Road, Purley-on-Thames, Reading, Berks RG8 8DS

chris.raper@hartslock.org.uk

Matthew Smith

24 Allnatt Avenue, Winnersh, Berks RG41 5AU

MatSmith1@compuserve.com

Tipuloidea & Ptychopteridae - Cranefly

Mr A E Stubbs

181 Broadway Peterborough PE1 4DS

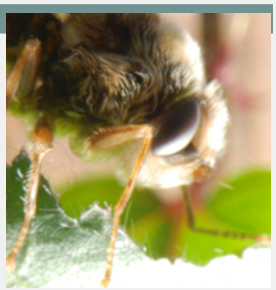
co-organiser: John Kramer

31 Ash Tree Road

Oadby, Leicester, LE2 5TE

john.kramer@btinternet.com

Oestridae



Andrew Grayson

56, Piercy End, Kirkbymoorside, York, YO62 6DF

andrewgrayson1962@live.co.uk

Hoverflies

Dr S G Ball stuart.ball@dsl.pipex.com

255 Eastfield Road Peterborough PE1 4BH

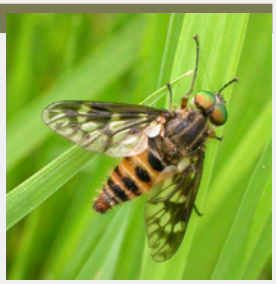
Mr R K A Morris roger.morris@dsl.pipex.com

Newsletter editor

David Iliff davidiliff@talk21.com

Green Willows, Station Road, Woodmancote, Chel-tenham, Gloucestershire GL52 9HN

Larger Brachycera



Simon Hayhow

simon.hayhow@btinternet.com

Tephritid Flies

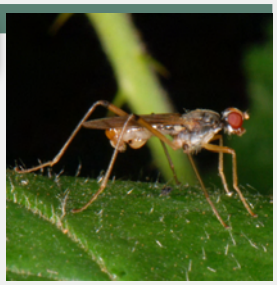
Mr Laurence Clemons

14 St John's Avenue

Sittingbourne

Kent ME10 4NE

Stilt & Stalk Fly



Darwyn Sumner

122, Link Road, Anstey, Charnwood, Leicestershire LE7 7BX.

0116 212 5075

Darwyn.sumner@ntlworld.com

Mycetophilidae and allies - Fungus gnats

Peter Chandler

606B Berryfield Lane, Melksham, Wilts SN12 6EL

01225-708339

chandgnats@aol.com

Empid & Dolichopodid

Dr Adrian Plant

Curator of Diptera, Department of Biodiversity and Systematic Biology, National Museum & Galleries of Wales, Cathays Park, CARDIFF, CF10 3NP

Tel. 02920 573 259

Adrian.Plant@nmgw.ac.uk

Martin Drake, Orchid House, Burridge, Axminster, Devon EX13 7DF.

martin_drake@btopenworld.com