

# DIPTERA



## RECORDING SCHEMES BULLETIN NO 22, APRIL 1987

This issue gives details of meetings for the forthcoming season, and gives news from the Recording Schemes.

### ANNUAL MEETING AND DIPTERIST'S SUPPER, 3 OCTOBER 1987

The date has had to be brought much further forwards than usual in order to gain use of the necessary rooms. Please make sure that you put a note in your diary so that you don't miss this major event in the dipterists calendar. The venue is at the British Museum (Natural History) as usual, and full details will be included in the next Bulletin. We have been fortunate in that the Museum authorities will not be charging us for the use of the rooms we occupy during the day, however, all participants will be required to pay the new standard public admission charge of £2 (the procedure will be announced in the next Bulletin). Hopefully you will take the view that this will not add greatly to the cost of the day when compared with the cost of travel, etc., and overall the cost of the annual meeting and supper is still considerably less than for many other comparable events in entomology.

### FIELD MEETINGS IN 1987

#### Bangor, 4-12 July 1987

Over 20 dipterists have booked for the main summer field meeting based at Bangor in north Wales. It should be possible to accommodate a few more on this meeting, so if you are interested please write to Ian McLean as soon as possible. There is a deposit of £5 for each person booking (cheques payable to 'University College of North Wales'). Previous experience in North Wales has shown that the wide variety of high quality woodlands, wetlands, coastal habitats and uplands all support plenty of interesting flies and offer scope for many interesting discoveries to be made. This is an excellent opportunity to get to know more about this fascinating area of Britain, and whether or not you have experience in recording flies you will be very welcome to come along. It is always good to see new people joining in the activities of the recording schemes, and we always aim to make the field meetings as informal and friendly as possible. If you wish to book please write to: Ian McLean, Nature Conservancy Council, Northminster House, Peterborough, PE1 1UA (Tel. 0733 40345).

#### Wealden Edge Hangers, Hampshire 30 and 31 May 1987

Mixed old woodland on Chalk and Upper Greensand escarpments in the Selborne area. Seemingly a good dead wood interest (all 4 Criorhina, B. laphriformis, B. lenta, X. xanthocnema, all taken in 1986) but also wood edge habitats, pockets of chalk grassland (M. devius), calcareous marsh, etc. Excellent DB&B in middle of woodland SSSI, caters for 6; other B&B available in Selborne. Also, people most welcome for the day: Sat. 30th, meet at end of No Through Road at top of Ashford Hanger, SU 737270, 10.15am. Sun. 31st, meet in Selborne village car park (next to Selborne Arms), SU 743335. Further details (habitat information, accommodation list, etc) from: Matthew Oates, The Lodge, Wyck Place, Wyck, Alton, Hampshire GU34 3AH. Tel. Alton (0420) 82716.

### **The New Forest, Hampshire 6 and 7 June 1987**

A joint meeting with the BENHS, this is part of the New Forest survey which aims to add to our knowledge of the insect fauna of this vast area of ancient woodlands, bogs and heaths. This particular meeting is hopefully timed to coincide with the main emergence of the dead wood fauna including hoverflies, craneflies and Empididae. On Saturday 6 June the venue is Eyeworth Wood, meet at 10.30 in the car park at SU 229146. On Sunday 7 June the area to be recorded is Mark Ash Wood, meet at 10.30 in the car park at SU 247072. Please let Ian McLean (address above) know if you are going to attend on either of these days.

### **The Wyre Forest, Worcestershire 5-7 June 1987**

Following a very successful meeting last year, Nigel Jones has again agreed to lead a field meeting in this extensive and varied area of ancient woodland. Previous experience indicates that there is an exceptionally rich and interesting hoverfly fauna in many parts of the forest, and as before this meeting has the added attraction that free accommodation is available at the Frank Chapman Centre, Bewdley. Please make your booking with Nigel Jones, c/o County Valuer and Land Agent, Shire Hall, Shrewsbury SY2 6ND (Tel 0743 252362).

### **Scottish Dipterists Meeting, 13 and 14 June 1987**

This will be based in Dumfries and Galloway, and hopefully will include a visit to Torrs Warren, the outstanding coastal sand dune system owned by the MoD. Contact Graham Rotheray, Royal Museum of Scotland, Chambers Street, Edinburgh EH1 1JF (031-225 7534) or Ian MacGowan, 40 Hamilton Street, Tillicoultry, Clackmannanshire for further details, including the accommodation which is available.

### **Scottish Entomologist's Field Meeting: 3-5 July**

These meetings, with field entomologists of all disciplines, have become very well attended. The seventh such meeting will be based at Achmara Outdoor Activities Centre, Argyll (grid ref NR 781872). This is at the NE corner of Loch Sween (on the mainland opposite the Isle of Jura).

Among the habitats available are mixed deciduous woodland, rich wet flushes and excellent coastal habitats. There are two NNRs and numerous SSSIs within easy reach. It sounds as though Jura and Gigha Island are practical as day trips.

Scottish dipterists usually attend these meetings and hopefully there will be good representation in this interesting area (Graham Rotheray can be consulted). For details of the meeting, including booking form, write to Dr R P Knill-Jones, 2 Lilybank Gardens, Glasgow G12 8QQ. Any dipterists from other parts of Britain who can include this meeting as part of a holiday visit to Scotland will be welcome to join in.

### **Field Meetings of the Yorkshire Naturalists Union Entomological Section in 1987**

1. 21 March. Askham Bog, York. Meet 10.30am (SE 573497) to enter the Bog at the SE corner. Indoor meeting to follow at Heworth Croft Science labs., College of Ripon & York St John, York 2.00pm. Symposium on the invertebrate fauna of Askham Bog. Leader Clifford J Smith. Details Mike Archer (York 25204).
2. 26 April. Hall Dike & Honley Wood (Huddersfield). Meet Healey House picnic area (SE 116123), 10.00am. Details (sae please), David Maude, 9 The Plains, Marsden, Huddersfield, HD7 6AL.
3. 16-17 May. Joint meeting, Royal Entomological Society, YNU Entomological Section, Doncaster Field Naturalists' Society. Weekend symposium (indoor and field), on the peatlands of lowland England. Contact Peter Skidmore (Doncaster 734444) for details.

Entomologists, whether members of the YNU or not, will be very welcome at the first two meetings. With regard to the joint May meeting I think it will be necessary to register in advance and non-members will be welcome to attend.

Roy Crossley, 46 St Davids Road, Otley, West Yorkshire LS21 2AN.

## REPORTS FROM PREVIOUS FIELD MEETINGS

### MENDIPS, OCTOBER 1986

Ten dipterists attended the long weekend, an encouraging increase in numbers compared with the last two years, and including several new faces.

The party was based in a large farmhouse near Wells, with excellent accommodation and food. We had a lounge to ourselves which was soon modified into a lab. The weather was reasonably kind and working mainly in two groups we managed to visit most of the sites that were known to be worth recording. All sites were in west Somerset apart from 2 in Avon.

We did really well on the fungus gnats, even though the list of 135 species was only middling for our autumn meetings. The number of scarce species was particularly good, including one new to science and 2 fungus gnats new to Britain. The most productive sites were Cogley Wood (65 species) and Ebbor Gorge NNR (60 species). (The week long meeting in summer 1985 produced 133 species, the combined total for the 2 meetings being 189). Peter Chandler seemed well pleased, even though he suffered from being taken through an SAS style assault course route into a gnatty ravine.

The list of crane flies was reasonable, though numbers low this autumn. The best find was Limonia danica at Shapwick NNR. Meniscus midges included the rare Dixa maculata. We did fairly well on other families, especially Heleomyzidae - which included Scoliocentra caesia.

## NEWS FROM THE SCHEMES

### Cranefly Recording Scheme

At the last Annual Meeting Tipula (Savtschenkia) invenusta was exhibited as new to Britain by Geoff Hancock. This was a particularly exciting discovery since it was bred from larvae found in the field (under moss on boulders). It comes from the top of Ben Lawers so other base rich mountains may well be worth searching. He will be publishing a formal note to place it officially on the British list.

### Mosquito Recording Scheme

The FBA key did not come into print as soon as anticipated. Recent enquiries suggest that the text is not yet with the printers and the time scale is now vague. Stringent cuts in FBA finances have seemingly upset forward planning.

### Mycetophilidae Recording Scheme

Those of you who attend field meetings will not be surprised to learn that Peter Chandler has accumulated a very large quantity of data on fungus gnats. The British (and Irish) lists have been advanced considerably and the geographic/habitat perspective has been developing steadily.

BRC has produced a record card so that the substantial data accumulated by Peter from various sources can be assembled for computerisation and atlas production in a few years time. This is seen largely as a specialist one man band scheme, with some data from the few people who have become confident in identification.

An RESL Handbook (9, pt 3) covers about half the British fauna and a paper covering number of recent additions is in preparation. There is no up to date key for the Mycetophilinae. Great care is necessary since extra species, including those new to science, are turning up regularly.

Peter Chandler is thus organiser of the scheme. He is prepared to identify collections of pinned material, though this is a rather time consuming process. The most efficient procedure is to send envelopes with bulk samples (labelled with site data, grid ref, habitat and date of capture; keep envelopes in a crush proof container). Those of you doing site surveys may welcome this chance to build up a fungus gnat list and if you visit interesting areas on your travels please bear in mind that this scheme will welcome material.

Whilst fungus gnats occur in a very wide range of habitats, even mountain tops, the richest places tend to be woodlands since this is where the richest fungus floras occur. Some species breed in leaf litter. Sweeping is the quickest means of obtaining samples, especially in ravines with streams, on the shaded side of stone walls, about dead wood, fruiting fungi and among dogs mercury, ferns and bracken. During hot weather adults can form large concentrations in the deeper shade in the fork between root buttresses at the base of tree trunks and in moist dark places in overhangs of stream banks. In sunny but cool weather, they will be most active where dappled sun provides warmth. Light traps often attract fungus gnats in numbers. There are currently over 480 species known in Britain, the better sites yielding 60 or more species in one visit. Some species will be found during all but the most severe winter weather. Late May-early June provides a peak, often continuing well into July. Another peak occurs in September-October, tailing out into December if the autumn is wild. The spring and autumn faunas are different, though some species occur during both seasons.

### **Larger Brachycera Recording Scheme**

The majority of data is now in BRC computers, the hold up being the instalation of new hardware. BRC is optimistic that there will be draft maps for the next autumn meeting and an atlas to all recorders in the scheme next winter.

The input of data has been substantial and some very interesting maps should be on their way. Please carry on recording, these first round maps are a spur towards even better maps, and of course the recording scheme aims to encourage more effort on the ecology, biology and life history of the various species.

A Newsletter is being circulated to all those registered with the scheme. Among the newsletter items - 'a stampede of strat larvae to grapefruit skins'. Thanks are passed to Tony Irwin for his period as organiser which has established the scheme on a sound footing; Martin Drake has now taken over.

New generation test keys are available for Asilidae, Stratiomyidae (selected genera), Tabanidae and Therevidae, via the scheme organiser if you want them and have not received them already.

If anyone has unpublished rearing data or preserved material of the early stages Alan Stubbs would be interested to hear.

### **Hoverfly Recording Scheme**

Following the discussion at the last Annual Meeting, an Advisory Network has been arranged. For the moment there will be no single national organiser. Instead there is a list of local representatives of the scheme who will cover basic enquiries for advice within their county/part of the country. Those wishing to register with the scheme (to receive newsletters etc) or needing supplies of record cards should write to BRC, c/o

Brian Eversham (Monks Wood Experimental Station, Abbots Ripton, Huntingdon, Cambs). If you are already registered with the scheme, fuller details may be found in the latest issue of the Hoverfly Recording Scheme Newsletter (dated April or May 1987).

Our thanks are passed to Philip Entwistle who has been scheme organiser in recent years. He steps aside at a time when his work commitments are increasing and the scheme grows larger. His noble efforts are greatly appreciated.

BRC expresses its thanks, and astonishment, for the large number of records which have flowed in. The installation of bigger and better computing facilities are causing a hiatus at the moment but a big push in feeding the records in is due to start this autumn.

The reprint (with supplement incorporated) of 'British Hoverflies' was delivered by the binder on 20th February. The prolonged delay resulted from the long illness of a key person at the printers. Anyway, 120 have been despatched already. Andy Callow is the distributor (25 Cranes Park Avenue, Surbiton, Surrey KT5 8BS), cheques payable to British Entomological & Natural History Society. The book (hardback only this time) is £21 (or £15 if you are registered with the Hoverfly Recording Scheme and say so) + £1 60 p&p. The supplement (as a separate, if you have the first print book) is available for £1 + 30p p&p. There is no restriction on the number of copies that may be ordered by those registered with the scheme.

Publication of 'Hoverflies of the Sheffield Area and North Derbyshire' was delayed. It is now in advanced proof and should be in print shortly. The cost will be £1.50 including p&p, cheques payable to Sheffield City Museum - orders may be placed via Derek Whiteley, who is the author.

### **Sepsidae Recording Scheme**

BRC has now fully computerised the first phase of data. Maps have been prepared and accompanying text compiled (as exhibited at the November meeting). A provisional atlas should be available by the time you receive this Bulletin.

The data set has 6127 records covering 983 10km squares, a very useful start. The commonest species, S. cynipsea has 946 records in 470 10km squares. The distribution of some of the more restricted species is becoming clearer, with some interesting patterns, especially where records occur well outside the main centre of distribution.

It is to be hoped that the provisional atlas will be an incentive to keep the flow of records coming into the scheme organiser, Adrian Pont.

### **NEWS ITEMS**

#### **Liverpool Museum Diptera Holdings**

There are about 57,000 flies in the museum's collection.

30,000 of these are from medically important groups in the Liverpool School of Tropical Medicine material. This comes from well known medical entomologists such as Newstead, Evans, Patton, Austen and Neave. The collection has only recently arrived at the museum and its full significance has yet to be investigated.

The remaining 27,000 flies are British. Between 60 and 80 percent of British species are represented in the Syrphidae, Tabanidae, and other larger Brachycera. The cover is also good for many other macro-diptera; however our species representation is mediocre for many small acalyptrates and small Nematocera and virtually non-existent for tiny flies like gall midges and fungus gnats. Diptera larvae are very poorly represented.

The taxonomy and nomenclature of many families needs updating and it is our policy to do this as new keys (or friendly experts) become available; Syrphids, Larger Brachycera and Tipulids are now re-identified. Once the curation is complete the data is available for distributional recording schemes.

The collections are amalgamated into a systematic sequence and made up of the following elements:-

Harry Britten (1870-1954) was one of the best entomologists this region has produced. The many thousands of flies he sold us in the 1940s come principally from Lancashire, Cheshire and north Derbyshire. They form the backbone of our Diptera holdings.

Joseph J Collins (1865-1942) (not the more famous J E Collin) is the collector of several hundred specimens taken in the 1930s in Oxfordshire; they provide cover for many southern species.

William J Fordham (1882-1942) provided the museum with many thousands of insects of all orders from Yorkshire and North-East England. Unfortunately many of these were destroyed in the war-time fire.

Charles Malcomb Jones (1908-1966) collected a few thousand Syrphids and larger Brachycera from North West England and North Wales in the 1960s.

George Sidney Kloet (1904-1981) of the famous Kloet & Hincks check-list was the collector of several hundred Diptera from North-West England and North Wales during the 1920s.

J H Murgatroyd. Next to Harry Britten, the most important part of the fly collections. As well as his own material from all over Britain, the Murgatroyd collection included the Collins & Kloet specimens.

C D Day wrote a book on Tachinid Flies and gave us his collection which comes particularly from Dorset.

E G Hancock worked at the museum in the late 1960s and early 70s concentrating upon Tipulids.

The Museum's facilities include good quality stereo and monocular microscopes, good runs of periodicals and books, and friendly staff.

If you would like to use the Museum collections and facilities, please write or telephone Ian Wallace or Stephen Judd, Department of Invertebrate Zoology, Liverpool Museum, William Brown Street, Liverpool. Tel. (051) 207 0001).

#### **Admission charges at the Natural History Museum - and some other matters**

Many of you will have been alarmed to hear that charges are being introduced for admission to London's Natural History Museum from 1st April. Rest assured that this applies only to the general public visiting the galleries, and not to bona fide visitors to the scientific departments. (And, in any case, admission will still be free from 4.30 pm until closing time at 6.).

The Diptera collection and library will remain available for consultation, without charge, to the majority of Dipterists. Those who are working for commercial organisations and wish to use the collection for their official work, and those who wish to use the collection and the information it contains for personal or corporate financial gain, can expect to be charged a bench fee or a consultation fee. This is nothing new, and is actually a Treasury directive that has been in operation for the last few years. Students and equivalently funded users of the collection will be requested to pay a bench fee, and should take account of this when writing their project descriptions.

Please, for your own convenience and for that of the hard-pressed Museum staff, ensure that you have an appointment when you visit the Entomology Department. Phone or write to Adrian Pont (ext 451/604). And, to avoid possible misunderstandings, do explain the nature of your work and your need for consulting the collection.

It is not part of the Museum's function to provide a free identification service, though it has often been done in the past in various groups of Diptera of economic importance. The Treasury now requires that a charge be implemented equivalent to at least the cost of carrying out identification work, but the charge may be waived if the work benefits previously approved Museum research and collections development projects.

Adrian Pont, Entomology Department, British Museum (Natural History), Cromwell Road, London SW7 5BD.

### **RES Fellowship at the Natural History Museum**

The Royal Entomological of London has appointed Dr Paul Williams as a Research Fellow for three years, to work on Diptera in the Department of Entomology of the Natural History Museum. Paul will take up his post in June, and his task will be the production of a new identification Handbook to British Tachinidae.

Paul will certainly want to write something in this Bulletin in due course and to make contact with all those who are the slightest bit interested in Tachinidae. But in the meantime, start sorting your collections and gathering material, particularly reared material with puparia and host data ... and encourage all those Lepidopterists, Coleopterists and Hemipterists to keep the parasites that hatch out in their breeding cages.

### **Found**

In the Natural History Museum Conversazione Room after the Dipterists' Supper: a bag containing a new BMNH tea towel, and the game Mousie Mousie. Owner please claim from Adrian Pont.

### **A thank you from NCC**

As from 1 April, Ian McLean has taken over responsibility for terrestrial invertebrates within the Chief Scientist's Directorate in NCC. I have stepped aside on health grounds.

May I take this opportunity of thanking all those who have given NCC support in recent years. In particular your help has so constructively been given to the Invertebrate Site Register, which is already in active service in most counties as regard the conservation of sites. The national review for the Diptera, co-ordinated by Steven Falk, will soon be completed as one of the very tangible outcomes of many peoples experience and help. Ian has done much to keep the show on the road while I have been poorly and I know that he already carries your confidence and encouragement. Two permanent staff have been appointed to work with him, Stuart Ball and Roger Key, and together they will be maintaining the efforts to ensure the best invertebrate sites are safeguarded and appropriately managed.

I shall still be involved in conservation and entomology with NCC so that my experience is still deployed. The recording schemes are separate from NCC, though the edges get very blurred indeed, and for the moment at least I will try to do my part in keeping the cogs whirring.

Alan Stubbs

## New RESL Keys

The last Bulletin spoke with optimism that the Tephritid key would be out about now, with Sphaeroceridae to follow shortly. There have been delays so optimism will now have to centre on the latter part of the year.

The BM (NH) are taking over the editorship and production of the series, retaining the RESL title.

## Dolichopodidae and Empididae Newsletter

Another newsletter is being produced this spring, with a fair amount of interest being generated in these families. If you did not receive the last newsletter and wish to be added to the mailing list please write to one of the editors - Roy Crossley and Anthony Bainbridge.

## Troublesome Pipunculidae!

Surely I cannot be alone in finding Pipunculidae troublesome. Coe's RESL was a noble attempt at advancing knowledge of the family but the keys can be cumbersome and frustrating. Since material is slow to come by, in recent years I have been keeping practically every Pipuncalid I have come across. Some other dipterists do the same, in the hope that something can be done with these flies in the future.

Apart from the occurrence of obviously new species, it is quite likely that there are some more subtle species splits to be recognised (any comments relevant to construction of keys on 'var, A.,' 'species B' basis welcome). There are no doubt some worthwhile field craft ideas on how to find Pipunculids since it is all too common to return home empty handed. I know of 2 relevant unpublished PhD theses (M Jervis & Benton) and will be contacting the authors.

I have so far constructed draft new keys to Pipunculus, Tomosvaryella (ex. Alloneura) and a simplified version of Coe's key to Verrallia. These are available for anyone willing to have a go and I would be interested to hear from anyone who is collecting the family so that the extent of interest can be ascertained.

Alan Stubbs

## AND NOW ..... HAPPY 100,000TH BIRTHDAY

What could you have possibly done to deserve such a greeting? Well, its your own doing, at least the hoverfly fans among our midst. According to BRC's calculation, they are now in possession of 100,000 hoverfly records. That puts the scheme into the big league even among schemes that have been running for much longer. It also explains why the atlas is not 'instant'. But please don't sit on your laurels (tarsi, palps, rotting banana skin or any other entomological equivalent) since surely we shall be able to acclaim another major birthday fairly soon - the next target  $\frac{1}{4}$  million? Easy!

Central Panel  
of Diptera Recording Scheme Organisers

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