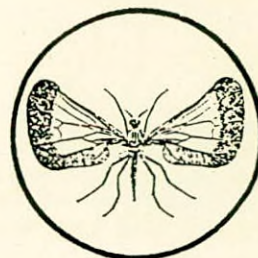


DIPTERA



RECORDING SCHEMES BULLETIN NO 32, SEPTEMBER 1991

Details are given for the annual meeting and supper. The venue for the autumn field meeting is announced. News items are included.

ANNUAL MEETING OF THE DIPTERA RECORDING SCHEMES - 2 NOVEMBER 1990

The Natural History Museum is our venue with the usual facilities. The Museum is making available 10% discount vouchers covering all sales at the bookshop (RES Fellows get 25% discount on RES).

We are grateful to the Trustees of the NHM for use of facilities and the above discount.

ACCESS ARRANGEMENTS

Those attending the meeting are asked to pay the standard admission charge at the entrance to the Museum (currently £3.50 or £2 for full time students, the unemployed and OAPs; proof of status required).

Morning Session - main lecture theatre

Chairman - Dr Anthony Brainbridge (Empid & Doli Newsletter co-editor)

11.00 - 11.30 The East Anglian Wetland Survey. Andrew Foster

11.30 - 12.00 An introduction to Scathophagids Dr Stuart Ball

12.00 - 12.30 Dolichopodidae of some Marshland Habitats. Dr Marc Pollet

12.30 - 1.00 Sent to Coventry! Steven Falk

LUNCH - Choice of pubs, cafeterias etc in area, or bring your own sandwiches.

Afternoon Session - Demonstration Room, Palaeontology Department

2.00 - 2.30 Setting up exhibits.

2.30 - 3.00 Informal, viewing exhibits.

3.00 - 4.00 Discussion session (update on schemes, topical issues) - optional.

4.00 - 5.45 Informal.

The morning lecture programme starts with an outline of the East Anglian Wetlands survey carried out by Andy Foster and Deborah Proctor. This major NCC invertebrate study, which many people have assisted by identifying material, is now drawing to a close. We shall see slides of a range of habitat types and consider the fauna and conservation issues. The second talk, by Stuart Ball, gives an introduction to Scathophagidae. This family contains many plant eating species, apart from those on dung. It is an interesting and suitable family for those branching out from hoverflies, a

point that will no doubt be made whilst using close up photos. For our third talk we are most appreciative to Dr Marc Pollet of the Royal Belgian Institute of Natural Sciences for volunteering to come and tell us of his studies on Dolichopodidae in marshes in Belgium, a very relevant insight into the ecology of our British fauna and giving some comparison with East Anglian results. The final talk, by Steven Falk, is about the wealth of good sites and faunas in and around Coventry. Until recently the centre of England was neglected and assumed to be poor but Yorkshiremen had better be prepared for Steve to convince us that Coventry is, after all, the centre of the Universe.

DIPTERIST'S SUPPER - 2 NOVEMBER 1991

David Henshaw has sent the following details.

Following my previous suggestion that 'A SUPPER' would be held if 30 names were obtained before June, I am pleased to say that that number was reached by April and therefore a supper will be held as announced above.

The supper is to be held at the Royal Entomological Society at 6.30 pm for 7.00 pm start. The Society's rooms are at 41 Queen's Gate, situated just to the west of the Natural History Museum. It is necessary to remind those wishing to attend that only 60 places can be accommodated. As 30 places are already reserved, only 30 remain, therefore, those wishing to attend who have not yet booked should write to me as soon as possible enclosing a cheque for £12.00. David Henshaw, 34 Rounton Road, Waltham Abbey, Essex, EN9 3AR.

DIPTERIST DIGEST

The following progress report is based on notes provided by the editor, Derek Whiteley.

Nos 8 & 10 are 'in press' and should be available on or before the November meeting.

No 9 This will be a colour guide to hoverfly larvae by Graham Rotheray, with plates on display in November.

No 12 Anthony Bainbridge is 'guest editor' for a special Doli & Empid issue. It is progressing well.

No 11 or 13? will be a Scottish Islands edition.

Papers are being marshalled for an early 1992 edition so your editor is ready and waiting to receive papers for this and further numbers.

Please note Derek Whiteley's CURRENT ADDRESS:- 17 Rustlings Road, Sheffield S11 7AA (10 metres from his old address!).

Malloch Society

The Malloch Society (Scottish Dipterists) continues to hold an annual series of meetings. This year we are looking at the fauna of the river gravels of various Scottish rivers, particularly the Spey and Feshie system around the Irish and Kingussie area. The first gathering, 28 - 30 June, was spent getting the feel of this interesting area. Armed with a list of the potential RDB species and others typical of the habitat the days were spent both confirming their presence where possible and searching for immature stages or other more detailed bionomic facts.

The intention is to be able to provide detailed information, principally on the dipterous fauna, for a conservation strategy for river gravel and associated niches. It appears to be the case that the majority of the rivers exhibiting sand and gravel margins suitable for the widest range of associated species occur in Scotland. The next field meeting is on 4 - 6 October 1991.

FIELD MEETING REPORTS

Skye and Muir of Ord July 1991

Six people attended the Skye meeting, plus a seventh for a day. We arrived during a short heatwave, followed by rather mixed weather with rain and dry periods. The first day yielded 76 species of craneflies, including Limonia stylifera and Orimargo virgo. Despite some difficult days with the rain, and the small party size, the total of about 111 species of craneflies for the week was pretty good. The hoverfly list provisionally recorded 61 species, with only the last day really being a good flower day. Lejogaster splendida was found on saltmarsh and Xylota sylvarum and Melangyna guttata were seen at probable new northern limits for the west coast. Other useful records included Platycheirus perpallidus, P. nielsenii, and Eristalis rupium. The strat Oxycera pygmaea was on cliff seepages. The most spectacular fly was the tephritid Vidalia spinifrons (3rd GB record, new to Scotland). There was the second GB record of Pseudopomyza atriseta, and on Rassay, Asteia elegantula. We were surprised to see the tachinid Dexiosoma canina so far north. There was a good number of very nice sites on Skye, with plenty of base rich influence.

The second week, based near Muir of Ord (north of Inverness), the residential party rose to 20. Apart from visiting plenty of good nearby sites, cars set forth to southern Sutherland, Ullapool and mountains on the west coast, Culbin Sands (Nairn) and the Spey Valley. The weather could have been better, with some rain, but at least it was fairly mild and without strong winds. Everyone seemed pleased with their finds, the meeting overall being very productive. Even with many samples of craneflies yet to be examined, 118 species were identified during the week. These included Limonia halterata (where we found it some years ago), Discobola annulata, 'Erioptera' meigenii, and Tipula nodicornis (= juncea). The hoverfly list rose to 77 species which suggests that the eventual figure will be about 100. The more interesting species included Eriozona syrphoides, Platycheirus podagratus, P. sticticus (probably new to Scotland), P. nielsenii (locally common), Chamaesyrphus caledonicus (probably only 3rd GB record), C. scaevoides, Eristalis rupium, Xylota tarda, X. coeruleiventris, X. sylvarum and Chalcosyrphus nemorum (the latter 2 are far north). Among larger Brachycera, a visit to a coastal cliff where strat larvae had previously been seen yielded Oxycera pardalina (previous northern limit Berwickshire) but the real excitement was a Stratiomys chamaeleon found as a female and subsequently as 2 empty puparia (only S. singularior has been found in Scotland previously, E of Edinburgh). Other useful records were Nemotelus nigrinus, Symphoromyia crassicornis, Laphria flava, Rhadiurgus variabilis, 'Thereva' lunulata and Phthiria pulicaria. Among fungus gnats there was 'Cerotelion' humerae (only 1 old record without specimen) and Keroplatus testacea (southern sp). It was about impossible to keep track of the wealth of other good finds but these included the pipunculid Eudorylas montium, E. terminalis, the doli Lamprochromus elegans, Asteia elegantula and various very rare chloropids.

These meetings, it is fair to say, were very successful. There should be a mass of new distribution information. Our thanks go to Iain Macgowan and his colleagues at NCC Scotland (Inverness) for advice and help with site access. It is only too apparent that these areas still have plenty of

untapped potential so anyone visiting northern Scotland is well advised to contact Iain or someone who was in these meetings.

FORTHCOMING FIELD MEETING

Peak District 9-13 October 1991

The Peak National Park is a very scenic area mainly in Derbyshire. Geologically it is the southern end of the Pennines with extensive outcrops of Carboniferous Limestone in the centre and with sandstones and shales round the edges, together with extensive peaty moorland. We shall be exploring the woodland, streams and rivers, bogs and various other habitats. Craneflies, fungus quats and assorted acalypterates are the main objective at this time of year.

We shall be based at Bakewell, where English Nature has an office providing lab space, and accommodation will be arranged in a guest house. The meeting will run from the evening of Wednesday 9 October to the afternoon of Sunday 13 October but if you can only manage a day or so then by all means join in. Even if you are not especially keen on the flies of this season, come and join us simply for the outing in pleasant countryside and to be sociable. The help from an extra few nets always comes in handy, and we can always hope for Arctophila fulva.

If you wish to book, or think you may be able to come as a day tripper, please contact Alan Stubbs (address at end of Bulletin).

NEWS FROM THE SCHEMES

Cranefly Recording Scheme

A new draft of the Palaearctic check list has been received for comment. Alan Stubbs will join an International meeting on Tipulomorpha in Poland in September.

Gomomyia abscondita is proving widespread, as in Scotland, the true G. lucidula seemingly being confined to calcareous sites.

BRC have repeated their expectation of producing the atlas to Tipulidae (ss) and Ptychopteridae this winter.

Newsletters will hopefully resume this winter. A package of keys and notes are already prepared.

Larger Brachyera Recording Scheme

BRC have sent the atlas to press. It should be available by the November meeting.

The Scottish field meeting report notes major northward range extensions for Oxycera pardalina and Stratiomys chamaeleon.

Hoverfly Recording Scheme

The scheme organisers have all the data put on computer by BRC and expect to be in full swing this winter. Ken Watt continues to make good progress with Scottish data, as seen via computer analysis shown at the Muir of Ord meeting. A fuller report will be given in November.

There has been excitement over the discovery of Doros on the west coast of Scotland (Argyllshire). Platycheirus nielsenii (= sp A) is proving very widespread in the north. See the Scottish meeting report.

Enormous numbers of Episyrphus balteatus appeared in late July/early August, seeming reflecting a major immigration arriving on the east coast. It has been an exceptional year for Scaeva pyrastris, another immigrant.

LABORATORY TECHNIQUES

DMHF Tony Irwin introduced many people to dimethyl hydantoin formaldehyde as a mounting medium in a previous Diptera newsletter (No. 24). It is a clear solid that dissolves in alcohol or more slowly in water. I mix up a very small amount (c. 2ml) of the solution at a time using equal volumes of DMHF and 70% alcohol, leaving it for a day to dissolve to a syrupy consistency. For lazy dipterists, it beats other mounting media because it requires no fiddly desiccation through different strength alcohols and clears specimens within a day, so obviates the risky boiling-up in KOH. It dries absolutely clear, unless you use lime-rich water which deposits white lime granules in the medium, and it sticks very well to glass because it retains a few percent water. It is easily re-dissolved if the specimens has to be re-orientated. I mount fly genitalia in a blob of DMFH on a piece of card pinned on the fly's micropin. I do not use a coverslip over the mountant and in years to come I may regret this as dust builds up on the mount. I recently checked slide mounts of chironomid larvae and adults made 16 years ago and they are still perfect - no shrinkage or distortion and they have not dissolved away. DMFH contains 0.5% formaldehyde so if 20g is burnt, the fumes released into an average size room will exceed the safe limit, so it would be safer stored outdoors. Don't eat it or get it in your eyes.

DMFH can be bought in small quantities from the sole supplier which is The Chemical Intermediates Co Ltd, Barnfields Industrial Estate, Leek, Staffordshire. 250g costs £7.50 + VAT, including p&p. My 100g bottle bought 10 years ago is only part empty.

Pinning flies from alcohol - two ideas. Freeze-drying. I leave the specimen in water for a day so the alcohol dissolves out, dry it on absorbent paper and spread the wings out, pin it into a plastic box leaving the lid ajar, and put it as quickly as possible into the freezer box of my fridge before it has time to dry out. After several months, it will have dried to a passable specimen.

Chemical stiffening. Leave the specimen in 2-ethoxyethanol for a day then transfer to ethyl acetate for one hour. This stiffens the cuticle. Pin the fly after drying on absorbent paper. I recently tried this and found it successful; it has the advantage over freezing that the specimen is available straight away. I thank John Ismay for the recipe. 500ml of 2-ethoxyethanol costs £4.50 from BDH Ltd, P O Box 15, Freshwater Road, Dagenham, Essex RM8 1RF (BDH also has a number of regional distributors).

If you are hesitant with these ideas, reasonably robust flies can often be dried out as satisfactory specimens with no special treatment. Simply place the wet specimen on a piece of paper and float out the wings, then leave to dry off, pinning before drying completely.

Magic Fluid (Barber's). A drop of this potion applied to a dry specimen and left for 5 mins softens the intersegmental membrane so that all the joints can be wiggled without any damage. This is most valuable for teasing out genitalia or for just moving appendages out of the way of important characters. It even softens specimens that have stored in too strong alcohol and hardened - useful for pulling out ovipositors. Don't drop whole valuable old specimens into it because the specimen is reduced to kit form, as a colleague of mine will testify. The formula given by Martin Speight in Diptera Newsletter 12 is:

95% ethanol	330ml
distilled water	300ml
ethyl acetate	150ml
ether	120ml
acetic acid	10-20 drops

NEWS AND REQUESTS

Museum Collections

The Peter Crow collection of store box hoverflies has been sorted out by Joan Morgan. Four boxes of material have gone to **Liverpool Museum** comprising duplicate and English material. She has Welsh reference material at Bangor.

A major collection of **Dorset** hoverflies and larger Brachyera collected by **Bill Dean** is now at the **Hope Department**, Oxford.

Please help keep the Bulletin informed of any further re-location of fly collections.

INDEX TO DIPTERISTS HANDBOOK

Eight years ago at Tony Irwin's suggestion he and I compiled an index in two parts to the Dipterists Handbook (Stubbs & Chandler, 1978); he did the fly taxa and I did the other organisms. Other matters intervened and the indexes did not get beyond handwritten drafts which I recently found and thought should be made available. The indexes contain over 2000 names and 6000 entries and I will provide copies for £2 on request.

Jonathan Cole, 2 Lenton Close, Brampton, Huntingdon, Cambs PE18 8TR.

GLASGOW NATURAL HISTORY SOCIETY

Geoff Hancock has taken over drawing together the annual published review of insect records for west Scotland (a seemingly very elastic area). If you have useful records for 1990 (currently on call as a matter of urgency) or in future years please contact him (Art Gallery & Museum, Kelvingrove, Glasgow E3 8AG. The format is as follows:-

Tipula grisescens Zett., near Aberfoyle, V.C.87, 16/4/89, EGH.

Lauxaniids

Andrew Godfrey has instigated re-examination of collections following the discovery that we have extra species in Britain. For instance Lyciella pallidiventris has been split into 3 and all Homoneura notata need cross-checking for H. subnotata. He will no doubt be pleased to hear from anyone with an interest in this family.

Fungus gnats

Peter Chandler draws attention for the need to re-examine all specimens of Mycetophila fungorum, Zygomya notata, Exechia repanda and Brevicornu fissicauda. All records without vouchers are now invalid. Details on the recognition of the relevant new species splits are available.

Opomyzids

Martin Drake will shortly be publishing the description of a new Geomyza that we know as brevisetata. The true brevisetata is scarce in England. He would be pleased to see specimens of this and any other opomyzid, and can supply details of the new species to anyone who is interested.

Alan Stubb's phone no.

There was a typing error at the foot of the last Bulletin. The correct number is 0733 346648.

AUTUMN EXHIBITIONS

The following events are open to all (11 am - 5 pm).

Amateur Entomologist Society, Saturday 5 October, Kempton Park, Sunbury (outer SW London near end of M3). Ample car parking, small entrance charge. Equipment, second hand and new books etc. Usually attended by a number of dipterists.

British Entomological & Natural History Society, Saturday 26 October, Imperial College, South Kensington. (N of Science Museum, college car park charges less than elsewhere nearby). Extensive members' exhibits, usually some Diptera.

APPLIED AND CONSERVATION ASPECTS OF THE DIPTERA

This one day meeting will be held at the London Natural History Museum, Cromwell Road, on Friday 1 November 1991, which is the day before Dipterist Day. Details can be obtained from AAB Office, Conference Registration, Horticultural Research International, Wellesbourne, Warwick CV35 9EF. Booking forms must be returned before 14 October.

AND NOW WHEN IS A COV NOT A COV?

An entomologist's life is full of uncertainty, what with the weather, the state of the season, for emergence peaks and traffic snarl ups. However, there's now't so strange and uncertain as response to the news that one wishes to go onto a nature reserve with a net. It has to be said that provided there is valid reason, such as to record, the entomologist is increasingly welcomed. For full measure, however try a reserve containing those flippin' flappin' feathered things, especially where there are 'ssh' unmentionable ones that are inconveniently multiplying just when you arrive.

On recent travels through Scotland, the map had some interesting looking lakes so a detour was called for. Shock horror, a road sign said to the 'nature reserve'. Even bigger shock horror, the car park entrance had a sign proudly pronouncing 'Ospreys hatched!'. Having entered the visitor centre, sure enough the nest was right over the best looking lake edge vegetation. On discussing the local options with the man in charge, remarkably it was suggested that I could go under the alders on the opposite lake edge. Since, on questioning, the water edge was sharp and dry, another lake was advised. This without giving any credentials. Full marks to Scottish Wildlife Trust.

On visiting an RSPB reserve, admittedly to do impact assessment survey, there was the remarkable remit to go anywhere (just after the main nesting period). The warden took the enlightened view that the data gained was more important than temporary disturbance of his charges. Hence that

flapping white net set forth even in front of the main clutch of bird hides. Plenty of birds rose in the air out of the marsh and to my surprise many simply settled on an embankment only 50 yards away, until I got closer. Having come off the marsh, enquiries in a hide as to the degree of disturbance confirmed that apart from more birds being visibly seen, the majority had not moved far. On recounting this to a fellow entomologist she deduced that the birds had considered my sweeping and pooting antics so outrageously obvious that I was not considered a threat. Her conclusion was 'perhaps the birds thought you were a cow!' A controlled response was just about achieved. It is, however, a relief that dressing up like some character from 'Midsummer Nights Dream' is not deemed essential when visiting RSPB reserves, unless anyone is volunteering to try it. I just have the feeling that a cow flapping a white net and with a pooter would definitely give a fright to birds - and in particular wardens.

Central Panel of Diptera Recording Scheme

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