## Diptera Recording Schemes Bulletin No 3

This circular gives news of the 1976 Annual Meeting and looks ahead to events so far arranged for this season. Apologies are due for the delay in announcing field meetings but a whole series of problems arose in fixing accommodation despite starting negotiations in September and every effort will be made to avoid the same touble arising next year.

## ANNUAL MEETING OF RECORDERS: 1976

The meeting at the British Museum (Natural History) on 13 November was well attended with about 45 people at the morning session of lectures (the Dipterists dinner had 42 people which, with some changing faces, probably represents a total of 55 to 60 dipterists attending at least part of the days proceedings). The main lectures were very stimulating in ideas, that by Mr K G V Smith covering 'the present state of the study of diptera' and one by Mr G White on 'Mosquitoes' emphasising the considerable scope for amateur work on the British fauna.

The afternoon session included some exhibits and discussion included a review of the recording schemes and the drought. Mosquitoes, Calliphorids and the drought are considered below under separate headings.

## Mosquitoes

At the Annual Meeting Dr G White drew attention to the comprehensive old taxonomic publications on British mosquitoes including what he believed to be the first distribution maps of British flies, covering Anopheles and dated April 1918. However, recent advances abroad in knowledge of taxonomy and the recognition of the significance of ecology has left us considerably outdated. Even the well known Culex pipiens of your back garden may well turn out to be another species.

A group of such considerable economic importance deserves renewed attention in Britain and there is already considerable interest at a professional level. Some of the problems require the expertise and facilities available at Universities, but it was emphasised that strong support, even financial assistance, may be made available to amateurs who can take part in Mosquito studies. Anyone can help simply by making collections of adults to assist mapping, by making ecological notes on adults and breeding sites and by rearing in order to gain a better knowledge of early stages. New keys to the British fauna are proposed.

If you wish to seek advice, please write to Graham White at the British Museum (Natural History). He is happy to receive, or name and return, pinned adults from anywhere in Britain and early stages in alcohol (or methylated spirits). An official mapping scheme will be started if there is sufficient support.

#### Calliphorids

Yes, 17 to 23 July is National Fish Skin Week. Put a fish skin on your lawn or window box for say 20 minutes and catch all the green bottles, blue bottles and any other Calliphorids attracted to the bait. Send the lot as a random sample to Mr James Dear at the British Museum (Natural History).

This unlikely procedure stems from Scandinavian work which has produced some most interesting geographical and ecological information. Even if only a quarter of our number take part in the Great British experiment some worthwhile data will result. You are welcome to send in samples from anywhere, at any bait or otherwise, since there should be ecological and seasonal patterns. The idea of using fish skins as a bait in one week is aimed at standardising at least one series of samples.

The results of our efforts will be announced at the next annual meeting and we will then discuss whether it is worthwhile developing this idea further. Mr Dear has prepared a simple key which will be available on request to those eager to do their own identifications (via Mr Dear or Mr Stubbs)

In addition to these bait samples, Mr Dear has offered to name pinned collections of Calliphoridae, including Rhinophoridae and Sarcophagidae.

## Drought Effects in 1976

A short discussion on this topical subject was held at the annual meeting of dipterists in November.

Mr P Skidmore has been studying muscids in the Doncaster area for several years which led to interesting results, especially in relation to weekly sampling of cow dung between June and October. Usually there are 12 common species; this year only two. The southern thermophile Haematobiairritans was present this year, the first Yorkshire record. Muscids were scarce as a whole, common species such as Polietes lardaria not even being seen whilst Mesembrina meridiana did not appear until the autumn rains. It is possible that Orthellia viridis managed an extra generation.

Dr H Disney, speaking of the high ground around Malham Tarn, Yorkshire, noticed that a number of species seemed to move up in altitude, this certainly being apparent with various bugs and beetles.

Mr E Philp in Kent found that species tended to congregate at the edge of water, thus creating good collecting conditions. He suggested some insects may have aestivated.

It was reported that first, second and third instar symphid larvae were found at Cardiff on 12th November (the significance would depend on which species was involved).

Mr A E Stubbs had found it a very poor year for craneflies, a result shared by others. He estimated that the autumn meeting at Ashdown Forest achieved about 50% of the species totals that should have been found, and numbers were extremely low - poor weather (in the wet, cold sense:) aggravated the situation.

Several people commented on the very early drying up of the woodland herb layer in some southern localities, as for instance in Huntingdonshire and Kent. Diptera were correspondingly sparse.

On balance it was felt that 1976 was a poor season for diptera, with no counterbalancing excitement from the reappearance of hot climate rarities.

#### ANNUAL MEETING OF RECORDERS: 1977

Facilities at the British Museum (Natural History) have been booked for Saturday 12 November 1977 for our annual meeting. The dipterists dinner will again be arranged to follow on the same evening.

How can this meeting assist you to best effect? If the programme did not attract you in 1976 or having attended you felt that some things could be done differently next time, then please send in ideas. For instance the very sound suggestion has been made that table lamps in the Conversazione Room would give better illumination for specimens - and possibly a spare microscope or too may help. Also there needs to be a clearer designation of specialists to consult since we are told that some boxes to be identified never saw the light of day for fear of overloading the few people you knew could help.

It is expected that the inclusion of some easy going and hopefully stimulating lectures in the morning will continue since these seem popular. The afternoon session could include a taxonomic talk, for instance 'hints on the identification of hoverflies' if this is the sort of item you wish to see on the programme but we are open to suggestions.

- 3 -

#### NEWS FROM THE SCHEMES

Cranefly Recording Scheme. Over 1300 10km squares now have records for the post 1960 period. A situation map is enclosed to all recorders in the hope of encouraging you to record or send samples for the unrecorded areas. A black dot may represent between 1 and 130 species - since the former end of the scale predominates material from recorded squares is still more than welcome.

In 1976 the following species were added to the British list:- Limonia (Dicranomyia) magnicauda Lund, Gonomyia (Protogonomyia) limbata (v. Ros.), Erioptera edwardsi Lack. and Molophilus variispinus Stary. The latter is very similar to M. serpentiger. It is hoped to issue maps to some Tipuline species shortly.

### Tabanoidea and Asiloidea Recording Scheme

A recording card and instructions to recorders are being finalised at the moment.

### Hoverfly Recording Scheme

As previous scheme

## Sciomyzidae Recording Scheme

A key to genera will be available shortly

#### CENTRAL PANEL

Please note that Dr A Irwin, representative for East Anglia, is now based at the Castle Museum, Norwich, NOR 6BS.

#### FIELD MEETINGS: 1977

Bookings and enquiries for long field meetings should be made through Alan Stubbs (address at end of Bulletin)

## Herefordshire and the Welsh Borders, May 1977

A field centre at Moccas, Herefordshire has been booked from arrival Saturday 21 May to departure Saturday 28 May.

Moccas is situated on the River Wye between Hereford and the Radnor/Brecon border. Moccas Park is a famed site for dead wood Coleoptera but the diptera are virtually unkown. There are many good woods and marshes in this part of Herefordshire. Within close range we have the largely unknown vice-county of Radnorshire. The Black Mountains of the Breconshire and Monmouthsire border has easy road access to varied upland habitats. Among the favourite localities of J H Wood at the turn of the century was Cusop Dingle at Hay on Wye, just down the road. To the south there is the Monnow Valley, which judging by the records in Collin's British Empids is well worth further study. If you feel so inclined it is no real distance to the Brecon Beacons; a trust reserve on the north slopes yielded 48 species of craneflies, including two new to Britain, during a visit last July.

The meeting is timed at the request of the hoverfly specialists but there should be a wide range of diptera available. Late May is a peak period for some upland diptera, as well as spring lowland faunas.

Booking should be made by 29 April though a few late comers might be fitted in. The ceiling is a party of 25. The cost is £25 covering 3 meals per day and sleeping in domintaries with bunk beds. A deposit of 25% is required - £6.25.

## Dundee, July 1977

Our first venture into Scotland. Based at University accommodation in the city arriving evening Saturday 2 July and departing morning Sunday 10 July.

Most people who collect in Scotland tend to stick to the old favourites of Rannoch and Aviemore. As a result many other areas of Scotland are unworked and a large radius from Dundee is a particularly blank patch for pre-existing records.

We have an excellant centre with a large lab and with microscopes and lamps provided. Some good spots such as the dunes at Tentsmuir Point NNR and Barry Links with dunes and marshes are close at hand. The agricultural countryside around Dundee has scattered high quality sites and within 20 miles drive there is a very wide range of habitat from coastal ravines, and inland wooded ravines, to the mountains and glens of Angus and the oak woods of Perth. A special feature of the area is high quality fens, marshes and lakes along the Vale of Strath More especially around Forfar, and some closer range ones in Fife. There should be terraine for all tastes.

Accommodation is in a University block with flats in groups of 6 containing individual bedrooms and shared facilities including a self catering kitchen. The proposal is that people look after their own breakfast, bring their own nose bag for lunch and find their own evening meal in town whether take-away upwards or alternatively self cook. The University canteens will be closed. This arrangement is far cheaper than full board in a University Hall and gives evening flexibility. The cost for the week is £12 per head for accommodation, the food bill from there on being up to you. The laboratory is in the main Biological Sciences block just across the road with its own ground floor exit for late working.

Bookings should include £10 deposit (payable to the University of Dundee) and be received by Alan Stubbs not later than 29 April.

#### Ballater, July 1977

It had been intended to share a split fortnight between Dundee and the Spey Valley. When Accommodation options finally expired, some promising possibilities in the Dee Valley (no relation to Dundee) were pursued but these too led into problems. Since some of those travelling a long distance to Scotland may feel they would like to stay on, or alternatively just attend an alternative meeting, the following proposal is offered.

An informal meeting is suggested basing ourselves on Ballater and using guesthouse accommodation. Day excursions will be arranged and if numbers make the proposition worthwhile it should be possible to lay on a school laboratory (schools will be closed in Scotland) or similar work space.

The Dee Valley is known to be a rich area, somwhat like the Spey Valley but still poorly recorded. There is a wide range of habitat including Dinnet Oakwoods NNR and ancient Caladonian pine forest, marshes, bogs, lakes and ponds, river and streams and upland habitat. NCC will help with access arrangements onto high quality sites which are normally strictly private and may be able to provide a land rover to ease access to remote upland areas.

The dates for the meeting will be evening Sunday 10 July (a days collecting will be fitted in on various routes from Dundee) and dispersing Sunday 17 July. It will be up to individuals to book their own accommodation and a tourist board list can be obtained from Alan Stubbs or by writing direct to the Tourist Information Office at Ballater. Ballater is chosen because of its good availability of accommodation. If you are joining in on this arrangement

Please let Alan Stubbs know first and once numbers have reached six the meeting will be confirmed as taking place so please write in as soon as possible, preferably by 29 April.

#### Central and West Weald

Anyone interest in joining in on an informal meeting for all or part of the Jubilee Bank Holiday, 3-7 June, is invited to contact Alan Stubbs.

## Breck District of East Anglia

Tony Irwin (address under 'Central Panel' above) may be able to arrange a day or weekend meeting in June or July. Please contact him if you are interested since he will react to demand.

## RESULTS FROM THE 1975 AND 1976 FIELD MEETINGS

These are being written up in a series of reports which will be available to those who attended. If you have records which have not been sent in, please forward them as soon as possible since the final stages of collation are being reached now.

There are plenty of very useful records including several species new to Britain. An outline will be given in the next Bulletin.

### AND NOW

From the local press -

## 'SUPERFLY' THAT EATS SPIDERS

'A species of fly which hunts and eats spiders has been discovered on Hengistbury Head on the Dorset coast. It is known as sorocera globosus and was spotted by Mr Martin Speight, an entomologist.'

'The superfly searches through the vegetation to find the spiders, marches out on to their webs and attacks them. It is described as very rare and exotic-looking'.

The Superfly Recording Scheme advances another step, under the auspices of the Tabanoidea and Asiloidea Recording Scheme which sounds far less grand.

It is believed that this item refers to <u>Acrocera</u>. A certain Martin Speight now living in Ireland has reservations about the facts as stated!

The Central Panel of Diptera Recording Scheme Organisers

Co-ordinator A E Stubbs Nature Conservancy Council 19/20 Belgrave Square London SW1X 8PY Identifications of most groups have been checked although some critical work is necessary in the light of recent revisions. These collections are an important data resource of great historical importance. All data of Larger Brachycera, Syrphidae, Conopidae and Tephritidae have already been furnished to the Recording Schemes.

Additions have already been made to many families including some formerly unrepresented acalypterate and nematocerous families and this will continue, but any further donations and acquisitions of Diptera, especially where major gaps exist, would be welcome. The number of species compared to the latest British total is given in the attached list.

Both the Andrews and Hammond collections are fortunately augmented by detailed and remarkably complete collecting diaries, together covering a span of 80 years. Andrews' diaries began in 1899 when he started on Diptera at the age of 22 and the last entry was 24.ix. 1954, the only interruption being his war service from 1914 to 1918. He lived at Bexley in Kent until his retirement in 1945 and then in Hampshire. He collected mainly in these counties and the Thames Marshes were a favourite area, but he travelled widely in England and Wales when on holiday. He made 4 collecting visits to Ireland from 1906 to 1911 (for which he published lists), but never visited Scotland. He exchanged specimens with most of his contemporaries and many collectors thus contributed to his collection, especially in the Tephritidae. We also have some of his correspondence and notes.

Hammond's Diptera diaries run from 1945 to 1980, the last entry on 26th July, four weeks before he died. His earlier collecting from the twenties onwards was mainly of dragonflies, an interest which always continued and we also have his Odonata collection. His interest in Diptera flourished from 1945, stimulated by meeting Charles Colyer. It waned in the fifties as Colyer specialised more in Phoridae, but gained a new lease of life from 1966 when excursions with Alan Stubbs began. Most collecting was within range of London (including the New Forest) or in Norfolk but he also made six trips to Scotland in later years (1969 to 1977).

The Society also has a large batch of correspondence and notes bequeathed by Len Parmenter (whose collection went to the Natural History Museum), including notes on several local surveys in which he was involved and his work on leaf miners. We also have his large collection of separates and reprints which augment the good stock of Diptera books in the Library.

#### THE BENHS DIPTERA COLLECTION

The insect collections and library of the British Entomological and Natural History Society have been housed at Dinton Pastures Country Park since October 1992 and the Society wants these facilities to be widely used. Open days for members and visitors are being held on the second and fourth Sundays of each month, from 10.30 am to 4 pm, reduced to once a month in the summer (Tel. 0734-321402 for recorded message of next opening date)

The Society has 1825 species of Diptera (about 28 % of British species) but some families are especially strong. There are good collections of calypterates (60 % of all British species; 70 % of Muscidae), Syrphidae (73 %), Larger Brachycera (79 %), Tephritidae (84 %) and other 'picture winged' flies. We have almost half of the British Empididae and Dolichopodidae.

Only the Tipulidae (60% of British species) are well represented in the Nematocera and some larger acalypterate families are lacking. There is also no current provision for Chironomidae, Cecidomyiidae or Phoridae and some other groups for which slide mounting is preferred.

We have a main Diptera collection arranged according to the 1976 Check List, leaving space for additions in most families; this is based on the collection of Henry W. Andrews, acquired on his death in 1955. We also have the collection of Cyril O. Hammond, bequeathed when he died in 1980. Then there is a duplicate collection from which specimens may be taken by members. Andrews ignored Nematocera and Hammond collected only a few of this sub-order. A start was made here when Ron Payne donated 100 species of crane flies and Alan Stubbs has added many more.

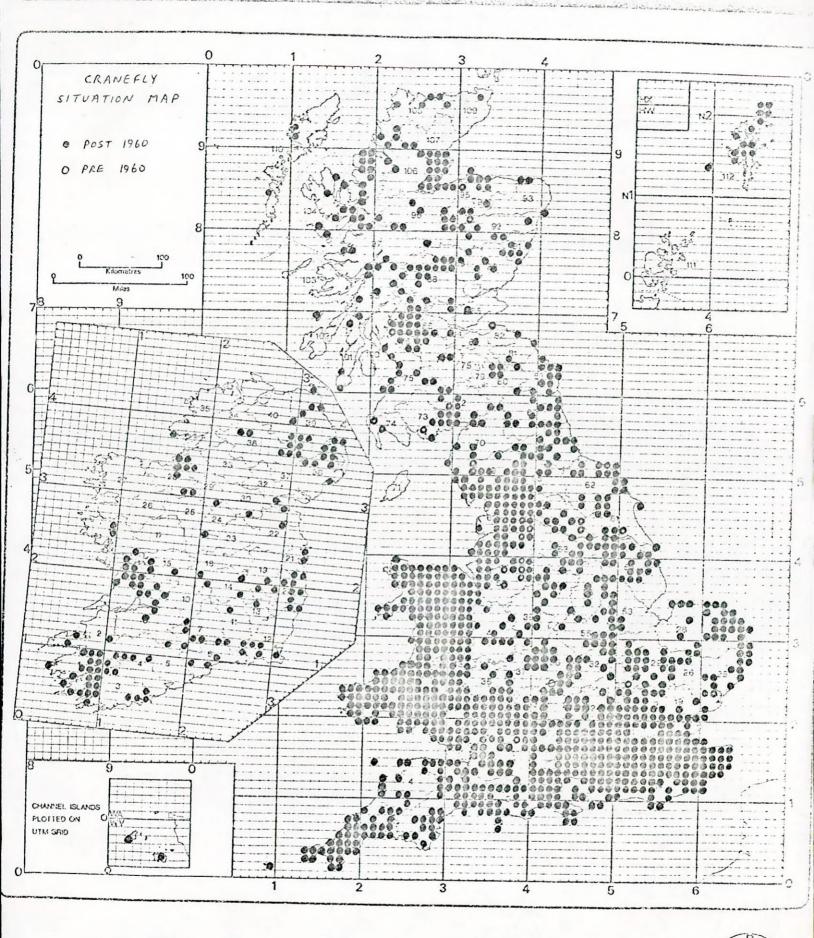
Andrews specialised in calypterates (especially Muscidae and Tachinidae) and Tephritidae; on the latter he did much detailed work on rearing and variation, resulting in several publications and reflected in extensive annotation in his collection.

Cyril Hammond's collection includes 458 species, including many of the beautifully set specimens used to illustrate 'Flies of the British Isles'. It is rich in Syrphidae and Larger Brachycera although its other contents reflect what caught his eye as he collected specimens singly. There are 43 species (including 26 Syrphidae) not otherwise in our collections, notably species of ancient forest and dead wood, a habitat not given much attention by Andrews.

# NUMBER OF SPECIES IN BENHS COLLECTION COMPARED TO TOTAL BRITISH LIST (1993)

Family (order of 1	976 Check List)	BENHS	Updated Bri	tish List
1. Trichoceridae		2	9	
2. Tipulidae (sen	su lato)	196	323	
3. Psychodidae	134 14407		92	
4. Ptychopteridae		4	7	
5. Dixidae		1	16	
6. Chaoboridae			6	
7. Culicidae		1	33	
8. Thaumaleidae			3	
9. Ceratopogonida	16		163	
10. Chironomidae			531	
11. Simuliidae			35	
12. Anisopodidae		1	6	
13. Bibionidae		11	20	
14. Mycetophilidae	(sensu lato)	30	521	
15. Sciaridae	. touriou zutti		113	
16. Scatopsidae			38	
17. Cecidomyiidae			615	
(all Nemator	ara)	246	2531	
(all Nemaroce	el d/	213	th. Labora	
18. Stratiomyidae		42	47	
19. Xylomyiidae		1	3	
20. Xylophagidae		1	3	
21. Rhagionidae		13	18	
22. Tabanidae		26	29	
23. Asilidae		22	27	
24. Therevidae		5	14	
25. Scenopinidae		2	3	
26. Acroceridae		3	3	
27. Bombyliidae		9	10	
(larger Brack	hycera)	124	157	
1241 001 -:				
28. Empididae (se	nsu lato)	167	386	
29. Dolichopodida		127	276	
(all Empidoi		294	662	
(all Emplose	ucu			
30. Lonchopterida	Δ.	3	. 7	
31. Phoridae	•		316	
Opetiidae		1	1	
32. Platypezidae		13	28	
33. Pipunculidae		30	91	
34. Syrphidae		192	264	
35. Conopidae		20	25	
(all 'Aschiz		259	732	
(all veculz	a		LEE	
36. Tephritidae		62	74	
37. Platystomatid	ne.	2	2	
38. Otitidae		15	20	
39. Micropezidae		8	9	
	80	-	1	
Pseudopomyzid	ae		- 5	

40.	Megamerinidae	1	1
41.			1
	Strongylophthalmyiidae	0.0	1
42.		13	26
	Helcomyzidae	3	3
44.	Dryomyzidae	2	3
	Chamaemyiidae	5	30
	Lauxaniidae	26	50
	Coelopidae	2	2
48.		. 25	57
U.S.	Trixoscelididae	1	4
49.	, ,	1	6
	Sepsidae	15	27.
51.		36	67
	Sphaeroceridae	6 7	119 13
	Pallopteridae		31
	Lonchaeidae	9	
	Neottiophilidae	1	1
	Piophilidae	5	13
	Opomyzidae	7	16
58.		3	10
	Odiniidae		7
	Carnidae		13
61.	Acartophthalmidae	1	2
	Periscelididae		4
63.	Aulacigastridae/Stenomicridae	1.0	3
64.		5	18
65.		5	7
66.		-	5
67.		9	131
68.		4.77	8
69.		17	57
70.			18
71.	Tethinidae		10
72.	Canacidae		2
73.	Braulidae		1
74.	Agromyzidae	8	329
75.	Chloropidae	17	169
	(all acalypterates)	317	1372
76.	Oestridae	1	8
77.	Gasterophilidae	1	4
78.	Tachinidae	135	235
79.	Rhinophoridae	8 .	11
80.		40	60
81.		24	33
	Scathophagidae	23	54
	Anthomyiidae	125	229
	Fanniidae	30	60
	Muscidae	191	276
	Hippoboscidae	7	13
87.		-	3
٠	(all calypterates)	585	986
A11	Diptera	1825	6440
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March 1977

Biological Records Centre

The map slightly underrepresents Post 1960 records from some areas les West Millands and Norfolk) and under represents Pre 1960 records. Published and county carl index records are excluded here.