After a wet summer all we can look forward to is a phenomenal autumn for craneflies and fungus gnats. This Bulletin announces forthcoming events, including the autumn meetings and the programme for next year's field season.

AUTUMN EVENTS

Annual Meeting of Diptera Recording Schemes: Saturday 29 November 1980

The meeting is slightly later than usual this year, but it remains at the usual venue of the British Museum (Natural History), Cromwell Road, London SW7.

MORNING SESSION	(Main Lecture Hall) (Chairman P.F. Entwhistle, Hoverfly Recording Scheme Organiser)
11.00 - 11.20	Horseflies: what colour to wear if you want to attract them (Dr N Burgess)
11.20 - 11.50	A comparison of the Hoverfly fauna of Ireland, Great Britain and France (Dr M C D Speight)
11.50 - 12.10	Hoverflies in gardens (Dr J Owen)
12.10 - 12.30	The biology of British Chamaemyiidae (I F G McLean)
12.30 - 12.50	Some studies on British hippoboscids (A M Hutson)
12.50 - 1.00	Next years field meetings (I F G McLean & Trudy Side)
LUNCH	(cafeterias, cafes, pubs or bring your own sandwiches)
AFTERNOON SESSION	(Demonstration Room in Palaeontology Department)
2.00 - 2.30	Setting up time for exhibits and informal session
2.30 - 4.30	Discussion Point (Chairman C E Dyte, who specialises in Dolichopodidae)
	The 1980 season - was it a bad summer for Diptera?
24.74	The future needs of dipterist's in Britain (theme introduced by K G V Smith, Conopidae Recording Scheme Organiser and revisor of the second edition of 'Flies of the British Isles').
4.30 - 5.45	Informal
(6.00 - 9.00	Dipterists Dinner - see separate item)

The morning programme of talks covers a broad range of topics with plenty of interesting and thought providing information. Having had an exceptionally dry spring followed by a very wet summer, the afternoon discussion point starts with the subject of the season in 1980. The main discussion topic is concerned with the future needs of dipterists in Britain. At annual meetings we often skate round this theme but we have never given a thorough overhaul of what's needed. We've all got needs, both amateur and professional, but the amateur in particular is often at a disadvantage working in semi-isolation. So thinking caps on. How do you think we should move forwards into the 1980's? Last year there was the best array of exhibits in the afternoon that we've seen so far and this gave a great boost to the meeting. We all like to see the goodies that the other fellow has caught, so don't be shy to become an exhibitor yourself. Assistance and advice on identification of material will be available as far as possible (it helps if you write in advance so that we know what quantity and family(s) of Diptera need attention). The latest additions to the series of hoverfly plates will be on display.

It should be possible to arrange a view of the Diptera section at the BM (NH) for those who have not been before.

Dipterists Dinner

An informal buffet is arranged to follow the meeting on 29 November. This has become so popular that it is impractical to increase the size beyond last years attendance of 80. Tickets will be issued this time, on a first come first served basis, so please write early. A separate circular has been distributed to those you have been before, but if you fear the post has let you down or you are new to these ventures, please write direct to A C Pont, British Museum (Natural History) Cromwell Road, London SW7 5BD. The price is £4 which is a bargin for one of the gastronomic (and alcoholic) events of the year.

Autumn Field Meeting - Bovey Tracey, Devon 8 to 12 October

This year the base for the traditional autumn field meeting is Colehayes Park, Bovey Tracey where previous meetings in spring and summer have been so successful.

The meeting is timed to coincide with the autumn peak of craneflies and fungus gnats, and previous experience of collecting in this area suggests that local woods and shaded streams should be excellent hunting grands for these Nematocera. Although late in the year for hoverflies or Larger Brachycera, many families of Diptera have interesting species which emerge in autumn. So whether you want to improve your knowledge of Nematocera, or just come along to a field meeting for the first time, you will be very welcome to join us.

The meeting is provisionally timed to start on Wednesday 8 October, but if anybody is interested in going for a full week (starting on Saturday 4 October) then please write to Ian McLean. The cost will be approximately £6.25 per day for full board (with packed lunch).

Bookings are now due, please write as soon as possible so that numbers can be finalised with the field centre. Write to Ian McLean, Nature Conservancy Council, 19/20 Belgrave Square, London SWIX 8PY, enclosing a deposit of £5 (made payable to I F G McLean).

AUTUMN EXHIBITIONS OF THE ENTOMOLOGICAL SOCIETIES: 1980

Peter Chandler and Alan Stubbs will be among the Dipterists attending these exhibitions, and they will be pleased to meet you there.

Amateur Entomologists Society

Annual Exhibition, Saturday 27 September from 11am to 6pm, Royal Horticultural Society, Old Hall, Vincent Square, London SW19 2PE. The admission fee is 20p, but exhibitors will be admitted free. In addition to members exhibits, suppliers of entomological books and equipment will be selling their wares.

British Entomological and Natural History Society

Annual Exhibition, Saturday 1 November from 11am to 5pm, Chelsea Old Town Hall, Kings Road, Chelsea. Admission is free, and in addition to a very extensive array of members exhibits, publications of the Society will be on sale.

FIELD MEETINGS IN 1981

Two centres have been booked for field meetings next year, one in Kent and one in Yorkshire. It is hoped that the location and timing of these meetings will enable as many as possible of you to attend one or other of these events.

Middleton in Teesdale, Co Durham, Saturday 20 to 27 June 1981

The Teesdale area has an impressive list of recent Diptera finds, including a Chrysopilus (Rhagionidae) new to Britain (J Cole), Eurygnathomyia bicolor (Pallopteridae - P Chandler) and a number of uncommon muscids (P Skidmore) and craneflies (J Coulson). Overall, the area has been little worked so exciting discoveries are anticipated in this area which is famous for its northern flora. Accommodation will be available in the village at a cost of about £6 per night for bed and breakfast. Laboratory accommodation will be available at the Middleton in Teesdale field centre each evening, where material collected can be sorted and identified. Early booking will enable participants to be accommodated in one or two establishments close to the field centre.

To book write to: Ian Mclean (address below), who will supply a list of accommodation available in the village.

Ashford, Kent, Saturday 18 to 25 July 1981

This meeting will be based at Ashford School, using dormitory accommodation and their laboratory. Ashford has a central position in East Kent with good access to a wide range of habitats in the county. Nearby localities include chalk downs at Wye and Folkstone, woodlands such as Ham Street and Orlestone (which produced the spectacular empid Rhamphomyia marginata as new to Britain not so long ago), and the wetlands of Romney Marsh, the Stour Valley and the North Kent Marshes. Heathland with a bog is just down the road at Hothfield. The very rich dunes at Sandwich, the landslips at Folkstone and the shingle foreland at Dungeness as well as various saltmarshes are available as coastal habitats. There are many other good spots within 15 miles of Ashford, so this is the ideal opportunity to get to know this part of Kent. It is relatively unknown country for Diptera and, being so near the continent, some very interesting species should turn up. The cost will be approximately £55 for the week (bed and breakfast with evening meal and packed lunch).

To book write to: Ian McLean, Nature Conservancy Council, 19/20 Belgrave Square, London SW1X 8PY enclosing a cheque for £10 made payable to him as a deposit.

Bookings for the above meetings should be sent in before March 1981 so that arrangements can be finalised with the field centres. If any other details are needed please write to Ian McLean for information.

REPORTS ON 1980 FIELD MEETINGS

Forest of Dean, July 1980

A joint meeting with the Bees, Wasps and Ants Recording Schemes was attended by a party of eight at the very comfortable Wilderness field centre, Mitcheldean, In the midst of a wet summer the party enjoyed fine weather, with some interesting captures and localities. Among the hoverflies Xylota florum and Xylotomima lenta were good finds, and there was an interesting late record for Criorrhina berberina. The larger Brachycera produced some good species including Acrocera globulus and Xylomyia marginata, and other notable records included Campsicnemus marginatus (Dolichopodidae), Oropezella sphenoptera and Euthyneura gyllenhali (Empididae).

Isle of Wight, June/July 1980

Viewed against the rest of the summer, the party of 16 had pretty good weather. The meeting was shared with the Bees, Wasps and Ants recording scheme which boasted 150 species, including one wasp new to Britain. The Dipterists did not let the side down, we got a cranefly new to Britain. It had been anticipated

that the coastal landslips should be of special interest and this certainly proved to be the case, especially for stratiomyids. The aquatic strats for the week were Stratiomys potamida (in several places), Odontomyia viridula, Oxycera pardalina, O. morrisii, O. trilineata, O. formosa, O.pygmaea and Vanoyia tenuicornis. Hoverflies were best in the woodland, with Volucella inflata locally common, Xylota lenta and Metasyrphus nitens (the latter was particularly nice to see). The main finds among the Larger Brachycera were Machimus rufipes and Villa modesta. A fair range of interesting species were found in other groups, one of the main surprises being the frequent occurrence of the tachinid Zophomyia temula.

NEWS FROM THE SCHEMES

Craneflies

A surprisingly sparse season but some good finds. The main spectacular was the discovery of a new <u>Dicranomyia</u> on thelandslips on the Isle of Wight. There has not been opportunity to check the literature for a name; This will make up for the previously mentioned <u>Dicranomyia</u> from Huntingdon which was not new after all.

Limonia masoni has been found new to Huntingdonshire and to Oxfordshire (a very rare species, if indeed it is not a dark form of nigropunctata). On the north Kent marshes, Ormosia bivittata has been found with such species as Helius pallirostris and Pilaria scutellata. Several specimens of Discobola annulata were in material from a light trap in Ross-shire.

It is hoped to complete an atlas to Ptychopteridae soon, followed shortly by one on Tipulinae.

Hoverflies

Please note that Philip Entwhistle has taken over as scheme organiser on a caretaker basis (Unit of Invertebrate Virology, 5 South Parks Road, Oxford). He will act as collator for records but taxonomic problems should be referred to A E Stubbs or Dr M C D Speight.

Our thanks are passed to John Ismay for getting the scheme going - his new job in the museum at Papua New Guinea will be the envy of many of us. There must be a hoverfly out there somewhere!

Meanwhile, back in Britain, most of us have had a rather indifferent season because of the weather. Chrysotoxum elegans was found to be common in a wood in Devon (S Falk). Lejops vittata is not yet extinct in Kent; it was found in two localities on the north Kent marshes so at last there is some basis for defining its habitat - it is along ditches, is very sluggish, and readily swept from emergent vegetation. The best way of finding it is to gently prod the vegetation and wait for the fly to settle a few feet away (not the sort of liberty to be taken with most hoverflies). Lejogaster splendida was locally abundant on the same marshes.

A Neoascia new to Britain has been taken in Sussex and Kent (S Falk and A E Stubbs)

Neocnemodon brevidens from Surrey has been published as new to Britain (Stubbs, A. E.

1980 Entomologist's Record & J. Var 92: 45-46). The long awaited paper by Torp and

Claussen on Anasimyia is now in print:— the transfuga with tergite 2 waisted is

called contracta and the split from lunulata is called interpuncta. Dr Speight is

publishing details in Irish journals and A E Stubbs is reviewing the position in

Britain. (If anyone has 'lunulata' from habitat other than acid bog, please let

A Stubbs know).

An account of the rearing of Cheilosia pagana and C. fraterna may be found in Ent. Rec 92 (4&5): 114-117.

Portevinia maculata has been reared and an account is being prepared (Dr M Speight)

Larger Brachycera

Tony Irwin is hoping to produce provisional maps of Stratiomyidae and Xylomyidae for the annual meeting in London. He can provide data sheets for recorders to use and will also undertake identification of material in any form (except small bits!) All records and specimens should reach him by the end of October, but sooner than that if possible.

Recent records include a Vanoyia tenuicornis swept from bare mud beside the River Yare in Norfolk and a further capture of Stratiomys chamaeleon near Oxford.

See the Isle of Wight report for records. The North Kent marshes still have a reasonable fauna including <u>Vanoyia tenuicornis</u> and <u>Tabanus autumnalis</u>. The Ashford meeting next year will give another chance of finding these and other species.

An account of the Chrysopilus new to Britain is in an advanced stage of preparation. It looks as though C. cristatus will not be split after all - phew!

Sepsidae

The Royal Entomological Society Handbook produced by A C Pont, the scheme organiser, is now available. There is a substantial body of records assembled and early thought is being given to preparing an atlas.

Sciomyzidae

A start on the Handbook has been delayed but a firm start will be made this winter.

A Pteromicra new to Britain (and not a known Palaearctic species) has been found on Castor Hanglands National Nature Reserve near Peterborough (I McLean & A E Stubbs).

Mosquitoes

Proposals are being developed for launching a recording scheme (Sussex Univ. Snow)

HOVERFLY BOOK

It has been decided to give the keys a provisional testing and refereeing before issue as a test version to all recorders. The completion of the keys has been a major task, running to nearly 100 pages with almost 90 pages of thumb nail sketches to draw and cut up (amounting to 620 drawings!). Some further thought is going to be required on the generic key to Syrphinae but greater progress towards a tribal key has been made than expected. The delay in the Palaearctic catalogue, further complicated by the fact that there are now two catalogues being prepared simultaneously, means a delay in firm names. In this respect a delay in the book may not be such a bad thing.

However, the good news is that there is a strong possibility of Stephen Falk's colour plates being published next autumn and available as a separate. The test key should also be available by then, hopefully well before. Thus you will have something to be going on with. AIDGAP is continuing to take a very positive role in seeing the book through to completion.

A DISTRIBUTION SCHEME FOR DIPLAZONTINAE, PARASITOIDS OF APHIDOPHAGOUS SYRPHIDAE

There are over 50 species of Diplazontinae recorded as occurring in the British Isles, some of which are among the commonest of ichneumonids found in the countryside. They are readily identifiable and are simply distinguished from other ichneumonids by the possession of three-toothed mandibles. They represent, therefore, one of the few groups of ichneumonidae suitable for a study of distribution. This is especially so since the Hoverfly Recording Scheme is now well underway. One of the eventual aims of the Diplazontinae scheme will be to make, hopefully, interesting and valuable comparisons between the distributions of the parasitoids and their host species, about which nothing is known. If anyone has records of Diplazontinae or who would be prepared to record these attractive ichneumonids, I would be very pleased to hear from you.

The most useful method of recording Diplazontinae is to rear field collected syrphid larvae using the methods outlines in the Dipterist's Handbook. The plant, aphid and syrphid species are essential information to record and much useful data can quickly be amassed. Adult female Diplazontinae are easy to collect having first located an aphid colony. All that is necessary is to wait by the side of the colony and remove the females as they arrive to search for hosts (I use a pooter for this). Males are usually collected feeding from flowers or, in the case of some species, under the shade of large trees and in woodlands where they 'swarm' in groups of up to thirty individuals. The most productive times are likely to be June, end of July, August and early September.

Help identifying aphids and syrphid larvae may be obtained from Blackman (1974) and Dixon (1960), details in the Dipterist's Handbook, (Stubbs, A & Chandler, P 1978). The Amateur Entomologist, vol. 15).

Diplazontinae may be identified using Beirne, B P (1941). Trans. R. Ent. Soc. 91: 661 - 712.

Dr Graham E Rotheray, Merseyside County Museums, William Brown Street, Liverpool, L3 8EN.

DO YOU HAVE AN ALCOHOL PROBLEM?

At the Dipterists' Day in London last year, several points were raised about the difficulty of obtaining alcohol. In an effort to sort things out, I have undertaken an exhaustive (and exhausting) survey of all the problems and possible solutions.

Uses of alcohol:

Industrial methylated spirits (IMS) is a mixture of 95% ethyl alcohol and 5% methyl alcohol. It is used for the wet preservation of adults (especially Phoridae, Pupipara, and various families of Nematocera), pupae and larvae. The usual concentration is 70% with 5% glycerine, which is added to prevent complete dessication if the alcohol evaporates. Several techniques for the preparation of larvae, whole adults or genitalia for mounting on slides also recommend the use of alcohol as a dehydrating agent.

Buying alcohol:

To buy IMS it is necessary to obtain authority for purchase from HM Customs and Excise. Application should be made to your local Customs and Excise office. Normally authority is only granted to companies or institutions, and T have been advised by my local office that they would not grant authority to a private individual for pursuance of a hobby. However they did point out that different offices have different policies and practices, so it may be worth trying anyway. IMS costs about £1.20 per litre which is 84p per litre of 70% strength.

It is sometimes possible to "borrow" alcohol from a museum or university but this is prohibited under the condition governing the granting of authority. Your friendly local curator or lecturer may have his authority revoked if HM Customs get to hear about it.

Other sources of alcohol:

Mineralised methylated spirits (the blue liquid used for camping stoves) has odd chemicals added to it and is not a suitable substitute.

Duplicating spirit such as Hectofluid or Bandafluid, which is obtainable from office equipment supplies (about £1.60 per litre) is also unsuitable unless treated as follows:- mix 5 volumes water and one volume glycerine. To this add 20 volumes of spirit. This will produce heat, so the solution must be left to cool overnight. A fine precipitate will form and this should be filtered off using fine filter paper. It seems that 'interfering' with duplicating spirit in this way is in contravention of the excise laws, so obviously I cannot officially recommend it.

Whisky, brandy, gin and vodka all contain ethyl alcohol in varying quantities, though seldom as a 70% solution. It is illegal to distill <u>anything</u> to obtain purer alcohol without obtaining a government licence, which you will not get! As emergency temporary preservatives however spirits can be useful, if expensive (£6.85 to £50 per litre).

Alternatives:

If you think that things are looking pretty grim, now is the time to cheer up!

Propylene phenoxetol (Phenoxyethanol) costs £16.00 per litre but is used as a 2% solution. Propylene glycol (£2.70 per litre) is added at 5% strength to help the phenoxetol dissolve. This solution is only a preservative and unlike alcohol, will not fix (ie render biologically stable) any fresh material. Specimens should therefore be first fixed in alcohol, formalin or one of the proprietary fixatives available from the various suppliers. Apart from the fixative, the phenoxetol/propylene glycol solution costs 46p per litre.

Formalin can be used as a preservative but it is unpleasant to work with and specimens will become brittle and may disarticulate in it unless it is carefully buffered. Not recommended!

Tertiary butyl alcohol (2-methypropan-2-ol) can be used as a preservative in some cases. It is particularly useful for sending material through the post, since it solidifies at 25°C. Slight heat (no naked flames!) is suffucuent to melt it so that the specimen can be extracted. The cost is £2.10 per litre.

When it comes to mounting genitalia, isopropyl alcohol (£1.50 per litre) is considered to be a better dehydrating agent than ethyl alcohol. Alternatively the alcohol stages may be left out. After maceration in potassium hydroxide specimens can be placed in a few changes of glacial acetic acid and then straight into xylene or clove oil before mounting in canada balsam. Another method is for the genitalia to be macerated, neutralised in acetic acid and then washed before placing them in a microvial in a drop of glycerine (glycerol). Glycerine is an alcohol and thus a preservative, and it has the great advantage of hardly evaporating at all. However, it is subject to invasion by certain micro-organisms. If any 'growths' occur on your specimens, a crystal of thymol or mentholon the surface of the glycerine will stop this.

The mounting of whole flies (Chironomidae, Phoridae etc) on slides can be done using Berlese Medium, which is a water-based mountant and obviates the need for dehydration. Do not try to mount freshly killed flies in this without wetting them first. A little soapy water should do the trick, but rinse before mounting.

Well things don't look so bad now, do they? If you still have problems do write to me and I'll try to sort them out, or if you have any other bright ideas or dull criticisms, let me know so we can keep everybody up-to-date.

Del Smith, Adrian Rundle and Simon Moore were very helpful with various aspects of this report. (Tony Irwin, Castle Museum, Norwich)

MICROVIALS

Microvials for glycerine storage of genitalia are available as two sorts - glass with cork stoppers or polythene with soft rubber stoppers.

The disadvantages of the polythene vials are:

- 1. They are slightly wider than the glass ones.
- 2. They are not transparent so specimens must be removed for examination. (Often specimens must also be removed from glass vials to achieve the correct orientation).
- 3. The stoppers have a tendency to "push out", because they form an airtight seal. This can be overcome by sliding a pin down beside the stopper, pushing the stopper in and then removing the pin.

The disadvantages of the glass vials are:

- 1. Occasionally the corks do not fit well.
- 2. Delivery time may be longer.
- 3. They are more expensive.

Polythene microvials cost £3.00 per 100.

Glass microvials cost £4.00 per 100.

These prices are dependent on bulk buying, so let me know how many of which sort you want, and I will place the orders. If you want to order direct, I can provide the names and addresses of suppliers. (Tony Irwin, Castle Museum, Norwich)

IN MEMORY OF TWO FINE ENTOMOLOGISTS

It is not intended that the Bulletin should give obituaries but the passing of two of our well known friends deserves comment.

Last autumn Ken Side died a few weeks after his botanist wife Trudy had so courageously decided to carry on with her talk at the annual meeting despite knowing that the news was bleak. Ken, with Trudy, joined the first field meeting in 1973 and became one of the stalwart regulars. He was a keen coleopterist and hemipterist who joined the dipterist ranks. He was a very active recorder in his home county of Kent (an obituary has been published in the Kent Field Club Bulletin). An invitation has been extended to Trudy to continue to join our events.

On 23 August 1980 came the close of an era with the death of Cyril Hammond. There cannot be a dipterist in Britain who does not owe the foundation of their knowledge to 'Flies of the British Isles' and many of you will know that he also produced the current standard reference to the identification of dragonflies. It gave him great pleasure that he became an honorary member of all three national societies, a rare and possible unique distinction which aptly reflects the regard with which he was held by amateurs and professional alike. He attended many of our events and despite frail health remained active in the field to within a few weeks of the end. A formal obituary will be published by the British Entomological and Natural History Society and some of the main journals will no doubt also give coverage.

AND NOW - DO IT YOURSELF

Many dipterists have 'domestic' responsibilities, such as putting up shelves, mending the fence or painting the back door. Do not despair? Just keep a tube or pooter handy. Tony Irwin was mending an upstairs window with a severe attack of dry rot (the window, that is) when a fine Eustalomyia festiva settled to search for aculeate hosts. The old window-sill is now in the back garden awaiting further species. Following that Tony was replacing the last of some freshly-painted windows (actually painted by Trisha) when he noticed a nasty mark on one. The mark turned out to be Xanthogramma pedissequum! Who needs field meetings?

The Central Panel of Diptera Recording Scheme Organisers

Co-ordinator A E Stubbs Nature Conservancy Council 19 Belgrave Square London SW1X 8PY