HOVERFLY NEWSLETTER

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FEBRUARY 1996

Dipterists FORUM

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It is a pleasure to welcome contributions from overseas to this newsletter. In this issue we have an article by Volkert van der Goot, with whose excellent hoverfly book **Zweefvliegen** some readers will be familiar. We also have a notice from Hans Bartsch about his new hoverfly checklist. Hans has kindly sent me a copy for examination. I can recommend it; it is far more than just a check list, and the enthusiasm of the author for his subject is apparent in every page.

Check lists are, I suspect, often the subject of controversy and dispute. I know that there have been problems agreeing a new check list order for hoverflies. One solution that I understand to have been considered is to list the whole of the family alphabetically by genera. Although this may be convenient in one way, I suspect that many hoverfly experts would prefer an arrangement that attempts to track the evolutionary relationships between the genera. Also an alphabetical system will come to grief as soon as a generic name is changed (and we are all well aware that there have been several changes of generic name recently). Darwyn Sumner has offered, in this issue of the newsletter, a suggested minimal check list change based on Graham Rotheray's work on larval relationships.

Another controversial topic is that of English language names. In **Newsletter 19** I raised the subject, and quoted translations of some of Kormann's German names for hoverflies. Although there has been no further correspondence on this matter in relation to hoverflies to my knowledge, Alan Stubbs has proposed English names for the larger Brachycera, and has discussed in the newsletter for that group the pros and cons of English names. One of the arguments against sticking with (Latin) scientific names is that they are esoteric and thus likely to deter people from getting interested in the subject. However it occurred to me while wandering around the Natural History Museum on Dipterists' Day that scientific names certainly do not put off large numbers of children from acquiring a fascination for dinosaurs. The debate will no doubt continue.

A recently published book (**Field Guide to the Insects of Britain and Northern Europe**, by Bob Gibbons, published by Crowwood in 1995) contains nearly 40 photographs of British hoverflies, some of very good quality. Unfortunately nearly a quarter of the illustrations are erroneously identified in the captions. Although these errors are unlikely to fool readers of this newsletter, recorders may well receive records from others based on the illustrations in this book, hence this warning. Examples include a photograph of *Myathropa florea* described in the caption as *Megasyrphus annulipes*, an *Eristalis intricarius* labelled *Volucella bombylans*, and two illustrations of

Brachypalpoides lenta, one captioned as *Xylota segnis*, the other as *Xylota sylvarum.*

Copy for newsletter No. 22 should be sent to me, **David Iliff, Green Willows, Station Road, Woodmancote, Cheltenham, Glos, GL52 4HN**, to reach me by 21 June 1996.

CONTENTS

MORE ON THE FOUR-X-FLY (*MYATHROPA FLOREA)*

Volkert van der Goot
N. Anslijnstraat 42, NL - 1068 WN AMSTERDAM

In **Zweefvliegen** (= Hoverflies), 1989: 1-52. I wrote the following (in Dutch): On the session of 14 November 1987 of the Southern Section NL of the Dutch Entomological Society, Mr V Gerris said that he had grown a large number of *Myathropa florea* from overseasoned cow dung, which, being kept humid, was stored in a plastic tub in a greenhouse. So the Four-X-Fly of Colin Plant (**Hoverfly Newsletter No. 20**) could be a bug from the dung instead of the cherry tree roots.

Perhaps this possibility of raising *M. florea* is also known to some British syrphidologists.

NEW HOVERFLY CHECK LIST

Hans Bartsch
Snövägen 24, S-175 38 Järfälla, Sweden

In **Check List for Swedish Hoverflies**, I have tried to give the actual status of hoverfly species in Sweden. I base the information on my examination of about 12000 specimens in collections, including my own, and literature which covers at least a further 14000 specimens. Sweden is divided into 4 geographic areas and, for each of these, records for the latest known time window (25 years each) are indicated. 180 (out of about 1600) of the most interesting new province records, compared with Hedström (1990,1991), are listed.

In the check list I also try to give a survey of hoverfly species in countries near to Sweden with a very similar hoverfly fauna. This survey comprises Finland, Norway, Denmark, Northern Germany and Britain/Ireland, is based on available literature and personal information and covers about 400 species. For Sweden as well as for the other countries I have included a "watch out" for species which in my opinion might be part of each country's fauna and thus should be checked for. The survey is also intended to give information about suitable keys in the international literature.

The check list is in English and in A4 format. The contents consist of:

- 4 pages of general information and comments
- 7 pages of check list
- 3 pages of comments on species
- 4 pages of literature references
- 2 pages with abbreviations and map of Sweden showing areas and provinces
- 2 pages with lists of species (abbreviated) in both check list and alphabetical orders

The simplest and cheapest way of ordering the check list is to send **bank notes** (no cheques, etc., please!!!) to me in an easily-changed West European currency or US dollars, for a value above 100 Swedish Crowns (at present about £10 in Britain) to me at the above address.

AN ATTEMPT TO CLARIFY THE PIPIZA COMPLEX

Darwyn Sumner
54, Blackshaw Lane, Royton, Oldham, OL2 6NR
(Tel: 01706 848261)

For some time I have based my identification of *Pipiza* females on a table of characters which I have maintained. Recently, however, I have cracked the mathematics of a particular technique which has been used in the past (Williams and Lambert, 1960. J. Ecol) mainly to categorise plots of vegetation on the basis of the plant species which are present, but which is known to enable identification of species based on the

presence or absence of morphological characters. After running the analysis data I have from 146 (strictly North West) specimens I was delighted to discover how well the technique divided them up into recognisable groups; the technique actually weights each character so that the most significant character is used in the first couplet. From this I was able to build up a key based on characters in my original table.

What I hope to be able to do is to amass data on the female *Pipiza* from all over the country and then to repeat my analysis so that it covers forms which are not found in my neck of the woods. I am therefore requesting that readers with collections of *Pipiza* critically re-examine their material, enter their results on to the enclosed chart and send me a copy. I have attempted to make the chart self-explanatory but there are a couple of points to note. The descriptions heading each column are necessarily brief but each one is detailed in the enclosed key. You must affix a unique number reference of your own to each specimen to enable it to be referred back to should the need arise; the ID column should detail what you decided its identity was. Each character may have only a yes (a tick) or a no type answer; this is essential for the mathematical treatment. An additional useful piece of information, which I have not really left much room for on the chart, would be some comment about the general region or locality the specimens were taken from; in particular it will be useful to know which specimens were taken in the same place on the same day.

Readers familiar with the Stubbs and Falk key will no doubt spot that I have omitted certain characters from my analysis. I have had to reject these because they are the same in all my north west specimens or because they are difficult to interpret (e.g. alula characters on museum specimens where the alula is folded on to the wing's surface). This presents some difficulties because, having now decided to go ahead with the scheme it may be that later on we shall find that another character has been usefully included. It was for this very reason that I contacted Alan Stubbs about the scheme. and I herewith include a note of all the suggestions he made concerning other possibly useful female characters:

Shape of third antennal segment:
round, a bit elongate etc. (variable and difficult to be precise)
in *lugubris* it is about 1.5 times as long as wide

Frons spots:
triangular, elongate, absent (no one else uses these characters for *signatus*)
absent in the related European species *signatus* (according to Siberian key); this really ought to be in the UK.

Ratio of width of frons; width of vertex; width of head:
::7.5:18 in *bimaculata*
::4.3:10 in *lugubris*
frons: head width::4.5:10 in *noctiluca*
these difficult characters are described in the Siberian key.

Colour of hairs on the frons:
front, mid, hind, vertex. Are they all the same colour or are they colour-zoned?

Cell A_2 with or without hairs along wing edge (should be visible even with antennae folded):
Alan Stubbs' Form A. South England and Midlands so far.

Tergite 3:
in the European species *quadrimaculata*, which may turn up in British conifer plantations, a pair of spots is present.

Tribe : Pipizini

Pipiza

This key has been developed using Association analysis (Kershaw, K.A., Looney, J.H. Quantitative & Dynamic Plant Ecology. Arnold 1985). It is based upon an analysis of 18 characters on 146 specimens, several of which had been critically examined by A.E.Stubbs. The technique has allowed rejection of some characters which provide no significant association and the inclusion of some forms (e.g. melanic) which are further described at the couplets. I would be happy to repeat the analysis if you have specimens which you feel should be included. The couplet numbers match those in Stubbs & Falk.
D.P.Sumner 1995

3 —— Males
——— 4

——— Females
——— 7

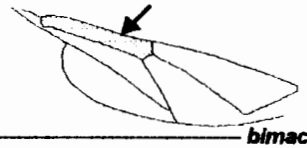
females

7 —— Wing with very dark cloud strongly developed with fairly well defined outer boundary.

Pilu ——— ***lugubris***

——— Wing with cloud less strong or absent.
——— 8

8 —— Second basal cell entirely covered in microtrichia



Pibi ——— ***bimaculata***

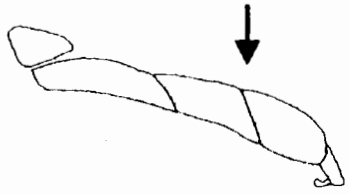
——— Some microtrichia absent from second basal cell
——— 9

9 —— Wings with no detectable cloud

Pibi ——— ***bimaculata***

——— Wings with cloud (may be very faint, especially in old specimens)
——— 10

10 —— Tergite 4 with no black hairs at the front (view from side)



Pife ——— ***fenestrata***

——— Tergite 4 with some black hairs
——— 11

11 —— The basal part of Cu1 with a small area in which the microtrichia are either sparse or absent

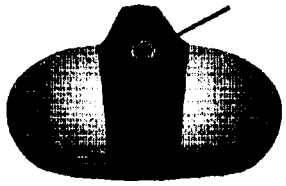
Pife ——— ***fenestrata***

——— Microtrichia present all over Cu1 or bare patch differently shaped
——— 12

Segments 6 &7:
almost certainly there are characters present on the telescopic ovipositor
Lateral hair fringes on tergites 1 to 5:
normally considered a male character, it may be useful to examine these in females.
Sternites:
Alan Stubbs hopes that useful characters may arise out of shape, colour and hair lengths.
Pipiza notata (Norway, Sweden, Germany, Poland):
characters confusing.

As you can see there is a great deal involved in the identification of *Pipiza*, but Alan thinks that useful progress can be made using my restricted set of characters. You may find it useful to try out Alan's set of characters if you have the patience - you might get a new British species. If you have any success or are able to produce some useful diagrams I shall be glad to hear from you. I initially intend to avoid the frustration that has plagued other workers on this group by concentrating on my restricted set of characters and by imposing a closing date for receipt of information one year from the date of this newsletter. Full details of the final analysis should appear in Dipterists Digest in due course. (Editor's note: in order that readers may retain a copy of Darwyn's chart in their newsletters a second copy, which can be detached for use, is included at the end of the newsletter)

12 —— Frons pit present. A shallow but distinct depression at the position indicated



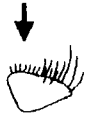
Pife ——— ***fenestrata***

Sometimes difficult to be certain. Mine finish up as a mixed bag of what were previously thought to be noctiluca and fenestrata. Try skipping this step

——— Frons pit absent

——— 13

13 —— Scutellum with hairs on dorsal surface as long as or shorter than maximum width of front tibia.



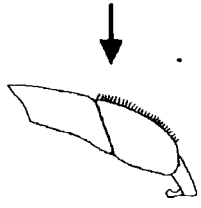
Pibi ——— ***bimaculata***

None of my specimens actually finish up at this part of the couplet, I misinterpreted a character. In an improved version the entire couplet would be unnecessary

——— Scutellum with hairs on dorsal surface much longer than maximum width of front tibia.

——— 14

14 —— Tergite 4 with all the hairs on the median axis black (view from side)



Pino ——— ***noctiluca***

Melanic form 1. Form E of Alan Stubbs is described as having hairs along the axis of the tergites entirely black.

——— Pattern of black hairs on median axis of tergite 4 different

——— 15

15 —— Paired spots on tergite 2, no matter how vague.

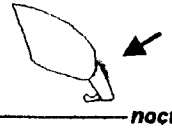
Pino ——— ***noctiluca***

Form A of Alan Stubbs

——— Tergite 2 without spots

——— 16

16 —— Tergite 5 with black hairs on the axis in the anterior half



Pino ——— ***noctiluca***

——— Black hair covering different

——— 17

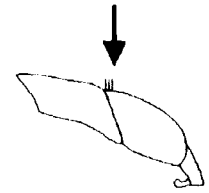
17 —— First three tarsi of foreleg darker on top than the other two tarsi

Pino ——— ***noctiluca***

——— First three tarsi of foreleg the same shade or lighter on top than the other two tarsi

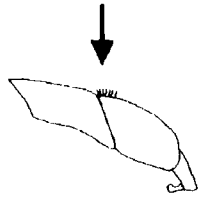
——— 18

18 —— Tergite 4 with a narrow band of black hairs on axis



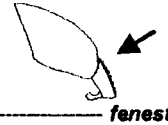
——— 19

——— Tergite 4 with band of black hairs broader



——— 20

19 —— Tergite 5 with black hairs on the axis for the entire length



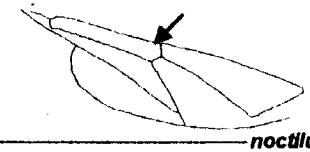
Pife ——— ***fenestrata***

This couplet catches the ones which escaped couplet 10.

——— Distribution of black hairs on axis of tergite 5 different

Pino ——— ***noctiluca***

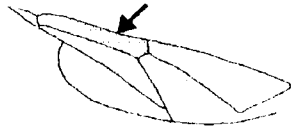
20 —— Microtrichia covering 1/3 or less of the 2nd basal cell.



Pino ——— ***noctiluca***

Many identified as typical noctiluca by AES.

——— Microtrichial covering different.

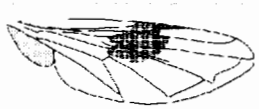


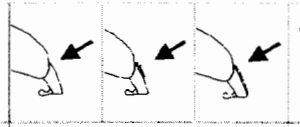
Pino ——— ***noctiluca***

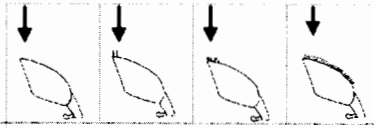
The largest batch of specimens, no further distinguishing characters found.

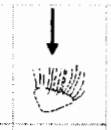
Pipiza ♀

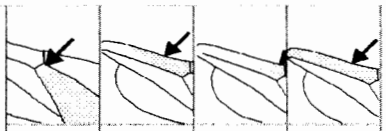
confine to lugubris, bimaculata, fenestrata & noctiluca











		Wing cloud			T5 with black hairs on axis			T4 with black hairs on axis				Long hairs on top of scutellum	Distinct pit on the frons	First 3 tarsi dark on top	Tergite 2 with spots (no matter how vague)	M'trichia absent in part of Cu1	M'trichia 1/3 absent	M'trichia 2/3 absent	M'trichia over entire cell
		None	Diffuse	Sharp	None	to 0.5	All	None	Narrow	Broad	All								
Your ref.	ID	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r

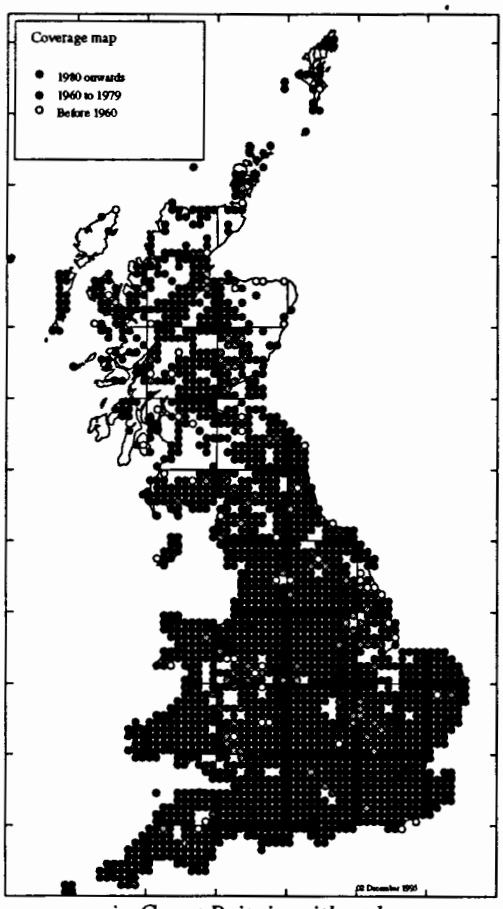
Progress with the Hoverfly Recording Scheme

Stuart Ball and Roger Morris

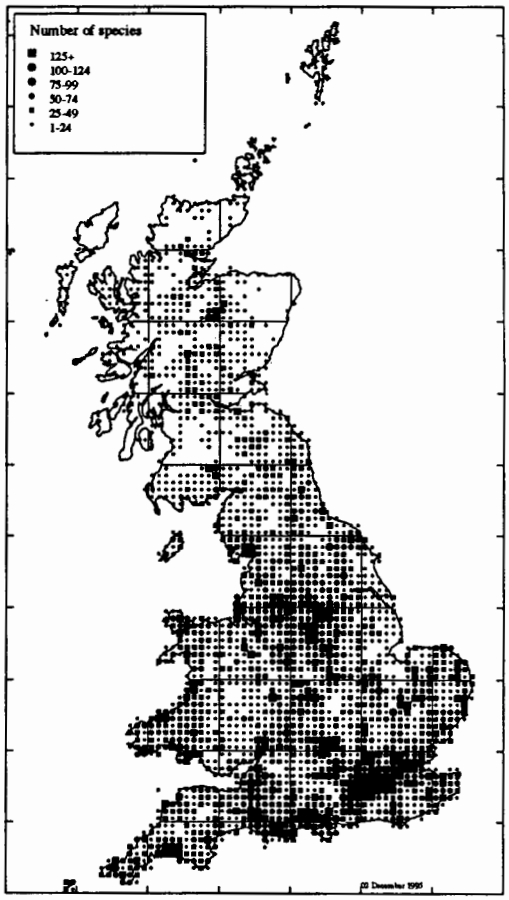
At the time of writing, there are 271,326 records on the recording scheme database from 2,244 10 km squares (2,168 (75%) out of 2,881 containing land in Great Britain, the rest in Ireland). The main sources of these records are shown in the following table:

Source	No. of records
Computerised by BRC up to 1990	54,503
Submitted on disk	105,998
Input from cards, etc. by SGB	11,189
Input from cards, etc. by RKM	99,636
Total	271,326

We are up to date with records submitted on Hoverfly cards, RA33, and Roger has nearly entered the backlog of records on other types of card and on "non-standard forms" that we inherited from BRC. Stuart is aware of some more computerised datasets which have not yet been trawled and some of these will hopefully be included this winter.



10 km squares in Great Britain with at least one record



Number of species recorded from each 10 km square in Great Britain

A second set of working maps was produced for Dipterists Day at the beginning of November and a limited number of copies were distributed to regional advisors and to the most active workers, who were asked to send comments back to us. Unlike the first set of working maps produced two years

ago, this version included species accounts and also a histogram for each species showing the number of records of adults falling in each fortnightly period from March to October.

We are aiming to produce a provisional atlas for publication by BRC in 1996/97. We intend to work on the species accounts this winter and submit a draft to BRC around March/April 1996. The maps and histograms will be finalised as late as possible in the process, **but we need to receive any outstanding records by 31 March 1996** if they are to stand any chance of appearing in the atlas.

Please send completed record cards to Roger Morris, English Nature, Bullring House, Northgate, Wakefield, West Yorks, WF1 3BJ (tel. 01924 387010). Roger also has supplies of blank recording cards. If you have already put your records on to computer, or are willing to do so, please contact Stuart at JNCC (tel. 01733 62626) for information about submitting them on disk since this can save us a great deal of time. Records which are already in Recorder are especially easy to submit! If you have substantial numbers of records which are in some *well organised* paper form, other than hoverfly recording cards, then please get in touch. It may well be possible for us to extract them directly without you needing to transcribe them to cards.

A gentle reminder of some points to bear in mind when filling in record cards:

- submit a separate card for each "visit" to a locality, no matter how few species you recorded

- be as specific as possible about date, locality and habitat, preferably using a separate card for each significant habitat element at a locality. Specific habitat comments like "*at hogweed in wide ride through conifer plantation*" are useful, "*woods, pond and grassland*" are not!

- give grid references as accurately as you can (preferably 6 figures, e.g. TL123456 or 52/123456 - whichever you prefer), but avoid spurious accuracy - e.g. don't use the 6 figure centre grid reference quoted in the reserve handbook if a site was 3km across and you wandered all over it!

- please fill in the altitude box if you can. We don't mind whether you use feet or metres but please indicate which! (eg. 250ft, 35m)

- please indicate that you have checked species that have recently been split, like *Platycheirus clypeatus* and *P. peltatus* (e.g. add "s.s." after the name). It you just cross off these names in the list without any comment we will assume you have not checked and will record *P. clypeatus agg.* or *P. peltatus agg.*

- please clearly mark any records of larvae or pupae - this will avoid misunderstandings over unusual recording dates. It is also useful to indicate that a list came from a trap (stating what kind) or any other unusual collecting method.

Finally, Stuart was asked at Dipterists Day for a map showing gaps in coverage. In the following map, filled circles indicate 10 km squares containing land in Great Britain with no records on the recording scheme database. Open circles indicate poorly recorded squares, defined here as those from which fewer than 10 of the 20 commonest species in that part of the country have been recorded. We know that records exist for some of these areas and it would be particularly useful if they could reach us by 31 March 1996. We will try to update this map in the next newsletter for those who are keen to target their fieldwork next year to fill in gaps.

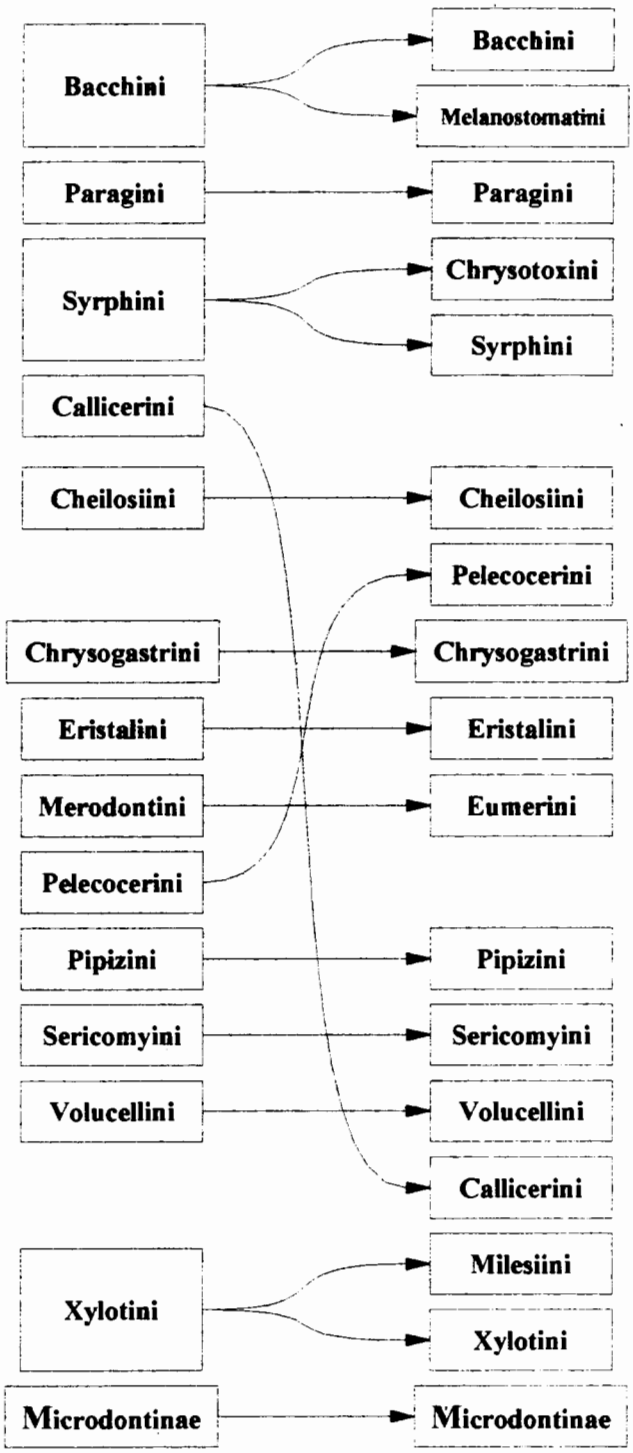

Gaps in coverage
No records
Poorly recorded

A CONSERVATIVE REARRANGEMENT OF SYRPHIDAE TRIBES

Darwyn Sumner
54, Blackshaw Lane, Royton, Oldham, OL2 6NR

A proposal for arranging the Tribes in such a way as to reflect recently described phylogenetic relationships (Rotheray) whilst minimising the work required to rearrange collections

The first column shows the current arrangement according to Stubbs & Falk.
The second column shows the proposed new arrangement.
The arrows show how the tribes are to be split or moved.



A full species list showing this proposed new arrangement is available from the author.

Darwyn Sumner 1995

CHALCOSYRPHUS EUNOTUS FEMALE FOUND IN GLOUCESTERSHIRE - MANY A TRUE WORD SPOKEN IN JEST!

David Iliff
Green Willows, Station Road, Woodmancote, Cheltenham, Glos, GL52 4HN

On 14 May 1995 five members of the Gloucestershire Invertebrate Group (GIG) were recording in an area of broadleafed woodland at Weston Park, on the Cotswold escarpment near Saintbury. The group consisted of Valerie Goring (whose expertise is spiders, and who had suggested the venue for the meeting), David Haigh (spiders, orthoptera and woodlice), Tony Taylor (hymenoptera, especially ants), GIG chairman Keith Alexander (just about everything!) and myself. During the afternoon some members of the group drew my attention to a hoverfly which was sitting on a hazel (*Corylus*) leaf. Keith and I rapidly moved to the spot, I with camera at the ready and Keith with his net poised for action.

We were not able to identify the hoverfly instantly, but it was clearly a honey bee mimic which looked as if it belonged to the group which are ancient woodland indicators. When one recorder is after a photograph in the wild and another wishes to capture the specimen, obviously the photographer has to do his or her bit first. I added to Keith's impatience by insisting on taking two exposures, with what seemed like an interminable delay between them waiting for the my flash unit (which had a somewhat run-down battery) to recharge. When both pictures had been taken the hoverfly flew off the hazel leaf and actually perched on Keith's net which was by now lying on the ground. Such cooperative behaviour was however shortlived because I inadvertently cast my shadow over the net causing the hoverfly to fly off into the woods not to be seen again.

I was confident that the identification of the hoverfly would be obvious once the slides were processed, but in the meanwhile Keith and I speculated over which species it might be. My best guess was *Criorhina asilica*; Keith favoured *Brachypalpus (laphriformis)*. Jokingly, I said: " You never know, perhaps it was *Chalcosyrphus eunotus*!". From Keith's response it was obvious that he knew that I was joking.

When the slides had been processed it was clear that the hoverfly which we had seen was indeed *C. eunotus*; this realisation was exciting enough in view of the rarity of the species, but even more exciting was the fact that the specimen was a female. According to **British Hoverflies** all examples of the species taken in Britain so far have been males; I have not heard of any subsequent captures or sightings of females since publication.

Without the benefit of a specimen to examine it was obviously important to check the slides carefully to ensure that the identification was correct, especially since there is no description in the (English language) literature of a female *C. eunotus* because no specimen has been available. Fortunately, however, comparison of the hoverfly in the photographs with Steve Falk's illustration in **British Hoverflies** and with the single example of the species (a male of course) in the Natural History Museum collection,

showed that the female differs from the male only in the usual features that distinguish the gender, such as the separation of the eyes and a somewhat broader abdomen. The pattern of markings on the thorax and abdomen were exactly like those of the male *C. eunotus.*

As a precaution the photographs were also carefully compared with females of other species, especially those of *B. laphriformis*, the only British species with which a possible confusion could arise. The following are the differences between the female *C. eunotus* seen at Weston Park and females of *B. laphriformis*:

	C. eunotus	*B. laphriformis*
Thoracic dorsum	Dullish black with vague but clearly visible grey longitudinal stripes, as illustrated in **British Hoverflies**	Shiny metallic bronze; any stripes very faint.
Abdomen	A pair of trapeziform faint grey spots on tergite 2 exactly (in shape, size and position) as illustrated in **British Hoverflies**. Visible portion of tergite 1 of same greyish colour, and a fainter pair of greyish spots on tergite 3. The grey colour on tergites 1 and 3 was also apparent on the male specimen in the NHM collection.	Tergites without spots
Legs	Mainly black except for knees; in particular the mid tibiae are black. Hind femur noticeably less arched than in either sex of *B. laphriformis.*	Extensively yellow, including all tibiae and basal segments of all tarsi. Hind femora more arched than those of *C. eunotus.*
Wings	Clear except for yellowish base. Blackish veins, with inner cross vein r-m conspicuously blackened.	Suffused brown; veins brown.

The site was a wooded stream valley, with ash, wych elm, hazel and field maple predominating. The hazel on which the female *C. eunotus* was found was alongside a path, not far from, but not adjacent to, the stream. Needless to say, the site will be visited again in 1996.

HELOPHILUS TRIVITTATUS IN SHETLAND

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Recording of hoverflies in Shetland is still in its infancy. Some work was carried out at the beginning of the century, while Brian Laurence has collected some records during his visits to the islands since the early 1980s. Over the past few years five individuals in the islands have started looking at this group and the islands' list is now a stunning 36 species. With no additions in 1995 so far, the list seems to have stabilised at this total, although some of the *Platycheirus* segregates still need sorting out.

On 6 July 1994, Frances Ratter on Foula collected a large hoverfly which she identified as *Helophilus trivittatus*, the identification later being confirmed by Colin Plant. At the time it seemed that this record related to an exceptionally far-ranging wanderer (one is reluctant to use the word migrant at this stage). The first few days of July 1994 saw an exceptional influx of migrant insects, including huge numbers of *Episyrphus balteatus*, *Metasyrphus corollae*, Red Admiral (*Vanessa atalanta*), Silver Y (*Autographa gamma*) and Diamondback Moth (*Plutella xylostella*).

However on 18 August 1995, at a beach known locally as the Easting on Unst (but called Sandwick by the Ordnance Survey in their infinite wisdom) I was searching for hoverflies on a patch of Creeping Thistle (*Cirsium vulgare)* when I suddenly saw a huge bright hoverfly nectaring at eye level a few feet away. I caught the specimen and immediately confirmed that this was another *H. trivittatus*. There were migrant hoverflies around at the time (mainly *E. balteatus* and *Syrphus vitripennis*) but the occurrence of *H. trivittatus* in Shetland had seemed to be a one-off, certainly not something to be repeated a little over a year later. Both specimens have been retained by myself.

I know little of the status of *H. trivittatus* in the rest of Britain other than comments in Stubbs and Falk which suggest that the species is scarce, widespread and occasionally encountered in strange places well outside its range. So, is this species resident in Shetland like other Eristalini, or is it a migrant? At the moment, I understand it is only Syrphini which are considered migrants (presumably they have to be to utilise fully their rather unpredictable larval food source of aphids). Are any other hoverflies known to be migrants? Any suggestions?

APHIDOPHAGOUS HOVERFLY LARVA IN OCTOBER

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1995 has certainly had a great effect on our hoverflies. Parts of England recorded the driest August since 1659. This undoubtedly had an impact on many of the commonest species of syrphid, producing a noticeable slump in August. However a relatively moist and mild September seemed to initiate a "second coming" of hoverflies, feeding on a bloom of autumnal flowers. For much of October we remained in an "Indian Summer" and on 8 October Manchester recorded its warmest October day since records began, with a very pleasant 23°C.

On 9 October I found an *Episyrphus balteatus* early second instar larva wandering about on the gates to the University bicycle sheds. Presumably the unseasonably mild weather and the presence of a great many sycamore aphids (*Drepanosiphum platanoides*) on nearby trees had induced a female *Episyrphus* to oviposit. Naturally I took it through to pupation, feeding it on *Acyrthosiphon pisum* aphids. I expected to have an adult *E. balteatus* emerge a week later, but almost a month later a diplazontidid parasite emerged. This shows that not only were syrphids thriving because of the wonderful autumn weather, but also their parasitoids were flying, and all within a kilometre of Manchester city centre.

Other late sightings this year include a male *E. balteatus* on 14 October, which matches Ernst Torp's (1984) sighting on Western Jutland, Denmark, and, surprisingly, a female *Sphaerophoria scripta* feeding on late-flowering hogweed on 27 October.

POSSIBLE DISPERSAL MECHANISM IN *PYROPHAENA GRANDITARSA*

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Following a recent entomological survey of a number of ponds in Cheshire, an interesting distribution pattern has emerged which might suggest a dispersal mechanism for *Pyrophaena granditarsa*. This hoverfly is a very suitable subject to study as it has two useful attributes: unlike many small hoverflies it is of course readily identifiable in the field as well as being relatively slow moving. Colonies can therefore be readily detected by sweep netting.

Records were made of all hoverflies present about each pond (or interconnecting pond cluster) during visits in both spring and summer 1995. Most of the ponds concerned are flooded marl pits of considerable age, and are now set within a pondscape mainly

composed of dairy leys and silage fields. The marginal vegetation is very limited in extent, but in places fragments of marsh, fen and even mire have survived. Amongst a wide range of hoverfly species identified there were many indicators of good quality wetland habitats, such as *Anasimyia contracta, A. lineata, Orthonevra brevicornis, Neoascia geniculata, N. obliqua, Parhelophilus frutetorum* and *Chalcosyrphus nemorum* (Whiteley, 1987 and 1995). The presence of these species would appear to confirm the ancient character of many of these ponds.

P. granditarsa was found to be widely distributed throughout the survey area, and exhibited a distinct cluster pattern. *Pyrophaena rosarum* was also recorded, and, similar to the observations in Stubbs and Falk (p. 125, 1983), was found to be less frequent than *P. granditarsa*, occurring in only about 10% of ponds. Interestingly, *P. rosarum* was only found at ponds in association with *P. granditarsa*, rather than occurring in isolation.

The spring survey results for *P. granditarsa* revealed a widespread distribution pattern, with colonies present at about 16% of all ponds. By summer the number of colonies recorded within the survey area had grown to about 49% of all ponds. This compares with data for a smaller but somewhat similar pondscape in Lancashire (unpublished data), where colonies were detected in about 43% of survey ponds.

The summer colonies appeared to have established over a mean distance of 217m from the spring colonies. This distance was found to be almost double the mean distance between ponds in this area. There was also evidence to suggest that dispersal in this species might be dynamic, as only 40% of spring colonies were reconfirmed in the summer visit.

I would greatly appreciate comments on these observations, and in particular would be glad to hear from anyone with literature or relevant information on the following:

Pond survey data: does anyone know of comparable surveys of hoverfly assemblages?

Phenology and number of broods: I would be interested in any information concerning seasonality, and evidence of breeding in this species. For example, did the observed dispersal distance involve single individuals, or was this colonisation the result of more than one generation?

Dispersal patterns in hoverflies: there were no interconnecting wet habitats such as ditch systems acting as conduits for migration and colonisation on this site. Has *P. granditarsa*, or any allied species, been recorded away from wet habitats, e.g. in dry grassland? Perhaps the influence of the prolonged drought this year may also have strongly affected the distribution pattern.

Habitat requirements: the observed distribution pattern of spring colonies appears to be clumped. Has anyone considered the exact habitat requirements of this species? Certainly there appears to be little information concerning the

larval prey (Rotheray, 1994; Rotheray, 1995).

References:

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MALLOCH SOCIETY NEWS

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In December the Malloch Society of Scottish Dipterists held their 8th annual meeting and dinner. It was a very successful meeting with 9 speakers queuing up to give a talk on various groups of flies including hoverflies, soldier flies, cecids and juniper gall flies.

At the dinner a quiet, unassuming founder member of the society, David Robertson, was presented with the DOTY award (i.e. the Scottish Dipterist Of The Year) by last year's winner, David Horsfield, for his longstanding work on Scottish syrphidae, and more recently tackling the identifications of the various difficult flies emerging from the Saproxylic Project, which the Malloch Society has been carrying out over the past 3 years. Well done to David!

HOVERFLIES OF SOUTH EAST CORNWALL AND THE SCILLY ISLES

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Rod Belringer and I have been recording hoverflies in South East Cornwall. While searching for *Chrysotoxum elegans* in August 1994 we noticed a tremendous increase in the number of hoverflies along the coast in various places between Fowey and Rame Head. This influx began in early August (especially from the 6th) and lasted for 2 to 3 weeks, until about the 20th.

The main species involved was of course *Episyrphus balteatus* which was suddenly present in large numbers all along the coast. There were also large numbers of *Metasyrphus corollae*, *Scaeva pyrastri* and various other species which were swarming along the beaches and cliffs, and were mainly attracted to rock samphire (*Crithmum maritimum*) and ragwort (*Senecio*). Other species involved included *Syritta pipiens*, *Helophilus pendulus* and various *Eristalis*, as well as some more surprising ones: *Metasyrphus latifasciatus*, *Orthonevra nobilis*, *Helophilus trivittatus* and *Pyrophaena granditarsa*, species not normally associated with beaches and sea cliffs, were quite numerous. Strangely, for most of these species, this influx did not appear to affect significantly the numbers subsequently seen inland

Our search for *Chrysotoxum elegans* was quite successful; we found it in about a dozen locations along that stretch of coast, as well as one individual about four miles inland.

Rod and I visit the Scilly Isles every October, and, since 1991, we have concentrated on recording hoverflies there. We have seen a total of 35 species (not a bad score for October) and we usually see about 25 in each annual visit which lasts about two weeks. We have records from all the major islands and from a couple of smaller ones. The records have been sent to the Cornwall Biological Records Unit. The species recorded are *Melanostoma mellinum, M. scalare, Platycheirus albimanus, P. manicatus, P. peltatus, P. scutatus, Xanthandrus comtus, Epistrophe grossulariae, Episyrphus balteatus, Meliscaeva auricollis, M. cinctella, Metasyrphus corollae, M. latifasciatus, M. luniger, Scaeva pyrastri, S. selenitica, Sphaerophoria scripta, Syrphus ribesii, Syrphus vitripennis, Rhingia campestris, Neoascia podagrica, Orthonevra nobilis, Anasymia lineata* (probably), *Eristalis abusivus, E. arbustorum , E. pertinax, E. tenax, Helophilus pendulus, Myathropa florea, Eumerus strigatus, Merodon equestris, Syritta pipiens* and *Xylota segnis*. Virtually all these records are from patches of Ivy (*Hedera*).