HOVERFLY NEWSLETTER

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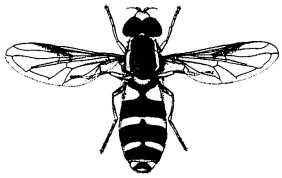

Dipterists Forum

ISSN 1358-5029

As a new season begins, no doubt we are all hoping for a more productive recording year than we have had in the last three or so. Despite the frustration of recent seasons it is clear that national and international study of hoverflies is in good health, as witnessed by the success of the Leiden symposium and the Recording Scheme's report (though the conundrum of the decline in UK records of difficult species is mystifying).

New readers may wonder why the list of literature references from page 15 onwards covers publications for the year 2000 only. The reason for this is that for several issues nobody was available to compile these lists. Roger Morris kindly agreed to take on this task and to catch up for the missing years. Each newsletter for the present will include a list covering one complete year of the backlog, and since there are two newsletters per year the backlog will gradually be eliminated.

Once again I thank all contributors and I welcome articles for future newsletters; these may be sent as email attachments, typed hard copy, manuscript or even dictated by phone, if you wish. Please do not forget the "Interesting Recent Records" feature, which is rather sparse in this issue.

Copy for **Hoverfly Newsletter No. 42** (which is expected to be issued with the Autumn 2006 Dipterists Forum Bulletin) should be sent to me: **David Iliff, Green Willows, Station Road, Woodmancote, Cheltenham, Glos, GL52 9HN**, (telephone 01242 674398), email: **davidiliff@talk21.com**, to reach me by 20 June 2006.

CONTENTS

3RD INTERNATIONAL SYMPOSIUM ON THE SYRPHIDAE

The 3rd International Symposium on the Syrphidae was held at the Museum "Naturalis" in Leiden, Netherlands in the period 2-5 September 2005. The first three days were spent in the museum for oral presentations and posters. The final day involved field trips to Meijendel, a dune area near the coast and Kortenhoef, an area of fenland. Participants from 22 countries were present (the Netherlands, Belgium, Brazil, Czech Republic, China, Finland, France, Germany, Indonesia, Iran, Ireland, Korea, Norway, Russia, Serbia & Montenegro, Spain, Sweden, Switzerland, Turkey, UK, Ukraine and USA).

The programme of presentations and posters is reproduced below.

Friday 2 September

S. Ball & R.K.A. Morris
Where will our hoverflies be in 2020? Some examples of potential responses to climate change

A. Barendregt
National biogeography: distribution pattern of all Syrphids in the Netherlands

L. Marinoni
The Syrphidae community in five floristically different areas in Paraná, Brazil

P. Hondelmann
The hoverfly *Episyrphus balteatus*: biology and mode of life (DVD film)

M.C.D. Speight
Why do females predominate in malaise trap catches of Syrphidae (Diptera)?

Pérez-Bañón, C., M.A. Marcos García & G.E. Rotheray
The preimaginal stages of *Callicera* species (Diptera, Syrphidae)

W. Renema & W. van Steenis
Are spring hoverflies changing their flight period?

F.C. Thompson
Where are we now: an overview of the systematics of flower flies

D.-S. Choi
Molecular phylogeny of Palaearctic *Volucella* species

A. Vujić, A., G. Ståhls, S. Radenković & S. Simić
Subgeneric division of the genus *Merodon* Meigen, 1803 (Diptera: Syrphidae) – morphological and molecular evidence

Saturday 3 September

T. Gittings, P. Giller & J. O'Halloran
Effects of afforestation on hoverfly (Diptera, Syrphidae) biodiversity M.A.

J.-P. Sarthou, J.-P., L. Larrieu & A. Delarue
Ecological assessment with Syrph the Net: the case of four stands in a *Fagus-Abies* forest in Hautes-Pyrénées (South-Western France)

Marcos-García, M.A., C. Pérez Bañón & G.E. Rotheray
Saproxylic syrphids in Mediterranean ecosystems (Diptera, Syrphidae)

E. Castella & M.C.D. Speight
Sub-alpine syrphid communities analysed with the Syrph-the-Net database

A. Ssymank & T. Krause
The Hoverflies (Diptera, Syrphidae) in an alluvial system of the Rhine in the Urdenbacher Kämpe near Düsseldorf (Northrhine-Westfalia, Germany)

T. Gittings, J. Good & M. Speight
The use of hoverflies (Diptera, Syrphidae) as indicators of wetland habitat quality: a case study from Pollardstown Fen, Co. Kildare, Ireland

F. Dziock & J.-P. Sarthou
A review on the use of hoverflies as bioindicators (Diptera, Syrphidae)

Mystery Hoverfly Competition

J.-H. Stuke
The hoverflies (Diptera, Syrphidae) from Baltic amber

J.T. Smit & A. Vujić
Preliminary results of a revision of the genus *Psilota* in the West Palaearctic region

H. de Jong & B. Brugge
The collection of Palaearctic Syrphidae in the Zoological Museum of the University of Amsterdam

G. Ståhls, X. Mengual & S. Rojo
Preliminary phylogeny of the predatory hoverflies (Diptera, Syrphidae: Syrphinae) using molecular data

P. Láska, J. Dušek, L. Mazánek & V. Bičik
Dušek & Láska´s (1967) system of Syrphini commented after 38 years

A. Vujić, G. Ståhls, S. Rojo, S. Radenković & S. Šimić
Paragini Phylogeny (Diptera: Syrphidae) and Systematics: a combined approach of DNA sequences and morphology

C. Carlson
Syrphids (DIPTERA: Syrphidae) as Bio-control Agents in Organic Lettuce on the Central Coast of California, USA

F. Verheggen, L. Arnaud, E. Haubrugge
Isolation of tomato plant volatiles and their antennal perception by the predator *Episyrphus balteatus* (De Geer)

A. Pineda Gomez & M.A. Marcos García
Several strategies to increase the number of aphidophagous hoverflies in Mediterranean greenhouses (Diptera, Syrphidae)

Sunday 4 September

W.H.O. Ernst
Pollen supply and feeding preferences of syrphids in shrub/herb vegetation boundary by feces analysis

R.K.A. Morris & S. Ball
Estimating the populations of three species of *Volucella* in an English woodland

F. Arrignon, J.-P. Sarthou, M. Deconchat & C. Monteil
What should we know about *Episyrphus balteatus* to improve the modelling of its individual overwintering survival?

V.A. Mutin
The Japan sea region as centre of syrphid endemism and dispersal center of arboreal fauna

L. Marinoni
Most abundant species of Syrphidae (Diptera) in Paraná, southern Brazil

H. Bartsch
The Encyclopedia of the Swedish Flora & Fauna – Volume Syrphidae

T. Zeegers
Trends of hoverflies in the Netherlands

W. van Steenis
The flower flies (Diptera, Syrphidae) of Nebraska

A.V. Barkalov& D.Yu. Kropacheva
The hoverfly fauna of the Altai mountains

A. Vujić, G. Ståhls, S. Rojo, S. Radenković & S. Šimić
Adult morphology and Phylogeny of Paragini: an analytical approach to species-groups relations

G. Ståhls, A. Vujić & V. Milankov
Cheilosia vernalis-complex: molecular and morphological variability (Diptera, Syrphidae)

List of poster presentations

Cheng, X-Y.
A new genus of hoverfly from China (Diptera: Syrphidae)

Choi, D-S, K. Ôhara & H-Y. Han
A description of a new *Volucella* species (Diptera: Syrphidae), with taxonomic discussion about the superficially resembling species from the Eastern Palaearctic Region

Gharali, B.
An interactive key for identification of Syrphidae genera based on Delta software

Gharali, B.
Hoverfly taxonomy in Iran: status and developments

Gittings, T.
The hoverfly (Diptera, Syrphidae) fauna of a plantation ancient woodland (Ballyannan Wood, Co. Cork, Ireland)

Ichige, K. & T.R. Nielsen
On a new *Melangyna* species (Diptera, Syrphidae) from Japan

Iliff, D.
Hovering activity of female Syrphinae (Diptera, Syrphidae)

Ludoski, J., A. Vujić & V. Milankov
Morphometric analysis of wing characters in populations of the *Cheilosia laticornis* group (Diptera, Syrphidae) from the Balkan Peninsula

Mazánek, L. & P. Láska
Upgrading of the checklist of the Syrphidae (Diptera) of the Czech and Slovak Republics

Mutin, V.
Hoverflies (Diptera, Syrphidae) of Komsomolsk-na-Amure.

Nielsen, T.R. & A.V. Barkalov
A new Palaearetic *Platycheirus* of the *manicatus* group

Pérez Bañón, C. A. Vujic', S. Rojo, S. Radenković & T. Petanidou
West Mediterranean islands and biodiversity: an analysis of syrphid fauna (Diptera, Syrhidae) of Lesvos island, Greece

Popov, G.V.
Using K. B. Gorodkov's methods in the investigation of hoverfly ranges

Smit, J.T.
The hoverflies of Yemen (Diptera: Syrphidae)

Our Dutch hosts are to be congratulated on the superb organisation of the Symposium and thanked for their magnificent hospitality which ensured that the conference was a great success.

HOVERFLY RECORDING SCHEME NEWS

Stuart Ball
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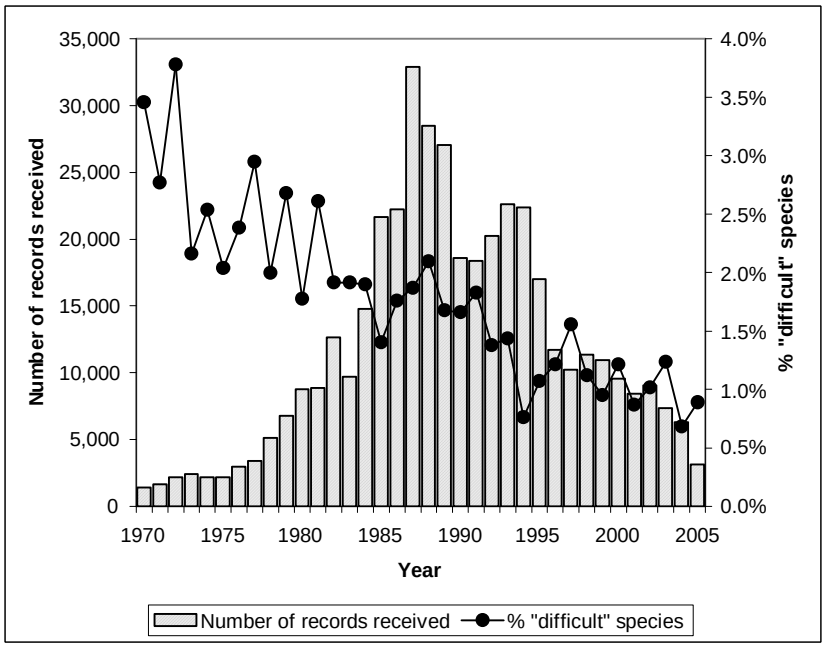
Roger Morris
7 Vine Street, Stamford, Lincolnshire PE9 1QE

2005 has been a very busy year for us. Hopefully by now everyone will have visited the Recording Scheme website www.hoverfly.org.uk. We continue to work on new products for the site and have a number of ideas that simply need time to make them happen. The most important aspect of the website is the distribution maps that are regularly updated as new data arrive; this is a real advance because recorders should be able to see the impact of their efforts fairly soon after submitting records. There are now 455,581 records on the database of hoverflies whose identity we accept. There are 17 years (1982, 1984 to 1999) with more than 10,000 records received and 27 years (1977 to 2004) with more than 5,000 records. 1987 was the most productive year with 32,872 records received.

One aspect of data that are arriving is a worrying downward trend in the numbers of records of more challenging genera such as *Cheilosia* and the Pipizini (see Figure 1). This differs from our experience in the field, which does not suggest that these genera are any less frequently met with; indeed Roger has found *Cheilosia* and *Heringia* to be quite abundant in northern Northamptonshire. We think that this reflects reluctance amongst recorders to tackle these groups. Should we be organising master classes to help people get to grips with these species? If so, perhaps it is about time that we ran one – we would welcome feedback (to Roger at roger.morris@dsl.pipex.com) on this issue. Alternatively, if you are uncertain, simply retain specimens and send them to Roger to identify.

Figure 1. The proportion of difficult species records submitted in relation to overall numbers of records submitted.



Other projects that we have undertaken this year include a major trawl of web sites to seek out possible sources of data. More than 50 were contacted as part of this exercise, some of which yielded useful data. We have also contacted the majority of the most active recorders that have not recently submitted records, many of whom have kindly contributed new data and others have promised data in due course. In addition, Roger has got to grips with the backlog of data from the Dipterists Forum field meetings, many of which include hoverfly data that will be useful to the scheme.

This burst of activity has made a considerable difference to the maps, but as always, there tend to be hot spots where active recorders are making a difference. The difference today is that we also have a programme of action to try to fill some of the gaps. In 2005 Roger made three trips to Scotland and has a further three planned for 2006. Dipterists Forum will be visiting Herefordshire in May, so perhaps a few gaps will be filled then. Even so, there is a lot to be done and we are keen to encourage recorders to visit under-recorded areas. Stuart is looking into developing a system on the website whereby you can put your postcode in and get a list of the species that have been recorded from your 10km square. If you go on to the website and bring up the map for numbers of species you can find out which squares are well or poorly recorded. Place the

cursor over particular spots – the 10k grid and latest dates for records will appear in a box below the cursor – how about using this to find a poorly recorded square near you?

The work of the Recording Scheme was promoted again at the 3rd International Hoverfly Symposium in Leiden this September. Stuart has been working on predicting where hoverflies might be expected to occur as a result of climate change. The results are quite encouraging in so far as many southern species can be expected to extend their range, but there are some that may become far less frequent in south-east England and others for whom their range will contract. We also presented a poster in which we evaluated the various approaches to predicting the composition of hoverfly assemblages. This work needs a little more refinement but will hopefully appear in press next year. As usual, the conference was highly stimulating and very enjoyable. Sadly it was not attended by a big UK contingent, which was a great shame as the international hoverfly community is very diverse and includes a good spectrum of young and enthusiastic recorders. Watch out for the Dutch hoverfly atlas – this is an impressive piece of work.

Was 2005 a good year for you? There are mixed reports and a good many recorders suggest that it has been little better than other recent seasons. Even if the overall picture of hoverfly occurrence is not great, hoverflies continue to be on the move. Recent records include a specimen of *Sphegina siberica* from North Yorkshire (Roy Crossley) and a number of specimens of *Rhingia rostrata* from Shropshire (Nigel Jones). The latter are very exciting because they show just how rapidly *R. rostrata* is moving up the Welsh borders. Nigel also reports a specimen of *Epistrophe diaphana* from Shropshire, complementing the one taken a couple of years ago. The old favourites *Volucella zonaria* and *V. inanis* continue to expand their range – *V. zonaria* appears to be moving inland into the midlands, so watch out for it. We also think that *V. inflata* is on the move as data seem to suggest that it is becoming more frequent – has anyone else got this impression first raised by Roger Payne in Essex? On the down side, has anyone seen *Anasimyia lunulata* recently? According to the database it has not been recorded since 1995 (on Dartmoor) and the youngest Welsh record is 1993.

And finally …we have recently been asked by JNCC to revise the statuses of hoverflies previously listed in Stephen Falk's 1991 review. This is something we have wanted to do for some time, and the prospect of getting the statuses reviewed is exciting, especially as we hope it will make it possible to draw together previously unavailable information for conservation managers. The question of conservation is also highlighted in an excellent article by Martin Drake and Norman Baldock in the December 2005 issue of British Wildlife. We too have an article in a forthcoming issue; effectively it synthesises the current state of knowledge of the British species of *Volucella* but also extends to available information on European distribution of our five species as well as *V. elegans* – we hope it will appear in the April edition.

VOLUCELLA INANIS AND *V. ZONARIA* IN YORKSHIRE, PLUS NOTES ON OTHER SPECIES

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Volucella inanis and *V. zonaria* both reached Yorkshire during 2004. I am indebted to Bill Ely who was responsible for determining the species and forwarding the records. A female *V. inanis* was photographed on *Carduus* at Thrybergh Tip, SK49, on 22.8.2004 by Paul Leonard. *V. zonaria* was seen by Bill Ely on a flower at Rother Valley Country Park, SK453831, on 4.7.2004. Another recent addition to the county fauna is *Cheilosia psilophthalma*, which has been identified from two localities by Roy Crossley, viz. Millington Springs, SE8452, 10.5.2004 (♀), RC; Sand Dale, SE859848, 14.5.2003, RC (teste A. E. Stubbs).

Following the splitting of *Platycheirus scutatus* by Rotheray (1998), I re-examined my *P. scutatus* (sensu lato) specimens, and Roy Crossley reexamined his. Our combined *P. scutatus* (sensu stricto) records for vice-counties 62 and 64 stand as follows: VC62: Haugh Wood, Pickering, SE7988, 9.8.1991 (♂), AG; Maiden Greve Balk, Malton, SE7771, 16.5.1990 (♂), 26.4.1991 (♂), AG; Sand Dale, SE88, 26.5.2003 (♂), RC; Sutton Bank, SE5083, 10.9.1992 (♂), AG: VC64: Birkham Wood, SE35, 21.6.1988 (♂), RC; Collingham, SE34, 17.4.1982, RC; Otley, SE24, 25.5.1988 (♂), RC; Scagglethorpe Moor, Upper Poppleton, 8.8.2000 (♂), AG.

Reference Rotheray, G. E. 1998. *Platycheirus splendens* sp. n. from Britain formerly confused with *Platycheirus scutatus* (Diptera: Syrphidae). Entomologist's Gazette 49: 271-276.

XYLOTA FLORUM COMES HOME

Malcolm J. Smart
Southcliffe, Pattingham Road, Perton, Wolverhampton, WV6 7HD

I got very warm working at my desk in Perton (SO846990, VC39) today (04/08/2005) and decided to open the window behind me. My attention was drawn to a large dark *Xylota* trying to escape from that window. I caught it in a tube expecting to find *X. segnis* but to my surprise it turned out to be a female *X. florum*. Although this is not the first Staffordshire record, I found it surprising because my house is located on top of an escarpment of highly porous (and therefore very dry) sandstone. There is no ancient (or modern) wet woodland nearby where it might find the partly submerged logs that in my experience are its usual preferred habitat.

FIRST EAST GLOUCESTERSHIRE RECORD OF *SERICOMYIA SILENTIS*

David Iliff
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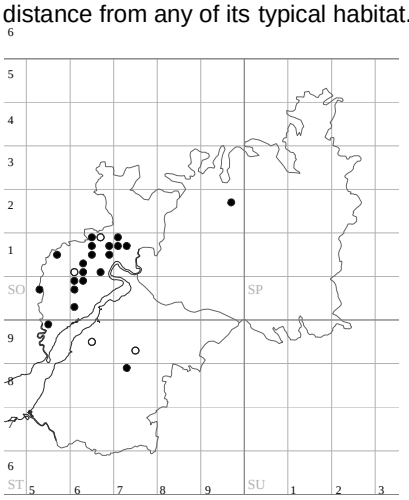
Malcolm Smart's article "*Xylota florum* comes home" (above) describes an instance of a hoverfly being found in the "wrong" habitat. I recall being similarly surprised in the past at finding a specimen of *Volucella inflata* on hogweed by a roadside far away from any woodland, and a male *Scaeva selenitica* at ivy flowers in a village street a long way from any conifer plantations.

Gloucestershire has numerous records of *S. silentis*, but until 2005 these were restricted to VC34 (West Gloucestershire). Over 90% of these were from the Forest of Dean, where the soil is mainly acid and where the species is common, with nearly seventy records from twenty 2 km. squares. The remainder were from the Vale of Berkeley which also has areas of acid soil. There were no records from VC33 (East Gloucestershire), where such habitat is virtually non-existent.

On 17 September 2005 I examined some ivy that was in flower in my garden, which is on alkaline soil at the foot of the Cotswolds. It was a warm sunny day and there were numerous insects feeding on the ivy, including several hoverfly species, among which was a male *S. silentis.* This is the first record for the species for East Gloucestershire that I can trace, and my garden is about 26 kilometres in a straight line from the nearest previous record for the species (as the Gloucestershire distribution map below illustrates; open circles are pre-1985 records) and a similar distance from any of its typical habitat.



Sericomyia silentis: Gloucestershire distribution

DIARY OF A SQUARE-BASHER: THE SCOTTISH BORDERS IN EARLY AUGUST 2005

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Having already completed two successful visits to Scotland earlier in 2005, I was determined to maintain momentum in rectifying shortfalls in coverage of hoverflies in Scotland. So, just five days after returning from a wonderful trip to the southern Alps, I was off to Scotland on Friday 5 August. Maybe it was the realisation that the two dimensional landscape of the East Midlands did little to inspire; or maybe it was the madness that affects the square-basher when faced with empty squares on maps and moderately good recording conditions. I favour the latter excuse as it takes a lot to get back into the driving seat after long road journeys (we did over 2000 miles the previous week and 800 miles on outward and return journeys).

In contrast to my earlier experiences, the A1 was relatively clear and it took just 5 hours to reach Langholm. I had changed hotels because I thought that the Exedale Hotel had some merits – not so, as the saloon bar was closed when I wanted to take my meal and my room was over the functions room and not insulated against noise. It was not helped when I discovered that breakfast was not served until 9 am – half way through the morning! Fortunately I did get breakfast at 8.30 on Saturday morning and managed to get out before 9. Off I went on the usual zig-zag between conifer plantations and roadside verges.

One feature of this part of Scotland that I had not expected was the extent of angelica, which formed widespread banks of flowers on the verges. This gave me hope that there would be good numbers of flies but I was sadly disappointed. It was hard work to find much, but I did manage to visit 14 points comprising eleven 10km squares on Saturday. *Eristalis pertinax*, *Sericomyia silentis* and *Episyrphus balteatus* were present at most sites, but the majority of other species were much scarcer. The most interesting records on that first day were *Arctophila superbiens*, *Eriozona syrphoides*, *Cheilosia longula*, *Eristalis rupium* and *Platycheirus nielseni*. None were present in any numbers however. Still, I returned to my hotel with a degree of satisfaction and high hopes for the Sunday.

I would not recommend my abode of the night – at least the room I had. By 10.30 pm I was going spare at the din from the function room and upon enquiry was told quite nonchalantly – oh the event would be going on until midnight. My demeanour was not improved and this was noted – I got a new room without a bathroom further away from the din. The following morning, my blood pressure nearly exploded when I found that despite asking for an early breakfast, I was told that breakfast would not start until 9 am. I left without breakfast, as I was not prepared to waste half the morning. As it happened, I could have waited because every site I visited generated few records – there were remarkably few

flies despite nice sunny weather. Not to worry – I covered ten 10km squares and sixteen recording points, which filled gaps for many common species. The best records of the day were probably *Eristalis rupium* and *Sericomyia lappona*, but I also noted just a single record of *Leucozona glaucia*.

The return home was relatively painless and I completed the journey in $4^1/_2$ hours; at least this bit went fine. Over the following evenings I worked my way through a large sample of material and finally concluded that I had generated just over 200 10km square records. Quite a good haul despite the poor Sunday, and at least some maps look better.

Reflecting on the three visits I made to Scotland this year, I think it was highly worthwhile, as the maps on the website will show (www.hoverfly.org.uk). The total number of useful records amounted to over 600 10km square records from relatively un-recorded areas. Clearly more will need to be done in the next few years: does anyone fancy taking on an area? There are some quite interesting areas that have already been recorded but the records are old – the western end of Dumfries and Galloway is one; maybe areas around Galashiels or perhaps Perth and Stirling.

Stuart and I are looking at ways in which we might generate some sponsorship money to assist with travel and accommodation costs. Let's see what can be done, but meanwhile anyone fancying a collecting holiday in Scotland is encouraged to do so – most squares are poorly recorded. June and July are clearly the most productive and should yield species that you won't see in any numbers in southern and central England. If you don't fancy such a long trip, there is plenty to do in mid-Wales and the Welsh borders.

As I write, the summer is coming to a halt – torrential rain, the cricket delayed and a big block of specimens to identify (I've held on to material across all Diptera families, so the Scottish trips should yield blocks of data for these schemes). Still, I look forward to next year – I intend to do more and hope to report further successes. I await spring with thoughts of hoverflies at montane *Salix*, marsh marigold and buttercups. Who knows what might turn up!

HOVERING BEHAVIOUR OF FEMALE SYRPHINAE

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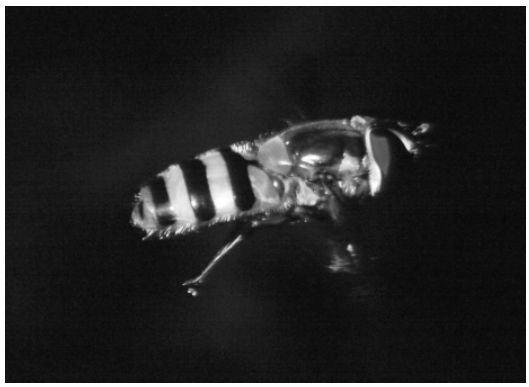
Gloucestershire, GL52 9HN

Some of the literature written in English on hoverflies could easily convey the impression that hovering is an activity confined to the males. This suggestion can be found in both early and recent works. For example Verrall (Syrphidae of Great

Britain, 1901) wrote: “The Syrphidae……are usually active and brightly coloured, and the males of most species are remarkably quick fliers and usually remarkably good hoverers in the sunlight….” . Much more recently the BBC Wildlife Magazine Pocket Guide No. 10: Hoverflies and their relatives, (2004) stated: “It is mainly males of some species that are seen hovering, perfectly still, in the air”. Flies of the British Isles (Colyer and Hammond, 1951), after writing lyrically about the hovering prowess of males, does at least credit females of “smaller species” with some ability to hover above flowers, but in general, even when it is acknowledged at all, the capability of females in hovering seems to be distinctly underrated when compared with that of the males

I have been observing, recording and photographing hoverflies for over 20 years, and I remain somewhat puzzled at this apparent failure by authors to notice that females of many hoverfly species are also impressive hoverers. I have regularly observed females hovering for long periods and apparently with the same precision as that exhibited by males, and have photographed them doing so. Had their hovering not exhibited those qualities I would not have been able to obtain acceptable photographs. I exhibited a poster at the 3rd International Symposium on the Syrphidae in Leiden showing photographs of several females hovering. One of the photographs is reproduced in black and white below. The species shown were *Platycheirus albimanus*, *Episyrphus balteatus*, *Epistrophe eligans*, *Epistrophe grossulariae*, *Eupeodes luniger*, *Scaeva pyrastri*, *Xanthogramma pedissequum* and two Oriental species, *Paragus crenulatus* and *Ischiodon scutellaris*. The poster was shown again on Dipterists Day at Preston Montford in November 2005. All the species included in the poster are members of the Syrphinae. I do not recall having seen hovering by females in the other sub-families.

Two US field guides to invertebrates, Simon and Shuster’s Guide to Insects (Ross H Arnett Jr. and Richard L Jacques Jr., 1981) and The Audubon Society’s Field Guide to North American Insects and Spiders (Lorus and Marjery Milne, 1980) show photographs of *Eupeodes americanus* hovering; they are different photographs, but clearly they are of the same specimen; it is a female. David Attenborough’s recent television series “Life in the Undergrowth” described and showed males hovering while holding territory prior to mating. The book of the same name that accompanies the series also describes this activity and is illustrated by a photograph of a hovering *Scaeva pyrastri*, for which the caption reads “a hoverfly hanging motionless in mid-air in front of a flower”; the *S. pyrastri* in the picture is a female.



Female *Epistrophe grossulariae* hovering

INTERESTING RECENT RECORDS

Volucella inanis: Holly Hayes, Birstall, Leicestershire, (SK594085) 15 July 2005 (Darwyn Sumner)

Eriozona syrphoides: 1 male, Pope's Hill, Gloucestershire (SO6814), 28 July 2005, John Phillips. Second county record (only previous record was in 1982).

Literature for 2000
Compiled by Roger Morris

Allen, A.A., 2000. *Scaeva selenitica* (Meigen) (Dipt., Syrphidae) in the S.E. London area in April. *Entomologist's Monthly Magazine* **136**: 30

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Achterkamp, B., Ottenheim, M., Buekeboom, L. &; Brakefield, P., 2000. Paedogenesis in *Eristalis arbustorum* (Diptera: Syrphidae). *Proceedings of the Section Experimental and Applied Entomology of the Netherlands Entomological Society* (N.E.V.) **11**: 83- 87

Anon 2000. Precedence of names in wide use over disused synonyms or homonyms in accordance with Article 23.9 of the Code. *Bulletin of Zoological Nomenclature* **57**(1): 6-10

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