HOVERFLY NEWSLETTER

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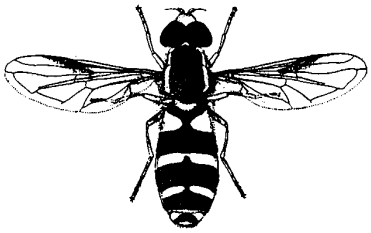
AUTUMN 2007



Dipterists Forum

ISSN 1358-5029

Readers may have wondered why they did not receive the Autumn 2006 newsletter (**Hoverfly Newsletter No. 42**) until the spring of this year, and why there was no Spring 2007 issue. The reason is that the newsletter is nowadays mailed to forum members with the Bulletin. The Autumn 2006 newsletter was prepared at the normal time for dispatch with the autumn bulletin, but no autumn bulletin was produced until the spring of this year, by which time the newsletter was some six months old. Consequently, by the time readers received it, the deadlines for submitting copy for the intended spring newsletter had long passed, and so it was not possible to produce a spring issue. To avoid delays in the catching up process two of Roger Morris's Recent Literature compilations are included in this issue.

My thanks to everyone who has supplied copy for this newsletter, not least for the excellent response to calls for "Interesting Recent Records". Copy for **Hoverfly Newsletter No. 44** (which is expected to be issued with the Spring 2008 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 December 2007.

CONTENTS

RECORDING SCHEME UPDATE

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We last reported in Spring 2006 (Issue 41) when there were some 455,000 records on the database, but have not been idle in the intervening period. The database now holds nearly 527,000 records and there are a number of additional datasets we know of that will bring the total well above 530,000. This increase is partly as a result of Roger contacting many of the most active recorders to update their data, trawls through websites for photographs that could be identified, and a steady stream of data from new contributors. Our own biggest contribution was a visit to the Outer Hebrides that filled in around 60 previously unrecorded or poorly recorded squares on Harris and Lewis and along our route through mainland Scotland.

Our trip to Harris and Lewis was a fantastic opportunity to see these wonderful islands and to record hoverflies and as a result of our efforts the list for these islands was raised from 19 to 38 species. There were a couple of squares that we didn't manage to visit because there is no road access, but these apart we obtained records from all the squares on these islands. Some squares in the centre of Lewis were hard work however, and there were places where we both swept hard for 20 minutes to secure a single hoverfly! The two "islands" are very different with Lewis largely covered with blanket bog and with some nice Machair along the west coast. Harris is amazing as much of the interior comprises a mosaic of small vegetated pools in a landscape of bare rock – it is well worth a visit.

There is much more to do, but the maps do now show signs of improvement over the coverage achieved in the Provisional Atlas (when the recording scheme held 375,000 records). There are some noteworthy changes as a result of the improved levels of recording as well as some developing patterns of distribution. One of the most striking changes is *Sphegina sibirica* which has clearly become widely established in Scotland (where it can be the commonest hoverfly species at some localities) and is also doing well in the Lake District and in Wales. Most of the other "movers" are already well known: *Epistrophe diaphana* and *Rhingia rostrata* continue to become more frequent, and the spread of *Volucella inanis* and *V. zonaria* continues.

Whilst we have seen a good response to calls for new data, it is noticeable that the "old guard" are on the decline and the numbers of records arriving from the stalwarts are diminishing. Of course this is to be expected, as recorders are ageing and some are reducing their activities or turning their attention to other families. Fortunately, we have seen the arrival of a number of new, active recorders in areas that were previously under-recorded, but we have noticed an increased reliance on photography - which is useful, but limits the range of species that can be identified with confidence. We are therefore keen to reach a new audience and to stimulate greater interest amongst new recruits and have been actively involved in training programmes. This year we have run courses in Buckinghamshire and Northamptonshire, and have bookings for more courses in Northamptonshire and Cheshire in the autumn and winter. We are happy to assist elsewhere, and are keen to talk to Wildlife Trusts that might act as the focus for running identification courses.

Looking at the maps, it is clear that the level of recording is decidedly patchy, but some of the patchiness is actually a function of the landscape rather than recording effort. Who deliberately goes to parts of the country where there is no obvious habitat?* We do need to find new ways of stimulating activity and interest, and maybe there is a place for the development of a network of "parataxonomists" who just collect material for identification by more experienced Syrphidologists. Do you know of anyone who might take on such a role, or are you lacking confidence in identification but would like to make a contribution? If you are willing to collect hoverflies, Roger is willing to identify them - providing they are accompanied by full data (Site name, Grid Reference, Date, Recorder's name) of course!

* **Answer** – Roger makes a point of visiting poorly recorded areas and gets bored silly by the miserable hauls in areas of the Fens and Radnorshire!

The biggest task we have undertaken has been the review of the conservation status of hoverflies mentioned in the Spring 2006 issue. The text is largely complete and is awaiting revision of the introduction that will go into all such reviews; once this is done, it will be published by JNCC and made available through the Natural History Book Service and as a download from the JNCC website. This review will replace the one by Steven Falk that was published in 1991 and is based on the most recent IUCN guidelines (2004). As a result, there has been a substantial reduction in the number of species listed (see table). Our approach has been robust and we hope that the resulting statuses will be stable for some time. However changes in land use and the climate, as well as advances in conservation management, will continue to affect hoverflies and we must expect that further revisions will be needed in due course.

Changes in the status of hoverflies 1987-2007.
Note that "Endangered and Vulnerable" statuses in the new review, based on IUCN's 2004 criteria, have a different meaning and are not comparable with statuses of the same name in the earlier reviews.

Status used in original British Red Data Lists	Shirt (1987)	Falk (1991)	Status in Ball & Morris (2007)	Ball & Morris (2007)
			Critically Endangered	4
RDB 1 Endangered	10	10	Endangered	3
RDB 2 Vulnerable	17	13	Vulnerable	6
RDB 3 Rare	29	16	Lower Risk (Near Threatened)	10
RDB K Insufficiently Known	-	-	Data Deficient	8
Nationally Notable	-	65	Lower Risk (Nationally Scarce)	56
TOTAL	**56**	**104**		**87**

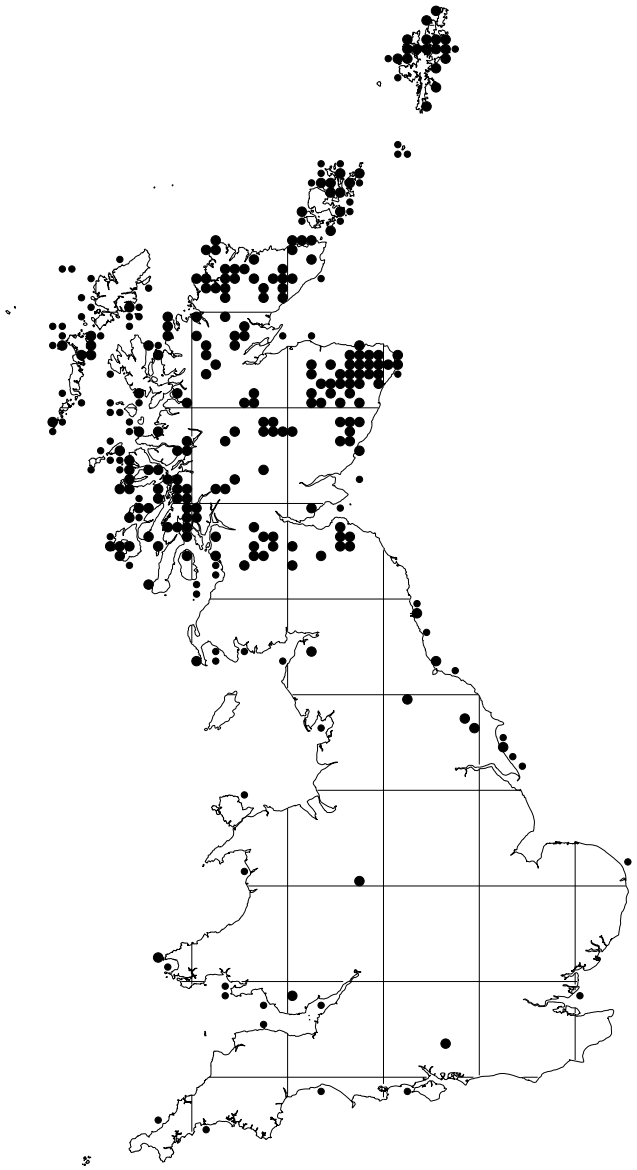
This review is an important step in the production of new Recording Scheme products and was one of two topics that we presented to the recent 4th International Symposium on the Syrphidae. Our other contribution was a presentation of some of the work that Stuart has been doing to refine predictions of how hoverflies may respond to climate change. This conference was a great opportunity to see how others were tackling mapping schemes and red data lists and to catch up on new developments in taxonomic thinking which are covered in our brief report on the conference in this issue.

In 2006, Roger managed to make two additional visits to Scotland to fill in gaps and had planned a number of trips for 2007. We also travelled to the Spey Valley for a few days, largely in search of Scathophagidae, but we did manage to record hoverflies from a number of sites in the Trossachs. The weather put paid to these plans, although one visit in early May was possible, following two trips to the Welsh borders to fill in gaps around Herefordshire and Radnorshire. This year has been decidedly wet and this is likely to have a significant impact on levels of recording. The Dipterists' summer field meeting in Aberystwyth was a great disappointment in terms of hoverflies – we saw precious few even on good days

and our general impression was that numbers were well down. One exception was the comparative frequency of *Meliscaeva auricollis* which has been noticeable by its absence in recent years, but has been widespread and abundant this year. *M. cinctella* was also remarkably abundant in many places.

Please keep up the effort and submit records this autumn. Hopefully August and September will improve and allow more activity than has been possible so far. What will be interesting will be to see how hoverfly numbers respond in 2008 to an unusually wet year!

Coverage: Shows 10km squares from which at least one record has been received. Black circles indicate that the latest record from a square was dated from 1991 onwards, grey indicates 1961 – 1990 and white indicates before 1961.



Gaps: This map shows those 10km squares from which NO hoverfly records have ever been received by the Hoverfly Recording Scheme. The smaller symbols indicate that the squares includes less than 10 hectares of land.

4th INTERNATIONAL SYMPOSIUM ON SYRPHIDAE: SIIKARANTA, FINLAND, 29 JUNE – 3 JULY 2007

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Some 50 delegates attended this meeting. Numbers were marginally down on previous meetings with the UK contingent confined to just three (Stuart Ball, Roger Morris & Graham Rotheray). The venue was the Siikaranta Conference Hotel some 35 km outside Helsinki. It was an inspired choice as it was adjacent to the Nuuksio National Park and its grounds included excellent flowerbeds of ground elder *Aegopodium podagaria* which proved to be an excellent lure for hoverflies and Syrphidologists alike. They were quite a distraction especially as *Didea alneti* showed up regularly and both *Hammerschmidtia* and *Blera* were found during the meeting.

A total of six sessions and 33 listed papers awaited our attention, with subjects ranging from the fauna of the Altai Mountains (central Siberia) to taxonomic studies of *Allograpta* and *Dasysyrphus*. Overall, the quality of the papers was excellent and our general impression was that standards have risen on each occasion. It is particularly encouraging to see how rich and diverse the study of hoverflies is. As might be expected, Graham Rotheray created huge excitement with a thoroughly enjoyable description of the genus *Copestylum* and his prediction that the genus might ultimately prove to comprise 3000 or more species!

There were several noteworthy studies of particular relevance to our own fauna. Dieter Doczkal described his studies of *Dasysyrphus* which clearly separates *D. hilaris* and *D. friuliensis*. *D. venustus* looks to be a species complex with possibly as many as four species. The shape of the black bars on the sternites is important – check your specimens for sternites with triangular rather than parallel-sided sternite marks. A new key is in the works and should be published soon. John Smit also presented a revision of the genus *Psilota*. This has no immediate affect on the British fauna, since it looks like our *P. anthracina* is a good species and correctly named. But the Dutch have found they have two species, with *P. atra* (associated with conifers) being the less rare of the two, and there seems little reason why it should not occur this side of the Channel. Axel Ssymank and Dieter Doczkal also presented a poster showing results of field work in southern Spain prior to the Alicante symposium in 2003, which included a split of a new species, *Chrysotoxum volaticum* from the common and widespread

C. bicinctum. The interesting thing about this is that they pointed out that the illustration of "*C. bicinctum*" on Plate 4 of Stubbs & Falk appears to be of the new species! We await details of this separation with interest. There is still no sign of anyone publishing the long awaited revision of *Melanostoma*.

As usual, the Finnish, Spanish and Serbian teams presented excellent taxonomic and ecological studies. The use of wing vein morphometry was particularly interesting and suggested that it could be used to detect differences at a population level that might be the foundations for speciation.

Atlases, red lists and recording were a common thread between Scandinavia, Germany, Holland and the UK. We learnt of the progress of the Dutch and Swedish projects and gained an insight into the development of the German red list. All of these projects were overshadowed by the introduction of the remarkable Finnish guide to hoverflies – more than 600 pages of full colour (a review will appear in the next newsletter).

Increased co-operation across Europe is a growing theme and it was noteworthy that the Spanish, Serbian and Finnish teams have joined forces on a number of collaborative projects- bringing strength and depth to their work. This co-operative approach is also growing between German, Dutch and British groups, with tentative suggestions for the development of a key to the western Palaearctic fauna. There is also developing thought on a European atlas project linked to development of models for climate change predictions along the lines of work Stuart has already done in the UK. This may lead to field trips to under-recorded parts of Europe and we now have some excellent contacts.

By the time the conference ended, there had been some important decisions, including an important Declaration in support of the organisation of a side-event on pollinators at the forthcoming Biodiversity conference in Bonn in 2008. This, we hope, will raise the profile of Syrphids and the need for enhanced support for research on the family. The next meeting in 2009 will be in Serbia – hosted by the University of Novi-Sad near Belgrade. This will be followed in 2011 by a venue in the UK (possibly Edinburgh). More in due course, but we do hope that this will reverse the trend of the poor UK turn-out.

A NOTE ON PATROLLING BEHAVIOUR OF MALE *PARHELOPHILUS VERSICOLOR*

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On 2 June 2006 I explored an area of riverside meadows near Condover, Shrewsbury. One meadow contained a spring-fed flush, with some shallow open water and emergent vegetation. I swept several *Lejogaster metallina* and *Melanogaster hirtella* from the flush. One area looked promising for *Parhelophilus*, containing quite a lot of tall emergent vegetation. However several sweeps and close inspection of the area failed to find any *Parhelophilus*.

Later, as I walked along the riverside I came across several male *Parhelophilus versicolor* patrolling around an ivy-clad alder tree. They were flying around the sunny side of the tree at about eight to ten feet height, occasionally alighting on ivy leaves. I saw one other *Parhelophilus* flying at a similar height around a nearby alder tree. These trees were a good two hundred metres or more from the wet flush, the only suitable breeding habitat anywhere nearby.

I found no females around the trees, but suspect that this behaviour is similar to that of some solitary bees, for example *Andrena haemorrhoa*, where numbers of males patrol around certain trees, waiting for females to fly into the territory.

It may be worthwhile investigating trees in the vicinity of suitable breeding habitat to try and discover if this is a widespread phenomenon in male *Parhelophilus*. Searching trees for patrolling males may also yield records more easily than trying to sweep through the robust vegetation around pools where *Parhelophilus* often occurs.

THE SEPARATION OF FEMALE *EUMERUS FUNERALIS* FROM *E. STRIGATUS*

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The Lesser Bulb Fly, *Eumerus funeralis* Meigen, was formerly known as *E. tuberculatus* Rondani. The latter name was based on the tubercle at the base of the underside of the hind femur. The presence of this tubercle is an excellent way of separating this species from others in the genus, but it is only really obvious in the male. Other characters are needed for the female, in particular for its separation from the very similar female of *E. strigatus* (Fallén).

In the original edition of **British Hoverflies** (1983), females are separated by the length and distribution of the hairs below the hind femur. Another character, the width of the narrow band of dusting beside the eye, was added in the second edition of 2002, but, unfortunately, was added the wrong way round. On page 148, couplet 3 of the key should read:

3 Hind femur in side view with ventral hairs short near base (seen from below there is a shining black area free of hairs). Male: surstylus shape as illustrated. Female: frons with narrowly dusted margins, about equal to width of front ocellus, inner edges sharp, most of frons shining, dust-free……. **funeralis**

— Hind femur in side view with ventral hairs long near base as well as near apex (seen from below, entire ventral surface covered in hairs). Male: surstylus shape as illustrated. Female: frons with strongly dusted margins much wider than width of front ocellus, inner edges diffusing into general dusting across full width of frons…….**strigatus**

The discrepancy in the key was first noticed when checking the identity of fresh specimens of *funeralis*, and by comparing our key with the Danish work of Torp which states in three places that *tuberculatus* (*funeralis*) is the species with the narrow band of dusting beside the eye. The RES Handbook by Coe separates the species initially by the colour of the stigma (yellowish or light brown in *strigatus*, dark brown or blackish in *tuberculatus*), but also gives other characters, including whitish dust-strips against the eyes, rather wide in *strigatus*, narrow in *tuberculatus*. The dusting can extend to the back of the head, for the occiput is 'lightly but obviously obscured by dust on upper part, moderately shining' in *strigatus*, but 'quite undusted and glittering on upper part' in *tuberculatus*.

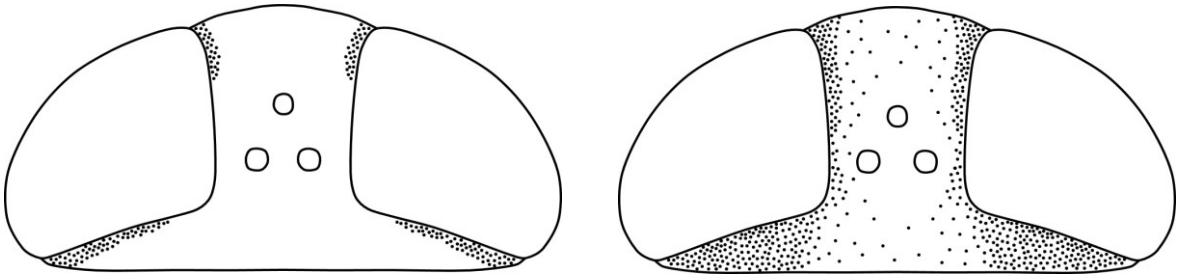

Fig. 1. Head (from above) showing dusting patterns: *Eumerus funeralis* (left) and *E. strigatus* (right).

Female specimens of *strigatus* have been checked, one from the collection of G. A. Collins and two from the collection of the British Entomological and Natural History Society at Dinton Pastures. Not all the specimens in the latter collection were held under the correct name, but it was rather difficult to separate the species in these old specimens.

A further distinguishing character appears to be that the triangle formed by the three ocelli is slightly narrower in *funeralis* than in *strigatus*. Comparing the distance separating the posterior ocelli (*a*) with the distance between a posterior ocellus and the anterior one (*b*) it was found that in *funeralis a* was always less than *b*, while in *strigatus a* was greater than, or in one case equal to, *b*. Thus in *funeralis* the triangle is elongate whereas in *strigatus* it is equilateral to squat. This difference can just be detected without the need for measurement. The sample size was small (*strigatus*, n=3; *funeralis*, n=6), so this may not be completely reliable.

Coe, R.L., 1953. Diptera. Family Syrphidae. *Handbooks for the Identification of British Insects*. Vol. X, Part 1. Royal Entomological Society, London.
Stubbs, A.E., and Falk, S.J., 1983. *British Hoverflies*. British Entomological and Natural History Society. (Second edition, 2002.)
Torp, E., 1994. *Danmarks Svirrefluer*. Apollo Books, Stenstrup.

AN UNUSUAL HOGWEED DAY

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When I first started recording hoverflies in the mid-1980s it was possible to find them in good numbers on hogweed – at least that is what I seem to remember - but for some years I have wondered whether my memory was playing tricks on me! On many occasions recently I have been amazed to walk a long length of track with hogweed with virtually no flies (or bees and wasps) in attendance. Why should there have been any changes and what do the changes mean? One possibility is that hoverfly numbers have declined; the other is that something has happened that makes hogweed less attractive.

There is plenty of evidence that some insect groups have declined markedly in recent years, especially the Lepidoptera. In the case of flies the evidence is more circumstantial and anecdotal but there are indications of declines amongst a number of hoverflies. Some of these are undoubtedly temporary e.g. *Platycheirus peltatus* and *Meliscaeva auricollis*; others may be more permanent. This year the question of whether the hogweed fauna has declined may have been refuted by good days in otherwise unremarkable landscapes. One day in particular strikes me as a useful piece of evidence.

On 16 June 2007 I travelled to south Norfolk to improve recording in six very poorly recorded squares. As expected, I found the landscape to be a challenge with few localities worth visiting and a great reliance upon roadside verges with hogweed. The day was very changeable with periods of sunshine interspersed by some very heavy showers, and yet it yielded good numbers of hoverflies at

hogweed. The best locality was at Goose Green where a 200-yard section of verge adjacent to arable yielded a very respectable 23 species, including *Epistrophe diaphana*, *Eumerus strigatus*, *Chrysotoxum cautum* and *Helophilus trivittatus*. Another site yielded 21 species, mainly at hogweed.

Neither of these two sites, or others that yielded lower but still good numbers of hoverflies, had any special attributes apart from the numbers of flies at hogweed. The one difference from recent years is that June was comparatively wet and this meant that the hogweed was not under drought stress. Perhaps, therefore, the dearth of hoverflies at hogweed in recent years reflects the ability of the plants to provide the nectar that the flies seek?

Perhaps there is scope to develop this theme as a student project using pot-grown hogweed with different plants given differing levels of water and then observed to determine their attractiveness as a lure for flies, bees and wasps.

WING WAVING AND FLUTTERING BY HOVERFLIES

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On 25 September 2005 John and Viv Phillips saw three or four *Arctophila superbiens* feeding at *Succisa* flowers in Blaisdon Wood, Gloucestershire (SO698178). When sending me the records John commented that while he was photographing the *Arctophila* he was aware that they were waving their wings while at rest.

My only personal observation of wing-waving behaviour by a hoverfly occurred in September 1991 at the National Arboretum in Washington, DC, USA where I saw a male *Spilomyia longicornis* (a spectacular social wasp mimic) waving its wings. In contrast to the simultaneous (symmetrical) wing-waving behaviour of some other Diptera families, such as the Sepsidae, the *Spilomyia* was extending and sweeping its wings alternately (asymmetrically). If the waving-waving behaviour of the Sepsidae can be said to resemble the extension and sweeping of the wings of a variable geometry winged aircraft, then that of the *Spilomyia* could perhaps be likened to a person using flags to communicate using semaphore! I estimate that each full cycle of wing-waving lasted for about 2 seconds

In view of this I asked John whether he had observed whether the wing-waving of the *Arctophila* was symmetrical or asymmetrical. His recollection was that it was probably asymmetrical. I had been under the impression that the wing-waving behaviour of *Spilomyia longicornis* was already documented, but I have since been unable to find any references to it in the literature. After receiving the news of *Arctophila* wing-waving from John and Viv I contacted Chris Thompson, who replied telling me that he did not recall hearing about such behaviour in

Spilomyia. Similarly, neither Alan Stubbs, Stuart Ball or Roger Morris knew of wing-waving behaviour by hoverflies.

On 8 September 2006 I observed another type of hoverfly wing movement that I had never seen before. The location was Whirlow Brook Park in Sheffield, where I saw a female *Didea fasciata*, which was at rest on a leaf, rapidly fluttering its wings. This activity continued intermittently for several minutes. There was a male *Didea fasciata* in the vicinity, but it did not appear to notice the female.

I would be very interested to hear from readers who have personally observed wing-waving or wing-fluttering by hoverflies, or who know of literature references to.such activity.

HOVERING BY FEMALE SYRPHIDS: NOT CONFINED TO THE SYRPHINAE

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In **Hoverfly Newsletter No.41 (Spring 2006)** I wrote that, contrary to assertions in some Hoverfly literature, sustained hovering flight is not an activity confined to males, and that I had observed females of many species hovering on many occasions. I stated in the article that all the females that I could say with certainty that I had seen hovering were species of the subfamily Syrphinae; I could not be certain that I had seen females of the Milesiinae subfamily hovering, as I had no written or photographic records of such activity.

On 2 August 2006 I saw a female *Paragus* (probably *P. haemorrhous*) hovering near runner bean plants in my garden. This is of course another member of the Syrphinae, and perhaps no great surprise, as I had in the past observed hovering females of the Oriental species *Paragus crenulatus* in Hong Kong. However on 13 March 2007 (a surprisingly early date) I was able to confirm that the females of at least one species of the Milesiinae subfamily also hover for sustained periods when I saw a female *Eristalis tenax* hovering at Bishop's Cleeve, Gloucestershire.

INTERESTING RECENT RECORDS

Microdon devius: Dancersend BBOWT Reserve, nr. Tring, Bucks (SP900094) 06 June 2006 (Rita & Ken Merrifield)

Microdon devius: Buttler's Hangings BBOWT Reserve, grassland/scrub, West Wycombe, Bucks (SU818962) 11 Jun 2006 (Alan Stubbs, Rita & Ken Merrifield) Previously found there in 2003 but not visited at a suitable time since.

Microdon devius: Warburg BBOWT Reserve, Nettlebed, Oxon (SU7288) 11 June 2006 (Alan Stubbs, Rita & Ken Merrifield)

Callicera aurata Ruislip Woods NNR, Poors Field, LB Hillingdon, Middx.(TQ0889) 14 July 2006 (Rita & Ken Merrifield), 1 female sitting on a fence railing by a bridleway at about 0830 during a spell of very hot weather. Ken comments: "Although a set specimen does not seem to me to be a wasp mimic, in life, when resting with wings folded, it appeared initially to be a social wasp collecting wood pulp. Fortunately it was sufficiently torpid to be pooted as I did not have a net ready".

Volucella zonaria: 1 female, Penhill, Swindon, Wiltshire (SU1588), 26 July 2006, (Harvey Wills).

Volucella zonaria: 1 female feeding at ivy flowers, RHS Garden, Wisley, Woking, Surrey, (TQ064582), 31 October 2006, a rather late date for this species (Andrew Halstead)

Volucella inanis: 1 male, Matlock Woods SSSI, VC57 (Derbyshire) (SK294581), 8 August 2006; at flowers by edge of riverside path (Martin C. Harvey). Possibly the first record for VC57, judging by the maps on the recording scheme website.

Platycheirus fulviventris: Venus Pool, Cound (SJ5406), 24 July 2006 (Nigel Jones)

Eupeodes 'species A': near Habberley SJ3803, 15 June 2006; Sunny Hill, Clunton, (SO3283), 16 June 2006 (Nigel Jones)

Melligramma euchromum: Bucknell Wood (SO3473), 16 May.2006 (Nigel Jones)

Chrysotoxum verralli: Venus Pool ,Cound (SJ5406), 15 July 2006 (Nigel Jones)

Parasyrphus nigritarsis: Atcham (SJ5509), 9 May 2006 (Nigel Jones)

Volucella zonaria: Shrewsbury (SJ4911), 8 September 2006 (Nigel Jones)

Cheilosia cynocephala: Eardington (SO7289), 14 August 2006 (Nigel Jones)

Cheilosia pubera: Pontesford (SJ4105), 5 June 2006 (Nigel Jones)

Cheilosia urbana: Nant Mawr (SJ2524), 18 April; Hampton Loade (SO7487), 12 April; Atcham (SJ5509), 5 May.2006 (Nigel Jones)

Ferdinandea ruficornis : Newport (SJ70221), 1 May 2006 (Nigel Jones)

Sphegina sibirica: The Wilderness, Drybrook (SO6517), (Gloucestershire), 23 May 2006 (Nigel Jones)

Sphegina verecunda: Brook Coppice (SJ3801), 15 June 2006 (Nigel Jones)

Eristalis abusivus: Llynclys Common Nature Reserve (SJ2723), 12 July 2006 (Nigel Jones)

Eumerus ornatus: Llynclys Common Nature Reserve (SJ2723), 12 July 2006 (Nigel Jones)

Heringia pubescen: Birch Coppice, Lawley Hill area (SO5098), 12 May 2006 (Nigel Jones)

Heringia heringi: Croft (Herefordshire) (SO4568), 23 May 2006 (Nigel Jones)

Trichopsomyia flavitarsis: Venus Pool (SJ5406), 30 July 2006 (Nigel Jones)

Brachypalpus laphriformis: Wollaston (SJ3312), 9 May and 27 June 2006; Kinlet (SO7358), 20 May 2006 (Nigel Jones)

Chalcosyrphus eunotus: Attingham Park (SJ5510), 5 May 2006 (recorded by Pete Boardman) and a further specimen on 10 May 2006 (Nigel Jones)

Criorhina flocossa: Croft (Herefordshire) (SO4566), 23 May; Atcham (SJ5509), 9 June 2006 (Nigel Jones)

Criorhina ranunculi: 18 April Llanymynech (SJ2621); Kinlet (SO7381), 22 April 2006; Sturt Common, Wyre Forest (SO7176), 22 April 2006; Earnwood Copse, Wyre Forest (SO7377), 25 April 2006 (Nigel Jones)

Xylota abiens: Croft (Herefordshire) (SO 4566), 17 June 2006 (Nigel Jones)

Xylota florum: Kinlet (SO7358), 19 July 2006; Wollaston (SJ3312), 27 June 2006 (Nigel Jones)

Meligramma trianguliferum: Sharpness Island, Gloucestershire (VC34), SO6602, 21 April 2007, 1 female (David Iliff)

Literature for 2002
Compiled by Roger Morris

Arif, M.J. & Yousuf, M., 2002. Taxonomic studies of saprophagous syrphids from Pakistan. *International Journal of Agriculture and Biology* **4**(1): 76-77

Barendregt, A., 2002. Volkert S. van der Goot (1928-2001). *Volucella* **6**: 236

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