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In their opening article in **Hoverfly Newsletter No. 38**, Stuart Ball and Roger Morris commented on the dearth of hoverflies (and other Diptera) during 2004, probably as a result of the previous year's drought, a phenomenon of which most of us were only too well aware. However, not long after the newsletter had been sent for publication, the media began to feature reports of a plague of *Episyrphus balteatus* as what appears to have been an especially large migration from the continent was taking place. My own experience was that, round about the time of this upsurge in *E. balteatus*, numbers for other species also improved, though not for very long, and the end of the season was as disappointing as the early part. The same article predicted that, for the same reason, 2005 might also be a poor year for hoverflies; however let us hope for some improvement.

I express my gratitude to all contributors to the current and previous newsletters. Please keep the contributions flowing. Articles may be sent as email attachments, but typewritten (or even hand-written) copy sent by post is also welcome. Please do not forget that there is a space for interesting recent records. Copy for **Hoverfly Newsletter No. 40 (**which is expected to be issued in August 2005) 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.

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HOVERFLY ATLAS 2010

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Since first raising the possibility of a revised and more polished atlas in 2010 (issue 36), we have given more thought to the work that will be needed to build on the strengths of the 2000 atlas and to address some of its limitations. As the map produced in issue 37 showed, there are substantial tracts of land with relatively few records. This is particularly noticeable in Scotland, but is also a significant issue in mid-Wales and the Welsh borders, parts of Devon and of course Lincolnshire and The Wash. Curiously, there is also a hole to the north and east of Shrewsbury that might be plugged by some well-timed weekend meetings.

The backlog of data is now assembled on the database, giving a current total of over 400,000 records. In the end, the backlog of cards amounted to 19,000 records. In addition Roger has abstracted the data held in the diary of the late Cyril Hammond (960 records plus 340 records for other schemes) and has been busy developing a database of papers mentioning hoverflies. Ultimately, the literature database should appear on the Dipterists Forum web-site but, meanwhile, it will be used to abstract data for the recording scheme, thus improving the historical coverage of the scheme. There must be many more records out there, and doubtless some readers may have felt reticent about submitting further records because there seemed to be nothing happening once the 2000 atlas was produced. Hopefully the development of this new project will reinvigorate some of you.

Given that 2010 is just six years away, the timetable is tight, but past experience means that we can now be much more confident about what is possible and what timescales need to be allocated to different parts of the project. To get things moving, we propose to run a one-day workshop for the hoverfly scheme as part of Dipterists Forum AGM this autumn (2005). In addition, we are looking into possibilities for funding that might help recorders to visit some of the less well-recorded areas or to assemble data from museums, diaries etc. (more on that if we are successful).

We think it ought to be possible to go for a big push to assemble new data between now and the winter of 2008/09, meaning that there are just four

recording seasons to fill in the gaps and beef up poorly recorded areas. Some progress has been made already, helped by increasing interest in hoverfly recording in Northamptonshire and Bedfordshire, Mick Parker's expeditions to western Scotland, and by our own exploration of some less well recorded areas (see the account of our expedition to the "Black Hole of Radnorshire" in this issue). We plan to undertake further gap-filling expeditions over the coming years and would be pleased to hear from anyone that might care to join us. This summer's DF field meeting in Durham should help too (do come and join us - new recorders are very welcome).

What form might the proposed atlas take? There is a variety of possibilities, ranging from a wide-ranging monograph compiled by a number of authors to a more modest compilation of maps and analysis based solely on the data assembled by the scheme. We think the latter is feasible, whereas a more comprehensive project might merit consideration as a follow-on. Depending upon funding we would like to produce coloured maps that depict a wider range of date classes for records. As the date range will have moved ten years, it makes sense to consider the most recent records as those after 1990 or perhaps even 2000; multiple colours would give much more scope for such an approach. As we have embarked on a variety of data interpretation projects, it is possible that more detailed evaluations of some species could be undertaken. Range and phenology shifts are obvious contenders. Range predictions for more habitat-specific species might also be possible for selected species (Stuart is currently investigating a new tool to predict distributions based on various habitat and climate parameters).

Next autumn's venue for the Dipterists Forum AGM at Preston Montford, with accommodation on both the Saturday and Sunday, gives scope for running a workshop on the Sunday for hoverfly recorders. Quite what this would seek to achieve has yet to be defined, but it might include help with problematic identifications, presentations on the work we have been undertaking in recent years and hopefully some feedback from individual recorders. We will expand on this proposal in the summer issue of the newsletter, but in the meantime we would be pleased to hear from recorders on any issues we might cover.

Readers might be interested in attending the forthcoming International Syrphid Workshop scheduled for 2-4 September in Leiden. We have been to both the previous meetings in Stuttgart and Alicante and found them very enjoyable. Given previous experience, we are looking forward to this next one. We have a variety of projects that we will hopefully offer as presentations. In previous years, the UK has fielded around 8-10 participants – it would be great to have a bigger UK turnout this time, given that Leiden is so close.

Hopefully this next field season will be more productive than 2004. Various notes in recent newsletters suggest that there are many changes afoot in hoverfly distribution. We now believe that *Volucella zonaria* is spreading inland in the East Midlands, whilst there are indications that *Epistrophe diaphana* is spreading northwards too. Quite what is happening to the phenology of *Epistrophe eligans* is uncertain, as we have not assembled the

full dataset for the past eight years. Hopefully we will have these data by the next issue.

FEMALE *FERDINANDEA*

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Though *Ferdinandea cuprea* is frequent, *F. ruficornis* is one of the very few British hoverflies that has eluded me. In general appearance *F. ruficornis* is a smaller narrower species with the abdomen black rather than bronze (best seen in sunlight). Andrew Grace has recently referred to me a female of the latter caught in Sussex, which has given me the opportunity to look for better characters.

I offer a revised key to females in the hope that those dipterists with specimens of both species will report back as to whether the distinction holds or needs further tweaking.

Females only

1. Femora entirely yellow; trochanters and coxae grey dusted, in part over murky orange. Front third of frons orange or piceous. Jowls with yellow extending to back of head (side view). Humeri bright or dull orange. **cuprea**

- Femora partly black (extensively so on front femora); trochanters and coxae deep black. Front third of frons blackish. Grey of occiput extends down back of jowls (side view). Humeri murky orange. **ruficornis**

Note that male *cuprea* have extensively black femora. It remains to be seen whether the other characters (plus additional ones?) will satisfactorily separate specimens of this sex.

CALLICERA AT RHS GARDEN, WISLEY

Andrew Halstead,
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At about 1pm on 21.vii.2004, I saw a *Callicera* sp. hoverfly visiting the flowers of a lime tree, *Tilia* 'Petiolaris' at RHS Garden, Wisley, Surrey [TQ064 585]. The upswept white-tipped antennae were quite distinct but I was unable to capture it and it was not in view for long. I guess from the location and the time of year, this would be *Callicera aurata*. In Roger Morris's 1998 "Hoverflies of Surrey", there is a record of this fly at Wisley (Garden or Common?) made by a former RHS entomologist, George Fox Wilson, on 7.vii.1934. Other Surrey records listed are at Oxshott, 25.vii.1937; Ashtead Common, 17.vii.1960; Addington, 27.viii.1974. The only

recent record in Morris's book is one made by Roger himself on the county border at Windsor Great Park on 19.vi.1996. Wisley Garden has some mature trees, including beech, with rot holes where this fly could be breeding; there are also birch and other trees on the nearby Wisley Common.

EPISTROPHE DIAPHANA IN NORTHAMPTONSHIRE

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Northamptonshire is poorly recorded for hoverflies, as it is for many other invertebrates. It does, however have much to offer; Stuart Ball and Roger Morris recently eulogised on the deadwood hoverflies of Old Sulehay Forest (**Hoverfly Newsletter 37, p.2**) and in the same newsletter (**p.8**) I wrote of *Volucella zonaria* at Bradlaugh Fields in 2003 (SP735636). The same site has now yielded *Epistrophe diaphana,* a male of which I took from *Heracleum* umbels on 15 June 2004. This rather scarce (nationally notable) hoverfly seems to be on the edge of its range here in VC32, although in their Hoverfly Recording Scheme Update Stuart Ball and Roger Morris (**Newsletter No. 38**) suggest that its range is widening. It is clearly one to be watching for in 2005.

SOME REMARKABLE ASSEMBLAGES OF HOVERFLIES IN NORTHERN ENGLAND

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In most years since I started collecting flies, way back in the early 1960s, my field season usually begins with the flowering of pussy willow, or sallow, from mid to late March through April. Some years are disappointing, and few flies are found, but others are more productive, and three occasions stand out.

One was a warm sunny afternoon at Askham Bog, near York, in early April 2000. A few *Eristalis pertinax* were seen, and a single *Cheilosia albipila* was taken, at a male sallow bush which was in full bloom. However the star attractions on this occasion were *Criorhina ranunculi.* In the space of half an hour I captured three for examination; all were males, two of the white tailed form and a ginger-tailed one. I saw up to five individuals at any one time, but probably more were involved. A few were watched hovering at sallow catkins but, more interestingly, from time to time couples were observed in what appeared to be pursuits through the branches, the distance between the individuals being about 6-9 inches.

For sheer numbers of individual hoverflies, I have never before experienced anything better than this year. On 24 April, a warm sunny day with little breeze, I came across several sallow bushes in flower at the entrance to the extensive East Moor Wood forest plantation in the North York Moors beyond

Helmsley. One was a female tree but others were bearing male catkins. Many insects were buzzing around, and apart from picking off individuals, occasional general sweeps of the net always produced several hoverflies, as well as an occasional hymenopteran. In the space of about an hour 'loitering with intent' I recorded ten species. Mostly they were the 'usual suspects': *Eristalis pertinax, Melangyna lasiophthalma, Platycheirus albimanus* and *Syrphus torvus.* A few *Parasyrphus punctulatus* and *Platycheirus discimanus* were present and a single female *Melangyna quadrimaculata* was taken, and singles also of *Cheilosia albipila* and *C.nebulosa.* Best of all, for me, were three female *Melangyna barbifrons* which is apparently a rarely recorded fly in Yorkshire, and which I hadn't seen before.

I have had a similar experience only once in the past forty odd years, and that occurred on 18 April 1981, when I recorded nine species visiting a sallow bush at Timble Ings on the edge of a forest plantation on the hills north of Otley. On that occasion (which resulted in a note appearing in **The Naturalist vol. 106, p. 152**), species included *Cheilosia grossa*, *Criorhina ranunculi* and *Eristalis intricarius*, which were not found at East Moor Wood, On the other hand, *Cheilosia albipila*, *C.nebulosa*, *Melangyna barbifrons* and *Parasyrphus punctulatus* were not recorded at Timble.

There were twenty-three years between these two spectacular collecting trips and I can't help reflecting that if I have to wait a similar length of time until the next red-letter day I will be well into my nineties!

ANOMALOUS FORM OF *HERINGIA VITRIPENNIS,* WITH BLACK THORACIC HAIRS

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A proportion of articles that have appeared in this newsletter over the years have published new observations on hoverfly morphology which in most instances have made determination of species easier. Unfortunately from time to time there are examples where such enhancements of knowledge have the opposite effect, and complicate a situation that had previously seemed clear. This has happened with the subgenus *Neocnemodon* of the genus *Heringia*.

The first edition of **British Hoverflies** stated that the black haired thoracic dorsum of *Neocnemodon pubescens* was not met with in any other species. By the time that the second edition was published *Neocnemodon* had been relegated to the status of a subgenus of *Heringia*; this edition repeated the statement, but allowed in the key for the possible occurrence in Britain of the European species *H. fulvimanus*, which also has a black-haired thoracic dorsum, but is distinguished from *H. pubescens* by the presence of a median prominence on sternite 3.

Alan Stubbs contributed an article to **Hoverfly Newsletter No. 36** (August 2003) entitled “Hair colour variation in *Heringia verrucula*”, in which an example of that species with a black-haired thorax was described, leading to the conclusion that we should no longer automatically assume that a *Heringia* of the sub-genus *Neocnemodon* with a black-haired thorax was certain to be *H. pubescens*.

On 8 June 2003 Martin Matthews took a male *Heringia* (*Neocnemodon*) at the Mythe, Tewkesbury, Gloucestershire (SO8834) which further complicates the picture for this sub-genus. He showed me the specimen, which he suspected to be *H. pubescens* as the thoracic dorsum was black-haired. I examined it and checked it against the key in the Second Edition of **British Hoverflies** and noticed what appeared to be a bulge on sternite 3, which caused me to suspect that the specimen might be the European species *H. fulvimanus*, which is allowed for in the new key.

Obviously it would have been precipitate on my part if I had immediately determined Martin’s specimen as a species new to Britain, especially as Martin himself was far from convinced that the “bulge” really constituted a “median prominence”. I therefore searched for other keys to *Heringia* in order to see if there were other means of separating the relevant species. Via the Internet I found a key to *Heringia* and *Neocnemodon* males by Mark van Veen. This indicates that in *H. pubescens* (and *H. verrucula*) the basal cells of the wings are completely covered in microtrichia, while in *H. fulvimanus* (and *H. latitarsis*, *H. brevidens* and *H. vitripennis*) these cells are partially free of microtrichia. Examination of the wings of Martin’s specimen with a x20 hand lens appeared to show a microtrichia-free area on the basal cells which corresponded very well with the illustration in Mark’s key. As a result I began to feel a little more confident that we might indeed have found *H. fulvimanus.*

In order to resolve the matter I took the specimen to Nigel Wyatt at the Natural History Museum in London. He examined it under a microscope and his verdict was that it was neither *H. pubescens* nor *H. fulvimanus*, but an aberrant form of *H. vitripennis* with a black-haired thoracic dorsum. Nigel concluded that the bulge on sternite 3 was a mere distortion rather than a true morphological feature, and showed me male specimens of *H. latitarsis*, which like *H. fulvimanus* has a projection on sternite 3, for comparison. He confirmed, however, that the basal cells on the wings of the specimen were indeed partially free from microtrichia, thus ruling out *H. pubescens.* Further examination of its other physical features such as the legs (figured in Mark van Veen’s key) and the genitalia (illustrated in the key to males of British *Neocnemodon* species by Martin Speight and Ken Smith (Entomologist’s Record Var. 87, 1975)) led to the positive determination as *H. vitripennis*.

Thus a male *Heringia* (*Neocnemodon*) with a black-haired thorax could belong to any of four species (if *H. fulvimanus* is included), though presumably the aberrant forms and *H. fulvimanus* are much less likely to be encountered than *H. pubescens*.

SQUARE-BASHING IN MID-WALES IN AUGUST 2004

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August can be a very uninteresting time for the hoverfly enthusiast, especially for those based in eastern England where rainfall is low, and flies tend to become very scarce by the end of July; 2004 was no exception. By the second week of August, I had already worked my way round southern Lincolnshire filling in the gaps, and had done as much as I could in Northamptonshire. So, not wishing to hang up the net for the year, I cast my eyes at the distribution maps; could I find a project that might be beneficial to the Recording Scheme? One of the most obvious holes in the data lies in mid-Wales, especially Radnorshire. That seemed to be the answer. A few phone calls later saw the establishment of the first expedition to the "Black Hole of Radnorshire", with a team comprising Stuart Ball, Darwyn Sumner and yours-truly. What joys awaited us that weekend? None if I did not get some accommodation sorted out! A few calls later and base-camp was established at "The Builders Arms" just outside Llandrindod Wells.

The drive to Radnorshire on the Friday afternoon (13 August 2004) was slow, made a great deal worse by heavy rainfall and slow traffic. Had we got the timing right? Would we be drenched by the traditional Welsh weather? Would there be any hoverflies at this time of year? The following morning we had our answer as we gathered for breakfast: a sunny day and hoverflies in the garden before 8.30 am.

We soon learned why Radnorshire was so poorly recorded; it is hard to find good sites with ready access. However our pre-planning gave us a possible route and we were out nice and early for a hard day's work. The first site (Gilfach Nature Reserve) was a pleasant upland site with acid grassland, a small stream and areas of heather and bracken. A small oak wood on the opposite bank of the stream was an obvious lure. At this site I saw more *Leucozona glaucia* than I'd seen all year, and was pleased to see a number of *Tachina grossa*. Both Stuart and Darwyn succeeded in securing various *Sphaerophoria*.

On we went. The day's itinerary included roadside verges with banks of *Angelica*, trackways out of a village, and a few upland conifer plantations. In keeping with experience elsewhere, these plantations proved to be amongst the most interesting sites. In Ceri Forest, we came across *Arctophila superbiens*, a species one does not see in eastern England. But no sign of *Eriozona syrphoides* or *E. erratica* which we had rather expected. By 17.30 the day was well over but our last site of the day (Kinsley Wood) was remarkably productive. Exhausted, we headed for our lodgings where our spirits were improved by a welcome pot of tea in the garden. We had succeeded in visiting ten 10k. squares, including four that had not previously been recorded at all. We rapidly attended to the day's catch, storing them in

tubes for identification on our return home. A curry seemed to be the order of the day, so into Llandrindod Wells for our meal - possibly not the finest curry, but very welcome nonetheless.

The following morning we were greeted with more sunshine and another full cooked breakfast. A wonderful start, but it was not quite so easy to get moving - we were all somewhat tired from the previous day's exertions. But there were more sites to be done and so we headed down to the Brecon Beacons, and yet another roadside verge! Our second stop was Battle Hill, a really nice upland conifer plantation with extensive flowery rides, lots of *Angelica* and plentiful thistles. *Arctophila superbiens* showed again, this time in some numbers. *Cheilosia* were numerous, mostly *C. proxima*, but also *C. fraterna*. Perhaps the most significant record was that of *Sphegina siberica*.

This second day was rather less productive than our first day, with few real sites and much attention placed on roadside verges. However, many of these were remarkably rich in flowers, with extensive tracts of hardheads *Centaurea nigra* and meadowsweet *Filipendula ulmaria*.

Two days' recording yielded 240 records of some 51 species (by RKM) with further records by both DS and SGB, so the haul for the weekend was highly respectable. RKM's list is shown below:

Baccha elongata	*Meliscaeva auricollis*	*Neoascia podagrica*
Melanostoma mellinum	*Meliscaeva cinctella*	*Sphegina elegans*
Melanostoma scalare	*Scaeva pyrastri*	*Sphegina siberica*
Platycheirus albimanus	*Sphaerophoria scripta*	*Eristalis arbustorum*
Platycheirus clypeatus	*Syrphus ribesii*	*Eristalis horticola*
Platycheirus granditarsus	*Syrphus vitripennis/rectus*	*Eristalis intricarius*
Platycheirus manicatus	*Cheilosia bergenstammi*	*Eristalis interruptus*
Platycheirus peltatus	*Cheilosia fraterna*	*Eristalis pertinax*
Platycheirus scutatus (sl)	*Cheilosia illustrata*	*Eristalis tenax*
Chrysotoxum arcuatum	*Cheilosia pagana*	*Helophilus pendulus*
Epistrophe grossulariae	*Cheilosia proxima*	*Myathropa florea*
Episyrphus balteatus	*Cheilosia vernalis*	*Sericomyia silentis*
Eupeodes corollae	*Cheilosia vulpina*	*Arctophila superbiens*
Eupeodes luniger	*Rhingia campestris*	*Volucella bombylans*
Leucozona glaucia	*Chrysogaster cemiteriorum*	*Volucella pellucens*
Leucozona lucorum	*Chrysogaster solstitialis*	*Syritta pipiens*
Melangyna umbellatarum	*Orthonevra nobilis*	*Xylota segnis*

Having covered a total of sixteen 10km. squares, including eight that previously had no records, the trip was a great success and met its principal objectives. Another trip earlier in the year would be well worthwhile as we now have a good idea where best to go.

The trip was also important in that it highlighted some distinct differences in the frequencies of many hoverflies. *Rhingia campestris* was widespread, if not hugely abundant, whereas it had been largely absent from eastern England for most of the year. *Leucozona glaucia* was equally widespread and relatively abundant, whilst we found *Leucozona lucorum* at three sites, suggesting that we had timed our visit to coincide with the emergence of a partial second generation of this spring species.

On this experience we were all agreed that weekend expeditions were a viable way of sorting out otherwise poorly recorded areas. Mid-Wales, the Welsh borders and various parts of northern England seem viable options for us.

INTERESTING RECENT RECORDS

Microdon myrmicae: Wimalford, Bodmin Moor, Cornwall, 5 June 2004. A copulating pair plus another male found in a boggy meadow; Leon Truscott

Xylota florum: Seaton Valley, Cornwall, 28 June 2004. A male found at rest on a hogweed (*Heracleum sphondylium*) leaf; Leon Truscott

Volucella inanis: Foston's Bank, Ebworth, Gloucestershire (SO913116 – VC33), 10 August 2004, 1 female; John Fleming. The Mythe, Tewkesbury, Gloucestershire (SO8834 – VC33), 10 August 2004, 1 male, Martin Matthews. Blaisdon Wood, Gloucestershire (SO6917 – VC34), 1 female, John Phillips. These are the first three records for Gloucestershire as presently defined; only previous VC33/34 record was from the Avon Gorge in 2003.

Heringia senilis: 1 male, Redfield, Bristol (ST6173), David Gibbs. Further details are in **Dipterists Digest Vol. 11 No. 2 (2004)**

3RD INTERNATIONAL SYMPOSIUM ON SYRPHIDAE, LEIDEN, SEPTEMBER 2005

The following invitation has been received from the organisers of this year's Symposium:

"Dear Syrphid friends all over the world, Many of you already know, some don't and others are not sure whether to believe it or not. But it's true: 3rd International Symposium on Syrphidae Friday 2 - Sunday 4 September 2005 Leiden, the Netherlands The organizing committee takes pleasure in informing you that the first small steps toward the organization of this meeting have been taken. The meeting will take place in the National Museum of Natural History in Leiden. The organization is supported by European Invertebrate Survey (EIS) - the Netherlands. Although it still seems far away, we would like to get a first impression of the number of people intending to attend the meeting, and the number of presentations we will have to incorporate into the programme. Therefore we kindly ask you to fill in the attached pre-registration form and to return it before January 15 2005 (preferably by e-mail). We expect that the costs for attending the meeting will be around Euro 100,-, but the exact price is still unknown. This does not include the costs for accommodation. Prices for hotels in Leiden start at around Euro 40,- p.p.p.n. We will inform you on this later. We consider trying

to arrange funds for (partial) financial compensation of the costs for people from countries with a less expensive economy than The Netherlands. In order to be able to decide whether this is necessary, we ask any potential applicant for this compensation to indicate this on the form. We are also considering organizing a field trip on the day before or the day after the symposium. Please answer the questions concerning this field trip on the pre-registration form. Any other ideas concerning the program or the organization are also welcome. We hope to hear from you all! Best wishes, on behalf of the organizing committee, Menno Reemer, John Smit, Wouter van Steenis

e-mail: <Syrphidae@naturalis.nl>
website: <http://www.naturalis.nl/Syrphidae> "

(Editor's note: although the 15 January registration date for the Symposium, quoted above, will have passed by the time this newsletter is published, John Smit has assured me that registrations will still be accepted up till 1 May).

NEW BOOK: HOVERFLIES OF NORTHWEST EUROPE

Hoverflies of Northwest Europe: **Identification keys to the Syrphidae,** by **M P van Veen**, has just been published by KNVV Publishing from whom it can be ordered. The book contains identification keys to virtually all hoverfly species of Northwest Europe and is written in English. Northwest Europe ranges from Great Britain in the west to the German-Polish border in the east, and from the Loire in the south to the North Pole in the North. The books of Van der Goot (1981, 'Zweefvliegen van Noordwest Europa, in het bijzonder de Benelux') and Verlinden (1991, Syrphidae in the series Belgische Fauna) are the core of the book. The vast amount of literature since 1981 and the collection at the Zoological Museum Amsterdam have been used to modify and extend keys. New keys have been built for genera that changed markedly the past 20 years.

The book describes 500 species and should be very useful for those visiting continental Europe, and for determination of species new to Britain. The price is €34.95.

Mark van Veen's policy is to update keys on the internet on:
http://home.hccnet.nl/mp.van.veen/hf_index.html).
More information can be found on:
http://home.hccnet.nl/mp.van.veen/boekhoverflies.html where a link to the publisher is made.

VOLUCELLA 7

The latest issue of **Volucella (no. 7)** has been published. It is available from Ulrich Schmid, Staatliches Museum für Naturkunde, Stuttgart Rosenstein 1, D-70191, Stuttgart, Germany. Price, including postage and packing, is €20.

Literature for 1998
Compiled by Roger Morris

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