HOVERFLY NEWSLETTER

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On the first page of **Hoverfly Newsletter No. 17** (November 1993) I wrote of the dilemma recorders are faced with in situations where a very common species and a rarity are sufficiently similar that they cannot easily be distinguished without capture (and in some cases without killing the insect). Do we capture innumerable specimens of ubiquitous species, when by not doing so we might risk missing a rarity? A related problem occurs when advances in knowledge show that a taxon that has been regarded as a single species can be split into more than one, particularly if the original taxon was common. The discovery a few years ago that what we knew as *Platycheirus peltatus* and *Platycheirus clypeatus* in fact included other species is an example. No doubt all readers are familiar with the methods of identifying the three species of *Syrphus* hitherto recognised as British; although all three are common, *Syrphus* is not the most straightforward of genera to identify to species, but at least the female of *S. ribesii* with its almost totally yellow hind femora is readily distinguishable in the field. I am sure I am not alone in having sent in numerous *S. ribesii* records based on females examined alive in the field, but not caught. In **Dipterists Digest Vol. 6 No.2** (1999) Martin Speight has drawn our attention to the likely occurrence of another species, *Syrphus rectus*, in Britain. He reports that the female of this species is not distinguishable from that of *S. ribesii* using the keys for the genus that are current in the UK, and that while the females can be separated on the basis of wing microtrichia, the males of *S. rectus* and *S. vitripennis* are not separable at all. Will all records of female *S. ribesii* without voucher specimens and all records of male *S. vitripennis*, even with voucher specimens, have to be discredited? I suspect such an outcome would fill most of us with dread. However our commitment must be as far as possible to the truth, rather than an easy life.

Contributions for **Hoverfly Newsletter No. 30** (which is expected to be issued in

August 2000) are welcome, either in the form of new articles or comments on articles in the current or pervious issues. These should be sent to me: **David Iliff, Green Willows, Station Road, Woodmancote, Cheltenham, Glos, GL52 4HN**, to reach me by 21 June 2000.

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RIPONNENSIA SPLENDENS (Editor's note)

Having already been obliged to apologise, in the last newsletter, for an error in the list of hoverfly name changes included in **Hoverfly Newsletter No. 27** (I incorrectly linked *Pipizella viduata* to the wrong species in previous check lists; it is the species formerly known as *P. varipes*), I now find to my further shame that the list contained another error, which I failed to spot in time, and which I therefore perpetuated in the "corrected" list that appeared in the following **Newsletter No. 28**. I misspelled the new name for *Orthonevra splendens*, wrongly giving it a double *p* and a single *n* immediately after the *o* (I repeated the error in Mike Bloxham's article. The correct spelling is *Riponnensia splendens*. As someone who has suffered throughout my life from having my surname misspelled, I should have been more careful! A slight consolation for me is that both in this instance and in the error involving *Pipizella viduata* I noticed the mistakes and corrected them before anyone else drew them to my attention! I fear, however, that this misspelling has been duplicated elsewhere; my profound apologies.

(N.B. The versions of Hoverfly Newletters No. 27 and 28 that are available on the website have these errors corrected)

HOVERFLY RECORDING SCHEME PROGRESS

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The manuscript for the "Provisional Atlas of Hoverflies of Great Britain" was submitted to BRC in the Autumn and publication is expected early in 2000. The format is similar to the "working maps" which have been displayed at Dipterists Day and distributed to workers for comment. It will be an A4 publication with two maps on each page. Each species has a map showing 10km squares in Great Britain from which one or more records have been received. Below the map is a brief species account summarising the biology, status and distribution of the species and a phenology histogram showing the number of adult records in fortnightly periods.

Records received by about September 1999 are included. This amounts to around 375,000 records from 2,445 10km squares (82.5% of those containing land). It was decided that Irish records should not be mapped because the scheme holds very few records from the Irish Republic, but details of species which have only been recorded from Ireland within the British Isles are given in the introduction. Three species; *Blera fallax*, *Callicera spinolae* and *Hammerschmidtia ferruginea* are mapped by 50km squares instead of the usual 10km squares. These are extremely scarce species with saproxylic larvae which are subject of Biodiversity Action Plans. They can most practicably be collected by searching for larvae, but such a search could be very damaging to larval habitat. Therefore it was felt to be unwise to publish recent distribution information, even to 10km square precision.

The atlas has an extensive introduction including detailed accounts of species with Biodiversity Action Plans and a table showing the various rarity and habitat indicator statuses that have been published for British species. Species are arranged alphabetically using the names from the recent checklist by Peter Chandler, so an index was not deemed to be necessary, but the synonyms used in the main, recent, British checklists and identification guides are shown.

SOME GARDEN PLANTS FOR HOVERFLIES

Patrick Roper
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On 10 August 1999, a fine female *Volucella zonaria* arrived in our garden and, over the next few days, was spotted several times on the flowers of *Eupatorium ligustrinum.* This shrub, related to our wild, herbaceous Hemp Agrimony is very attractive to Eristalini as well as to certain butterflies, particularly the "browns".

Here it grows next to a strange, 2-metre tall New Zealand shrub, *Muehlenbeckia astonii,* which has slender, geometrical twigs arranged in a dense mesh and tiny green leaves. The creamy white flowers are even smaller than the leaves and it was only when admiring the *V zonaria* that I noticed numbers of smaller hoverflies drifting about and visiting flowers in the *Muehlenbeckia.* The species *Episyrphus balteatus, Melanostoma scalare, Syritta pipiens* etc. – were all common enough and looked a bit like something out of one of those sci-fi films featuring futuristic cities with cars and aircraft flying around at different levels.

Apart from *Buddleia*, our very best hoverfly plant is *Escallonia bifida,* a shrub with great banks of white flowers from mid-August. As well as *V. zonaria* (not an uncommon species in this part of East Sussex) it has attracted all the other *Volucella* including *V. inflata* and *V. inanis* and many other Diptera species, and it far outshines *Buddleia* for butterflies. Unfortunately it is only hardy in favoured places.

While not common in garden centres, all the above can be found at specialist nurseries via The (RHS) Plant Finder.

VOLUCELLA INANIS "STALKING" A WASPS' NEST

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On 14 August 1999 at about 3.30 p.m. I noticed a female *Volucella inanis* resting

on the leaves of a shrub near the back door of our house here at Sedlescombe, East Sussex (TQ782188). In the wall not far away there was a nest of the common wasp *Vespula vulgaris* (L.). As the larvae of these flies are known to be

scavengers in wasps' nests, I watched to see if this was what the fly was interested in.

It soon arrived near the entrance to the nest and made a careful exploration of the area during the next half-hour. It settled at various points on the wall itself, some of the pipes running along it, or on leaves of nearby plants with its wings half open and its head pointing towards the nest entrance. It gave the impression of watching the comings and goings of the wasps very carefully. Though it remained settled for a while in each spot it selected, it did move very slightly with a sort of swaying motion, possibly because it was marking the area. From time to time the wasps saw it and attacked immediately. They were no match for the fly though and, after a brief angry buzz from either or both parties, the fly simply withdrew to a different nearby position and the wasps got on with their work.

Shortly after 4 p.m. the fly settled on the branch of a climbing plant growing against the wall about three quarters of a metre from the nest entrance, folded its wings tightly together over its body and remained still. It was warm and sunny and the wasps and other warmth-loving insects in the garden remained fully active. The inference therefore was that the fly had achieved its first objective and was now waiting for phase 2. It was easy to approach while settled and I was able to confirm its identity by observing the pale second sternite under its body. I was also able to hold a ruler within 1 centimetre of it to measure its wing length (just under 14 mm). At the time both this species and *V. zonaria* were on the wing in the garden, so each could be recognised with certainty.

Although it chose not to move, it was clearly alert and frequently changed the orientation of its head as though looking round or "testing the air". After an hour it moved closer to the nest and again adopted the wings-folded position quite different from its earlier wings-akimbo approaches.

My suspicion is that the insect had marked the nest entrance with its own scent and was waiting for night time, or late evening, before making an entrance to lay eggs (though judging from the contents of light traps, wasps are active at night as well as by day). The wasps would clearly not allow it in during their active period.

Later that evening there was no sign of the fly, but I saw it, or another of the same species, a few days later on a bush across the path from the wasps' nest. It had settled in the characteristic watching pose with outstretched wings and its head pointing towards the wasps' nest.

Alan Stubbs has suggested that female *V. inanis* might be aiming to cover

themselves with wasp scent.

HOVERFLY NEWS FROM EAST CORNWALL

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Although hoverfly numbers were generally disappointing in 1999, this was more than made up for by a series of records of locally scarce species. Until 1999 there were only three Cornish records of *Didea fasciata.* This was eclipsed this year with four records starting with one in my garden at Torpoint on 15 May and ending with one at Penlee Battery CWT Reserve on the very late date of 6 November. Rod Belringer found *Neoascia tenur* (scarce in Cornwall) at Gunnislake on 27 May. *Volucella zonaria* occurred almost daily in my garden from 9 June to 9 September (both the earliest and latest dates I have seen it). *Chrysotoxum elegans* was found at two new sites, Tredrossel on 11 June and Penlee Battery Reserve on three dates in June, including a count of four individuals on 15 June. Penlee Reserve provided a fantastic day on 20 June with two *Brachypalpoides lentus, Criorhina berberina, Chrysotoxum elegans, Didea fasciata, Meligramma guttatum* (only the second record for Cornwall) and *Volucella inflata.* On 1 September, Rod Belringer found *Melangyna umbellatarum* at Trebeigh Wood near Liskeard and, following the discovery of *Merodon equestris* on Scilly in October in recent years, Bill Birkett reports of one flying into a moth trap at Tavistock (Devon) on 8 September followed by one in his garden at Callington on 10 September. This must be the latest mainland record. Finally, after a couple of months during which ivy patches on the coast were fruitlessly searched, a male *Xanthandrus comtus* finally appeared, but from a clump of Michaelmas Daisies I was cutting back in my garden at Torpoint on 7 November.

SYRPH THE NET

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Martin Speight, with a number of European co-workers, has been working for some years on a method of interpreting lists of invertebrate species for sites. Martin has collated information about over 500 Syrphid species occurring in the

Atlantic, Northern and Continental Zones of Europe as defined by the EU. This included most of the species occurring in the British Isles. The information includes associations between the hoverfly species and macro-habitats (e.g. categories of woodland, grassland, wetland, etc) and "micro-site features" (e.g. presence of various features of importance to hoverflies for larvae, adult feeding, etc.). The range, status, flight period and "traits" (e.g. number of generations per year, whether they are migratory, whether they are associated with Aculeate Hymenoptera, etc) are also covered. A detailed account of each species is given including its habitat, range and status, larval biology and identification – including extensive references to nomenclature problems and identification works.

One of the intended uses of the material is to provide a way to predict a list of species for a site and compare this expected list with the species actually recorded from the site. The process works as follows:

1. Start with a list of the species of hoverfly occurring in the region in which the site of interest is located. In Great Britain this could be, for example, the list of species recorded from the appropriate vice-county or "Natural Area" in which the site is located. This represents the species that are "available" to occur on the site of interest.
2. List the macro-habitats occurring on the site. This could be done as a desk-exercise, based on existing habitat survey data, but really requires a field survey with reference to the macro-habitat categories devised for Syrph the Net. This is because the Syrph the Net macro-habitat categories are not directly comparable to other habitat coding systems (although Martin Speight attempts to relate them to the European CORINE system in his definitions of habitat categories).
3. Select the species from the regional list which are associated with these macro-habitats. Since the strength of association is coded on a zero (no association) to three (maximally preferred) scale, it is necessary to decide what degree of association a species must show to be included on the expected list. Martin Speight recommends including species with an association of 2 or 3.
4. The process is actually a bit more complicated than this because account is taken of "supplementary habitats" – e.g. if a pond occurs in a wood, then additional species would be expected compared to a wood in the same region without a pond.
5. If the observed list for the site results from samples taken over a limited part of the year, the flight period information can also be used to further restrict the expected list to those species which fly during the sampling period.
6. A list of species expected to occur at the site has now been generated (i.e. a sub-set of the species occurring in the region which are associated with habitats occurring on the site, optionally further restricted to those flying during the sampling period).
7. This expected list can then be compared with the observed list. By examining micro-site features, macro-habitat associations and traits of the species that are "missing" (i.e. the species that were expected, but not observed) or

> “extra” (i.e. observed, but not expected), insights into the history and management of the site may be obtained. For example, if the traits information shows that “missing” or “extra” species are strongly migratory, one would probably dismiss the differences as chance effects of weather, but if many of the “missing” species from a woodland site were found to have saproxylic larvae, then one would start to think about how deadwood habitats have been managed on the site, both recently and historically.

Martin Speight has distributed the material to interested hoverfly workers on computer disk with the species accounts and introductory material as Microsoft Word documents and the tables of associations, range, status, etc as Excel spreadsheets. His documentation explains how the spreadsheets can be used to generate an expected list and make comparisons between expected and observed lists, but in practice this is quite a long and involved process requiring a fair degree of computational skill.

I became involved when I suggested that the computer files could be loaded into suitable database software and a program written to make viewing and exploring the information much easier and to facilitate the prediction and comparison process. I went through this process using the 1998 version of Syrph the Net and produced a Paradox database with two programs to browse the database and to carry out the analysis. This was submitted to Martin Speight and his co-workers to obtain their approval. They were pleased with the outcome, and it has subsequently been updated using the 1999 version of the information. This is now in an Access database which is interrogated by a program which behaves like a web browser. This is currently being assessed and tested by Martin Speight and others and it hoped that it will be issued on CD-ROM by about the end of March 2000.

One of the features of the CD-ROM is that is can include pictures to illustrate the species accounts, habitats, etc. In particular, we would like to include photographs of at least one representative species from each genus. I would be very grateful to hear from anyone who would be willing to allow their photographs to be used. Copyright of pictures will remain with their author (we ask only permission to use them for this purpose) and the author of each photograph will be credited as part of the caption to the picture. If you have photos you think might be suitable (which could be of adults, larvae, puparia, signs like larval mines or feeding damage or habitat features associated with particular species) please get in touch.

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GLOUCESTERSHIRE HOVERFLIES: A FINAL REQUEST FOR RECORDS

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Ted and Dave Levy and Roger Morris have set high standards with their county hoverfly books, but I am hoping to emulate them by producing an atlas of Gloucestershire Hoverflies. It is intended that this will cover Gloucestershire as it was before the 1972 boundary changes; it will therefore include the area now known as South Gloucestershire which was part of the county of Avon between 1972 and 1998. This coverage virtually equates to the Watsonian Vice Counties 33 and 34.

Stuart Ball and Roger Morris kindly provided me with all the hoverfly records for the two vice counties that were in the recording scheme's data base up to early 1994. I also have many later records, mainly, but not exclusively, from locally-based recorders. However there is no doubt that I do not have all available records for the Gloucestershire, particularly those from visitors to the county from other areas. I am therefore making a plea to all readers who may have recorded in Gloucestershire, either since 1994, or earlier if their records were not in the data base by then, to contact me. It would be regrettable if any recorder's work failed to be included in the county atlas.

Finally does any reader have the answer to either of these questions?

(i) R. L Coe's key to the Syrphidae quotes a record (unattributed and undated) for *Eristalis cryptarum* from "Gloucestershire (Cleeve)". On the face of it this record appears doubtful, and it may be a result of a confusion with Stowford Cleeve on Dartmoor, a known site for the species. However such an explanation is speculative, and this record, which would be of high interest if valid, cannot yet be totally discarded. Does anyone know the origin of this record, and whether it is supported by a voucher specimen somewhere?

(ii) Does anyone know the whereabouts of the collection (if indeed there is one) of V. R. Perkins, a dipterist who recorded many species in the area around Wotton-under-Edge in the early part of the 20th Century?

INTERESTING RECENT RECORDS

Barbara Last (Wiltshire)

Hound Wood	*Dasysyrphus pinastri*	29 April 1999
Langley Wood	*Xylota coeruleiventris*	26 May 1999
Pewsey	*Criorhina berberina*	28 May 1999
Tilshead Down	*Cheilosia soror*	20 July 1999
Pitt Wood	*Cheilosia soror*	23 July 1999
Devenish Reserve	*Cheilosia soror*	28 July 1999
Devenish Reserve	*Cheilosia soror*	5 August 1999
Berwick St. James	*Cheilosia soror*	4 August 1999

John Grearson (Wiltshire)

Eastfield, Ashton Keynes	*Didea fasciata*	3 August 1999
Somerford Common	*Brachyopa scutellaris*	9 May 1999

David Iliff (Northumberland)

Leaplish, Kielder Water	*Cheilosia pubera*	7 June 1999

David Iliff (Gloucestershire)

Shuthonger Common	*Chalcosyrphus nemorum*	14 August 1999
Lower Lode	*Eumerus ornatus*	14 August 1999

ANNOUNCEMENT

No list of recent literature is included in the current issue of the newsletter. However this feature will appear again in the next issue. Kenn Watt, who compiles these lists for the newsletter, has asked me to seek a volunteer either to assist him in this task in the future, or to take it over from him entirely. Would anyone willing to volunteer please contact him direct (Kenneth. R. Watt, “Kob-Web” Record Centre, 64 Hilton Drive, Aberdeen, AB24 4NP; telephone 01224-483065; email: Hoverfly@aol.com)