Hoverfly Newsletter
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2011 may have been a year when hoverflies were often especially hard to find in numbers, but, as the many articles below will testify, it was certainly a vintage year for Syrphidology in several other ways. The Glasgow Symposium was a truly memorable event, and the year saw the publication of **The Natural History of Hoverflies** by Graham Rotheray and Francis Gilbert and the new atlas, and as we enter 2012 we have the start of the Big Hoverfly Watch, the Wild*Guide* and a new edition of British Hoverflies to look forward to.

It has been a pleasure to receive so many articles in a timely manner without the need for me to chase authors or try to solicit contributions. My thanks to you all. Please try to keep up this momentum!

Articles and illustrations (including colour images) for the next newsletter are always welcome. Copy for **Hoverfly Newsletter No. 53** (which is expected to be issued with the Autumn 2012 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 2012.

The hoverfly illustrated at the top right of this page is a female *Leucozona glaucia*.

Ron Payne: a tribute

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I want to pay tribute to Ron; his obituary appeared in the Autumn edition of the Bulletin of the Dipterists Forum. He was entirely responsible for my early interest in hoverflies, which has been our obsession ever since. Originally I had been interested on Lepidoptera, but was also a keen birdwatcher prior to 1971. When Ron moved to Westcliff-on-Sea, he joined the South Essex Natural History Society, based in Southend, and as a committee member, I felt it appropriate to welcome him by tentatively collecting hoverflies locally, and showing an interest! Some of my specimens were scarce or interesting, so my enthusiasm grew, and we had several sessions at his home, determining and seeing his vast collection, which occupied shelves all around his study! He was always most kind and patient, and lent me identification keys and guides which were most helpful!

As at that time I was a sub-editor of The South Essex Naturalist Journal, which we were upgrading from news sheets to a better publication. I received several articles from Ron about hoverflies in our region. I also joined him when he led a coach trip of dipterists to Lakenheath in Suffolk in June 1971, and it was at this time that I began recording and collecting hoverflies in earnest.

When Ron moved to Somerset we lost touch, except by brief correspondence, but when we began our research for Somerset Hoverflies he helped with advice and records, though by then he had more interest in grasses. When we became interested in finding *Eristalis cryptarum* on Dartmoor he proved to have collected widely there, and had a specimen of that species. Later during book research we were permitted access to his collection in Bristol Museum and species were added to the Somerset list.

Dave and I were fortunate to meet Ron Payne and we have forty years of interest in hoverflies to thank him for, though probably his enthusiasm must also have rubbed off on many dipterists in his lifetime.

6th International Symposium on the Syrphidae, Hunterian Museum, Glasgow, 5-8 August 2011

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The first International Symposium on the Syrphidae was held in Stuttgart in 2001 and was a tremendous success. It attracted a broad spectrum of delegates from across the world and there were at least ten UK delegates. Since then, numbers of UK delegates have declined to a bare handful: just four went to the last symposium at Novi-Sad (Serbia) in 2009. Yet, hoverflies are a very popular group of insects that boast one of the most active recording schemes and are the subject of several UK research themes. It was therefore greatly encouraging that UK attendance at this latest symposium involved at least 22 delegates, several of whom provided a presentation or a poster.

The conference ran over three days and was split into six sessions with a total of 41 presentations listed in the abstracts volume. In addition, at least 27 posters were presented. Unfortunately several delegates, including Dieter Doczkal and Valeri Mutin, were unable to attend in the end and so the list was somewhat shorter. There is often a silver lining to such clouds and on this occasion it allowed Nathan Medd and Kirsten Miller, MSc Students at Imperial College, to tell us more about their work on hoverfly activity patterns and aspects of the ecology of *Microdon myrmicae*. For me, these were obvious highlights to the conference because they showed that a new generation of hoverfly enthusiasts might just be developing. Hopefully we will hear much more from both Nathan and Kirsten in coming years.

A wide spectrum of issues was covered, ranging from autecological studies to morphometric analyses and genetic studies that throw important light on the taxonomy and classification of particular genera. Studies of hoverflies in Latin America are clearly gaining momentum and it was interesting to hear of work in Brazil, Columbia and Puerto Rico. For me, the following highlights represent the parts of the conference that most grabbed my attention:

Ellen Rotheray ***Restoring endangered hoverflies: Case study of the pine* Blera fallax *and aspen* Hammerschmidtia ferruginea *hoverflies in Scotland***. Ellen's work has thrown considerable light on the ecology of both species and gives reason to hope that conservation measures for both species will lead to maintenance of more robust and sustainable populations. Remarkably, it appears that *Callicera rufa* and *Blera fallax* larvae vacate water-filled cavities in the winter to avoid being entombed in ice, whereas *Myathropa florea* remain *in-situ* and suffer major losses through freezing. Most noteworthy, however, was the degree to which *H. ferruginea* was demonstrated to disperse – at least 5 km. in one case. Translocation of *B. fallax* also provides encouraging signs that populations are capable of dispersal and there is now evidence of a new breeding site established about a kilometre away from the initial introduction site.

Rob Wolton ***Adult and larval behaviour of the ant-eating hoverfly,* Microdon myrmicae**. Rob regaled us with his studies of the population of *M. myrmicae* on his farm in North Devon. Rob has managed to observe most of the stages in this hoverfly's life cycle. Eggs are laid in batches of up to three at the mouth of the nests of the ant *Myrmica scabrinodis* (and possibly other species). First instar larvae are postulated to feed on buccal pellets and other detritus within the nest but subsequent instars are predacious upon the ant larvae. Adults show little sexual selection or courtship. Males have been demonstrated to live for up to 18 days in the wild, whilst females have lasted 20 days in captivity. Rob also raised the possibility of a new genus – Mogodon (referring to a sleeping pill) – coined by his family to describe their response to his constantly talking about this fly!

Maarten de Groot ***The effect of altitude on species composition and seasonal dynamics in hoverflies in beech forest***. Using a mixture of netting and malaise trapping, Maarten demonstrated substantial changes in the peaks of abundance and species richness on the north side of Mount Krim in Slovenia. Although the results were consistent with what might be expected, they nicely illustrated the differences in timing of hoverfly species richness and abundance. For me, the most striking point was that there were multiple peaks in abundance at the various points up the mountain with peaks in May, July and August, with multiple peaks at lower altitudes and less pronounced peaks at higher altitudes.

Menno Reemer & Gunilla Stahls ***Phylogeny and classification of the Microdontinae***. For me, the most striking part of this presentation was the remarkable range in form amongst the Microdontinae that highlighted the extreme uniformity in the European fauna and extensive diversification in the tropics. So far, the DNA of 80 of the 400 species of Microdontinae has been analysed. A significant proportion of the described species are known from the type specimens only, suggesting that there is

considerable scope for adding to our knowledge of these remarkable flies.

Gunilla Stahlls *et al.* MtDNA *CO1 haplotype distribution patterns in the eastern Aegean area (Greece)*. This study focussed on the genus *Merodon* which is one of the most dominant genera in the eastern Mediterranean. The larvae are associated with a variety of 'geophytes' or bulb-forming plants. Separation of the European and Asian continental plates during the Miocene means that populations of certain *Merodon* species might be expected to have been isolated over differing timeframes and signals for these differences were sought in the Mitochondrial DNA CO1 gene. Evidence from a small suite of islands showed that these differences could be detected in some but not all species.

Catalina Gutierrez-Chacon & Padu Franco *Syrphids in the coffee-growing region of the Columbian Andes: occurrence in relation to landscape context*. This study investigated the highly crenulated landscape of the Columbian Andes with coffee plantations on steep slopes that are capped by relatively undamaged forest. Given the intensity of sampling, the numbers of hoverflies recorded was remarkably low – a total of 896 specimens from 88 hours netting, 2,856 hrs. malaise trapping and 960 hrs. of van-Someren-Reydon traps. This effort yielded 79 species from 19 genera. Results pointed to an increase in species-richness as the landscape contained more forest, but some genera seemed to occur exclusively in the coffee plantations.

John Smit *A survey of the hoverflies of the Lagua Blanca Natural Reserve in Paraguay*. John's talk explored a survey of three habitats, wet Atlantic forest, dry forest and the extremely hot Cerrado (a thermophilic scrubby habitat). His talk was noteworthy for the extremely low numbers of hoverflies recorded; at times equating to about one specimen per hour of effort! His conclusion was that Paraguay was not worth visiting for hoverflies (I formed a similar view for some other parts of South America after getting better results but still poor numbers). The results also conformed to the findings in Columbia where malaise trapping was found to be a relatively poor method of recording hoverflies in the tropics.

Several taxonomic studies were relevant to the UK fauna. Work on *Dasysyrphus* by Michelle Locke on the Nearctic fauna (some of which is Holarctic) suggests that we will see several important splits in *D. venustus*; a situation previously reported from work by Dieter Doczkal. We also learned from Zorica Nedeljkovic that *Chrysotoxum festivum* comprises two species: a paler yellower northern species that occurs in Scandinavia and seems to be represented in British collections; and a darker species that appears to be confined to the Mediterranean. Finally, and most importantly, work on the genus *Pipiza* was presented by Ante Vujic, Hans Bartsch, Rune Bygebjerg and Gunilla Stahlls. In this work it seems that there are no obvious new species and that *Pipiza bimaculata* and *P. fenestrata* have new names; a key to the European fauna was provided in a poster. We eagerly await the publication of these changes.

The split between professional and non-vocational UK participants was marginally weighted towards the non-vocational component. Overseas participation was primarily from academic institutions. A strong contingent from the Netherlands, Germany and Scandinavia was augmented by teams from Novi-Sad (Serbia) and Spain (Alicante). Delegates from further afield, including Canada, Columbia, Brazil, Russia, Romania, the Czech Republic and Ukraine, contributed to the overall complement of over 70 delegates.

The Williston Diptera Research Fund and four UK societies (the British Entomological & Natural History Society (BENHS), Dipterists Forum, Glasgow Natural History Society and the Malloch Society) provided financial support for the Symposium. This made it possible for us to assist seven overseas delegates with part of their costs: Catalina Gutiérrez Chacón (Columbia), Dr Pavel Laska (Czech Republic), Dr Grigory Popov (Ukraine), Augusto Montoya (Puerto Rico), Mirian Morales (Brazil), Dr Martin Speight (Rep. of Ireland) and Dr Carmen Stanescu (Romania). We were also able to subsidise student attendance and to provide conference literature including a special edition of the new atlas of British Hoverflies. This atlas, jointly authored by Stuart Ball, Roger Morris, Graham Rotheray and Kenneth Watt is the first to combine all UK data, including those data held by the Scottish Hoverfly Mapping Project; it is a huge improvement on the atlas produced in 2000 and is based on almost double the number of records (745,000).

Unfortunately, although we approached all of the UK professional entomological and ecological societies for sponsorship, only one actually responded and informed us that it would not be able to help; the others simply did not answer! We were amazed to get no response from the Royal Entomological Society (RESL) and pursued this both through their on-line communication system and through a direct letter to the President. The former yielded no response, whilst the latter led to initial contact from

Professor Stuart Reynolds, but we heard no more from the Society itself.

The fact that four amateur societies felt it appropriate to support the conference and the RESL chose not to respond speaks volumes for the nature of entomological outreach in the UK, and this despite four of the five organisers being Fellows of the RESL. Clearly, hoverflies are regarded as an 'amateur' pursuit even though they attract significant funding under pollinator programmes across the world.

Work by the HRS to train new hoverfly recorders is clearly paying dividends, and it was immensely gratifying to meet up with several alumni of HRS training courses. Three presented posters and Rob Wolton presented his impressive work on *Microdon myrmicae*. We hope that by the time this symposium returns to the UK there will be many more alumni of the *Introduction to hoverflies* course. Training new syrphidologists was part of the theme we developed for Recording Scheme presentations. Our presentations explored some aspects of our experience and evolution of teaching techniques, and looked at some of the trends in hoverfly recording and its implications for data analysis.

Organising this event was a major undertaking and it has drawn upon the efforts of five organisers: Stuart Ball, Francis Gilbert, Geoff Hancock, Roger Morris and Graham Rotheray. The organisers were greatly assisted by the sponsoring organisations and would like to give special thanks to all five sponsors.

Offers from Canada and Russia to host the Seventh Symposium were put to the audience and it was concluded that the next symposium would be at Novisibirsk in 2013. This venue in Siberia is difficult to reach and the meeting will therefore be followed by an extended field trip to the Altai Mountains (we heard about these from John Smit in 2007). Anybody intending to go should make sure that they get an invitation from Anatolii Barkalov in good time to make it possible to apply for a Russian visa. Initial investigations of flights suggest that there are no direct services and that at least one and possibly two changes are required. Flight costs are difficult to judge but it looks as though there will be little change from £1,500. Start saving now!

The post symposium trip visited Rowardennan Research Station. This is a fantastic place that lies on a wooded peninsular on the eastern shore of Loch Lomond. Hoverflies were sparse but, with over 30 hoverfly specialists working this area, a respectable list was compiled. The list has still to be completed but so far 47 species have been reported. We tend to take our fauna for granted and it was therefore noteworthy that the Dutch contingent was pleased to see *Leucozona glaucia*, which is extinct in the Netherlands.

Species recorded from Rowardennan: *Baccha elongata*, *Cheilosia antiqua*, *C. bergenstammi*, *C. fraterna*, *C. longula*, *C .scutellata*, *C. vernalis*, *Chrysogaster solstitialis*, *Chrysotoxum arcuatum*, *C. bicinctum*, *Dasysyrphus albostriatus*, *Didea fasciata*, *Epistrophe grossulariae*, *Episyrphus balteatus*, *Eriozona syrphoides*, *Eristalis nemorum*, *E. pertinax*, *Ferdinandea cuprea*, *Ferdinandea ruficornis*, *Helophilus pendulus*, *Leucozona glaucia*, *L. lucorum*, *Melangyna compositarum*, *Melanostoma mellinum*, *M. scalare*, *Meliscaeva auricollis*, *M. cinctella*, *Myathropa florea*, *Neoascia podagrica*, *Orthonevra nobilis*, *Platycheirus albimanus*, *P. clypeatus*, *P. fulviventris*, *P. nielseni*, *P. occultus*, *P. peltatus*, *Scaeva selenitica*, *Sericomyia silentis*, *Sphegina clunipes*, *S. elegans*, *S. siberica*, *Syritta pipiens*, *Syrphus ribesii*, *S. torvus*, *S. vitripennis*, *Xylota jakutorum*, *X. segnis*

Hoverfly Recording Scheme update

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What a bumper year for hoverfly enthusiasts. A new atlas has been produced; the 6th International Symposium on the Syrphidae was held in Glasgow in August; we have delivered the text and illustrations for the forthcoming WILD*Guide* '*Britain's Hoverflies*' to the publishers; and we have finalised the statuses of hoverflies listed in the National Status Review published by JNCC. At the moment we are working on a revision of Alan Stubbs and Steven Falk's '*British Hoverflies*', which we hope will emerge in 2012. What is more, we have also run numerous training events to recruit new hoverfly recorders in the past year and will be running further courses in Glasgow, Bristol, Exeter, London and Bangor this winter. Many of these venues are dependent upon us providing the microscopes and we are very fortunate to have secured an OPAL grant to buy 13 microscopes for running courses at venues that are not normally equipped

with microscopes. This is a great advance and we are keen to take bookings for the winter of 2012-2013.

Production of a new atlas is just one part of the Recording Scheme. It was generated from a dataset of three quarters of a million hoverfly records – double the number that was available ten years ago for the first atlas. How many will there be in 2020 when we produce a more comprehensive volume? Do keep the records rolling in and watch out for opportunities to get involved as we are starting to embark on new initiatives. The one that is potentially very exciting is the start of 'Big Hover Watch' which we are modelling on the 'Big Garden Birdwatch' that the RSPB holds each year. The concept is new and consequently we want to recruit a small group of people to trial it in 2012 in advance of preparing literature and publicity for a bigger launch in 2013. If you are interested in taking part, please let Roger know – details are posted in this issue of the Newsletter.

We also hope to launch a new version of the website in 2012. Stuart has been hard at work developing a new format which we hope will improve our interface with hoverfly enthusiasts. In the meantime, the mapping facility on the existing website has been repaired and is now fully functional with up- to- date records available.

2011 was not the greatest year for hoverflies but it has yielded some exciting new records, most notably reports of *Callicera rufa* from Shropshire and Bedfordshire. These reports prompted a further one for 2009 from Nottinghamshire to be reported. What is going on with this species? It is rarely seen as an adult in Scotland, and there have been no indications of a gradual southward spread into northern England, so we seem to be looking at major jumps from an unknown source. However, there are potentially good reasons for this change and it seems likely that creation of new habitat as conifer plantations are felled plays some part in the process. We know from work by the Malloch Society that *C. rufa* is moving into felled plantations in Scotland, so why not elsewhere? Hopefully recorders will be sufficiently motivated to look for this species in pine woods elsewhere. Nigel Jones (2011) explained his discoveries in Shropshire in the last Bulletin. If you know of a hill top with exposed Scots Pine trees it is worth a look as *C. rufa* seems to be hill-topping. However, the other two sites are lowland localities with conifers and so it is entirely possible that this species will turn up in many more places.

We were also greatly excited by a possible *Syrphus admirandus* caught by Roger Morris at a site in Lincolnshire. In the end we have concluded that the specimen is not this species (thanks to Hans Bartch's excellent guide to the Swedish fauna (Bartsch, 2009). At the moment it must be logged as a very odd *Syrphus ribesii* but this seems highly unlikely. More work is needed to determine quite what it is.

Hoverfly atlas

Hopefully, by the time this newsletter reaches readers those who have made a significant contribution to the atlas over the past 10 years (50 or more records) will have received their copy via the Biological Records Centre. If it has not arrived, it should do soon after. Blame Roger for the delay – he has bitten off too much this year and has had a problem sorting out the address list.

Hoverfly WILD*Guide*

We seem to be regularly reporting delays, and again we have to report a delay. We finally delivered text and photos to WILD*Guides* in October and hoped that the book would come out in March or April 2012. Unfortunately that is not the case as the process of formatting our product has raised a number of issues. We are now revising our approach to identification to see whether we can come up with a format that meets the consistently high standards that WILD*Guides* prides itself on. The problem is how to produce a key that is not a key? We have tried several approaches and they all have their drawbacks. So, at the moment we think we may see the final product in July 2012. We are terribly sorry about the delays which really amount to us underestimating the work involved and the extra effort required once the draft was produced.

Data from websites

Over the past few years the numbers of photographers posting excellent photos of hoverflies on websites such as Flickr and WildaboutBritain has increased tremendously. Roger regularly trawls these sites and extracts usable data. The numbers seem to be rising exponentially and in the last 6 months some 1500 have been extracted. In all, it looks as though we will gather somewhere between 1500 and 2000 records per year from this medium, which amounts to perhaps as much as 10% of the yearly totals. It is quite amazing what people manage to find, but making a firm identification is far more challenging. If you post photos on the web and use a pseudonym, please can you let Roger know so that we don't generate multiple datasets for the same person.

In memoriam – Hans Bartsch

Many of our more enthusiastic readers will know of Hans Bartsch through his fantastic volumes on the hoverflies of Sweden. Sadly, Hans died of pneumonia in April this year. We had the great pleasure of his company at several of the Hoverfly symposia and have very happy memories of those times; he will be greatly missed for his infectious enthusiasm and kind nature.

References

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Jones, N., 2011. Astonishing discoveries of *Callicera rufa* in England. *Hoverfly Newsletter* **51**: 4-5.

Syrphus nitidifrons Becker (Diptera Syrphidae) – a second UK record

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I visited Denny Wood in the New Forest, Hampshire, between 31 May and 3 June 2011 to look for speciality hoverfly species.

On 1 June I caught a hoverfly in an opening along a path in broadleaved woodland near the edge of the wood and adjacent to heathland. The hoverfly was hovering at eye-height, and I expected it to be *Parasyrphus punctulatus*, of which I had already caught several in this opening, exhibiting the same behaviour. When confined in a tube, I determined that it was clearly not this species, although superficially similar, and indeed not any other species with which I was familiar.

The hoverfly, a female, was of a similar size to *P punctulatus*. The abdomen was black, with narrow paired orange spots on tergites two to four, the pair on tergite two being slightly broader. The sternites showed dark central spots. The face was yellow down to the base of the facial prominence, and below this the mouth edge was black. The frons was shining black without dusting.

Because of its overall similarity to *P punctulatus* I initially took this specimen through the *Parasyrphus* key of Stubbs and Falk 2002. It quickly ran to *Syrphus nitidifrons* due to the paired spots on tergites 2 and 3 and its black, shining frons. However, seeing that this was a species not yet discovered in the UK (at the time of publishing of Stubbs and Falk) I tried to work the hoverfly through other keys in this book (*Syrphus*, *Eupeodes*) but without any satisfactory conclusion.

I collected the specimen and subsequently passed it to the Bedfordshire County Hoverfly Recorder John O'Sullivan, who identified it as *Syrphus nitidifrons*, using Stubbs and Falk 2002, Van Veen 2004 and Parker 2010, and also having had the benefit of seeing the first UK specimen of this species at the BENHS Annual Exhibition in November 2010. This first specimen had been collected in Dorset on 10 May 2010 by Mick Parker (Parker 2010). The identity of the New Forest specimen was subsequently confirmed by Dr Martin Speight at the 6th International Symposium on the Syrphidae in Glasgow in August 2011.

This species occurs in parts of western Europe and now appears to be colonising the UK. The paucity of records may possibly be due at least in part to its arboreal habits and a flight period restricted between the months of April and June.

Acknowledgements
My thanks to John O'Sullivan for identification of the specimen, and for commenting on a draft of this paper. Thanks also to Martin Speight for confirmation of the identification.

References
Parker, M. *Syrphus nitidifrons* Becker (Diptera, Syrphidae) new to Great Britain. *Dipterists Digest* 2010 **17**, 145-146.
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van Veen, M. P. 2004. *Hoverflies of North West Europe: identification keys to the Syrphidae.* 254 pp, KNNV Publishing, Utrecht, The Netherlands.

A further record of *Callicera rufa* Schummel, 1842, in Central England

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Following my report of the discovery of *Callicera rufa* in lowland England in the previous Hoverfly Newsletter (Jones, 2011), I received an email from John Szczur in Nottinghamshire. It turns out that John had found a single female *C. rufa* on the edge of the National Trust's Clumber Park on 31 May 2009, pushing back the English discovery date by two years. John had captured and determined the fly correctly, but in some disbelief that it could be *C. rufa*, he had

withheld from making the record known, in case it was an incorrect determination. John has emailed photos of the specimen to me and it is clearly *C. rufa.*

John's *Callicera* was taken from *Rhododendron ponticum* flowers, from which it was nectaring. The site is described by John as:

The principal habitats within 100m radius of the capture site are:
a) Grass Heath; established on a clear-felled conifer plantation with rotting cut stumps still evident in 2009.
b) Mature conifer plantations; composed, in the main, of Scots and Corsican pines, with clear-fell and restocked areas.
c) Mature mixed woodland; with numerous huge trees, including Scots Pine, many of which were originally growing in an arboretum/parkland setting but today are growing alongside a significant amount of regeneration.
d) A tree line of mature Yew.

We now know of four sites, in three counties, in central England (Bedfordshire, Nottinghamshire and Shropshire) for *C. rufa.* I noted in my previous report that it seemed unlikely that *C. rufa* would not be present in more areas, and this has already proved to be so! This new record adds to the conviction that *C. rufa* is likely to be quite widespread in England. The peak season would appear to be May, with the presence of adults lasting into late June. I'll repeat my previous call for dipterists to make a special effort during May to visit areas with cut conifers and mature or standing dead trees. The best place to search is probably at height on dead and live tree trunks, possibly targeting hill and ridge top areas with these features.

Good hunting!

Reference

Jones, N. 2011. Astonishing discoveries of *Callicera rufa* in England. Hoverfly Newsletter **51**. 4-5.

Pelecocera tricincta locally numerous

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Pelecocera tricincta is usually encountered singly though is reputed on occasion to be locally frequent. 31 August 2011 on Chamberlayne's Heath, Dorset, was just one such occasion. Along a length of gravel track through wet heath I noticed several and, finding that once I "got my eye in" they were quite easy to spot, I decided to do a quick count along a measured stretch of track between two readily identifiable and fairly permanent posts (with a view to perhaps repeating the exercise on future occasions). Because they were fairly sedentary there was little risk of double counting.

Over a distance of 103 metres I noted 23 individuals. All of these were on yellow flowers of, in descending order of frequency, *Hypochoeris radicata, Crepis capillaris, Potentilla erecta* and *Hypericum perforatum*. On several plants of the first two species I noticed that the flies seemed to be avidly feeding on pollen (see photo). Elsewhere on the heath I encountered a pair in cop. - again on a flower of *Hypochoeris* and, knowing where to concentrate my search, found them to be fairly widespread on this and other, neighbouring, heaths. However no other spot produced more than one or two individuals.

Pelecocera tricincta feeding on pollen
(photo: Ian Cross)

An early record of *Eristalis similis* from Britain

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Aside from generating a large dataset for the new Atlas, study of undetermined syrphids in the collection of the Norwich Castle Museum collection during 2011 produced a record of *Eristalis similis* (Fallen) in Britain well before its addition to the British list (as *Eristalis pratorum* (Meigen)) by Falk (1990).

A male of this species, taken in Norwich on 18 July 1942, was the star of a small and otherwise unremarkable collection of hoverflies made by R.M. Stuart Brown. No other details accompany the specimen save for the information that it was taken on hawthorn on a wet day. The specimen's accession number is NWHCM : 2000.150.43.

Raoul Stuart Brown was a student in London during the early 1940s, but his home was in Norwich. With the encouragement of Ted Ellis, Keeper of Natural History at the Museum at that time, he made a collection of insects of all orders. It was entirely fortuitous that he collected the *E. similis*, which remained unrecognised until the Museum's miscellaneous collections were examined critically in 2011. It is quite likely that earlier specimens may remain overlooked in other museum collections.

Since its addition to the British list from Warwickshire, *similis* has been recorded infrequently but widely with further records from Derbyshire, Yorkshire, East Sussex, Leicestershire and Somerset.

Reference Falk, S.J. 1990. *Eristalis pratorum* (Meigen,1822): a new British hoverfly. *British Journal of Entomology and Natural History*. **3**, 139-141.

R. M. Stuart Brown's *Eristalis similis* specimen (photo: Tony Irwin)

Some recent, and one not so recent, records from Buckinghamshire (VC 24)

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Cheilosia griseiventris: on the evening of 2 September 2011 I was running a mercury vapour light at Prestwood Picnic Site, a chalk grassland and scrub nature reserve near High Wycombe (SU866991). A *Cheilosia* appeared on the sheet under the light. I've never seen a *Cheilosia* at light before, and it seems likely that this one was disturbed from the adjacent vegetation rather than being attracted to the light. It proved to be *Cheilosia griseiventris*, apparently the first record for the county judging by the online recording scheme maps. It was swiftly followed by a second record the next day, from a disused railway line north-west of Aylesbury (SP709201), this time from flowers during the day (the line has developed a good mix of open, flower-rich turf and species-rich hedges).

Cheilosia nigripes: I have a *Cheilosia* specimen from 1995 that had sat in my collection over the name "*Cheilosia albitarsis s.l.*", and although I'd made a note that the legs seemed too dark for *albitarsis* I hadn't been able to find a better match. I recently sent the specimen to Roger Morris who has determined it as *Cheilosia nigripes*. According to the recording scheme online maps this is also a new record for the county. The specimen is a female and was collected from Homefield Wood Wildlife Trust reserve (SU812869) on 6 May 1995, in a woodland-edge chalk grassland meadow, typical habitat for *C. nigripes*. Many thanks to Roger for his help with this and other specimens.

Ferdinandea ruficornis: a species I hadn't encountered before, from the disused railway line north-west of Aylesbury (SP709201), swept from flower-rich vegetation on 24 June 2011.

Ferdinandea ruficornis male (photo: Nigel Jones)

Rhingia rostrata: after many years of checking the abdominal markings of *Rhingia campestris* in vain, I finally had my first encounter with *rostrata* on 5 September 2010 at a flowering Buddleia in the walled garden at Hughenden Manor (National Trust; SU861954). On 29 May 2011 another one was among brambles at the edge of the disused railway line north-west of Aylesbury (this time at SP711214).

Rhingia rostrata female (photo: David Iliff)

Spread of *Chrysotoxum verralli* into Gloucestershire

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Chrysotoxum verralli, previously unrecorded on the western side of England, has spread into Gloucestershire since 2006, and now appears to be well established there.

Of the eight British species of *Chrysotoxum*, five - *C. arcuatum*, *C. cautum*, *C. elegans* (typical form), *C. octomaculatum* and *C. verralli*, are somewhat difficult to distinguish from one another at sight; these are the species in which the yellow markings on the tergites predominate over the black, and which consequently are excellent mimics of the social wasps (*Vespula* sp.). Before the year 2006, only two of these five, *C. arcuatum* and *C. cautum*, had been recorded in Gloucestershire, *cautum* frequently and *arcuatum* represented by only a very small number of records from the far west of the county, where it is apparently at southern extremity of its range.

C. verralli was not known from Gloucestershire before 2006, and was considered to be species of the south and east of England – I had encountered it on visits to Essex. It was described by the Recording Scheme organisers as having suffered a substantial decline in the 1990s. The first Gloucestershire record was of two females at The Mythe, near Tewkesbury, on 25 August 2006, by Martin Matthews. It has since been recorded in the county in every subsequent year apart from 2008, with records from four sites in 2011(an otherwise very unproductive year for hoverfly recording in Gloucestershire). Even in 2008 it was probably observed: on two occasions that year I saw in my garden a *Chrysotoxum* of the wasp-mimic type that was smaller than typical *C. cautum*, but on both occasions it evaded capture or close observation. John Phillips and Martin Matthews reported similar sightings that year.

The full list of Gloucestershire records of *Chrysotoxum verralli* is as follows:
25/8/2006 The Mythe (SO8834) 2f Martin Matthews
11/7/2007 Woodmancote (SO9628) 1f David Iliff
17/8/2009 Pope's Hill (SO6841) 1f John Phillips
1/7/2010 Blakeney Straits (SO6508) 1f Maris Midgley
26/6/2010 Pope's Hill (SO6814) 1m John Phillips
28/6/2011 Prior's Park, Tewkesbury (SO8931) 1m David Iliff
30/6/2011 Prestbury Hill (SO9924) 1f David Iliff
16/7/2011 Hartpury Orchard Centre (SO7825) 1m Anthony Taylor, det. David Iliff

In the period 2009 to 2011 Gloucestershire records of *Chrysotoxum cautum* have been atypically sparse. Could this have any connection with the spread of *verralli*?

Male and female *Chrysotoxum verralli* in Gloucestershire in 2011 (photos: David Iliff)

The hoverflies of a Devon hedge

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Last year I decided to see how many species of plant and animal I could find in a single hedge on our farm in north Devon. It has become absorbing and exacting work, and an excellent way to improve my natural history skills. I'm hugely grateful to all those experts who are helping me with identification – without them I would still be struggling with the basics. My hope when I started was to demonstrate that the lowly hedge really is a habitat worth conserving in its own right - with 1300 species identified so far, the sheer diversity of life in the hedge I'm looking at has surpassed all my expectations and I think proves the point.

It's a fairly typical Devon hedge, about 90m long, running along one side of the farm lane. It has an earth bank down the centre, and on the lane side a shallow ditch with tall herbs, nettles, umbellifers and brambles, on the 2m margin between this ditch and the tarmac. On the other side a lightly grazed herb-rich margin grades into semi-improved pasture. The shrub layer is species-rich, with hazel, blackthorn, hawthorn and grey willow predominating. The hedge is well connected to other habitats, with a thin strip of streamside woodland at the bottom, a similar hedge on the other side of the lane, and a small farm pond close by. The farm has Soil Association organic registration.

As may be expected the majority of species recorded are insects, with the three big orders being Lepidoptera, Diptera and Hymenoptera. The Malaise trap I've been loaned picks up a considerable diversity of parasitic wasps, but even so I think the flies are likely to lead the way in terms of species richness. And of these, the most diverse family appears to be the hoverflies (Syrphidae), very small flies like midges excluded (I have an alcoholic soup of these, if anybody wants to have a go?). This may partly, of course, be explained by hoverflies tending to be more conspicuous and easily caught than many other flies, and because I am more familiar with them than other families.

In 2011, I recorded 75 species of hoverfly from the hedge. All of these were using the hedge for something, if only as a resting place while searching

more widely for mates or breeding sites. Most were seen feeding, in particular on the umbellifers. The succession of these flowers from late April through to October proved my most fertile hunting ground. Large quantities of flowering hemlock water dropwort *Oenanthe crocata* growing out of the ditch were a particular draw, although the smaller numbers of flowering stems of cow parsley *Anthriscus sylvestris*, wild angelica *Angelica sylvestris* and hogweed *Heracleum sphondylium* were equally attractive. The well-known value of umbellifers to flies makes me think about the loss of habitat that must result from all the mid to late summer roadside verge cutting that takes place. Other flowering plants in the hedge that were used extensively for feeding by the hoverflies included grey willow, blackthorn and bramble.

How many of the species are actually breeding in the hedge is something I must try and look into. A few species are most unlikely to have been doing so, for example *Anasimyia contracta* which must have come from the nearby pond, and there are no suitable rot holes in the hedges for *Criorhina berberina* and *C. floccosa*, or sap runs for the single *Ferdinandea cuprea* found on a hogweed flower. The behaviour of others suggested that a careful search would reveal their larvae – for example, females of many of the 12 *Cheilosia* species were seen flying low down amongst the herbage, searching, I suspect, for places to lay their eggs.

Although I did not record numbers, the most numerous hoverflies were certainly *Syritta pipiens, Platycheirus albimanus* and *Melanostoma* species, although *Eristalis* species were abundant at times too and it was a very good year for *Rhingia campestris*. There were a few species I expected to see but did not: *Leucozona glaucia, Helophilus trivittatus* and *Pipiza noctiluca*. I searched too for *Platycheirus ambiguus* which I also know to occur on the farm, but without success. Indeed, I did not see any of these species anywhere on the farm or nearby all last year. I wonder whether they were hit badly by the harsh winter weather. Fortunately, the summer drought that has affected much of the rest of England did not hit us here; to the contrary it has been a remarkably wet and soggy year, April excepting.

There were some nice surprises too. On 9 April I caught the first of several *Melangyna arctica* on a dandelion flower, while three days later I spied a strange looking *Syrphus* resting on a dock leaf in the ditch which turned out to be a male *Parasyrphus nigritarsis*, not, I think, recorded before from the vice county. Later I caught another *P. nigritarsis* in the farm polytunnel. In mid-April I observed a female *Cheilosia nebulosa* flying low among the primroses and other plants at the base of the bank. In June a *Xanthandrus comtus* was feeding on a hemlock water dropwort flower – this species also turned up in the polytunnel.

One intriguing question is how important is it to diversity of hoverflies using a hedge that there should be a combination of ditch, shelter-giving shrubs and flower-rich margins present? I suspect that it is the combination of these features (and probably others) that accounts for the high diversity I found. Perhaps agri-environment schemes like Environmental Stewardship in England should be tailored to reflect this?

Big Hoverfly Watch – an experimental project – volunteers sought

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For a long while we have wanted to develop a monitoring project that might provide a snapshot about the status of Britain's hoverflies. Ideally we would like to develop hoverfly transects similar to those used for butterfly monitoring. However, the difficulty of identifying hoverflies makes this more challenging and therefore we think there may be scope for doing something more along the lines of the Big Garden Birdwatch.

We therefore propose to pilot an idea in 2012 to develop a network of recorders who would visit their favourite site on two separate days once in each of two pre-arranged dates and to develop a list for that site for that date. We realise that there will be differences in the skill-base of recorders but we think there is scope for distilling the differences between complete and incomplete lists. Once we have a big group contributing, any differences in recording skills are likely to be evened out by the size of the dataset.

Proposed method:

The event will take place over two periods:

- Thursday 10 May to Sunday 20 May
- Wednesday 20 June to Saturday 30 June

During this week, participants are invited to visit a favoured site, one they want to visit regularly. During this visit they would spend a maximum of two hours between 10.00 and 13.00 recording hoverflies. The choice of weather and time is important – we know that in general hoverflies are most active in the morning – in May timing between 10.30 and 12.30 is probably about right but is weather-dependent. In late June they will fly earlier so a 10 a.m. start may be more appropriate. However, this is also potentially dependent on the latitude – flies may fly a bit later in more northerly locations so 11.00 to 13.00 may be more suitable.

This project is open to recorders of all abilities. We need to get a feel for the ability of the recorders in order to analyse the data. Our analysis of existing Recording Scheme data suggests that there are several major steps in recording confidence and this will inevitably have a bearing on how many species and the numbers of specimens recorded.

Where recorders have limited experience and want to collect specimens and send them to the HRS for identification we will be happy to take material specifically for this project – material should be forwarded to Roger Morris, 7 Vine Street, Stamford, Lincolnshire PE9 1QE. If participants are unhappy about collecting specimens for determination they are encouraged to get voucher photographs and to send them to Roger for an identification.

Data will be assembled from electronic returns and the results outlined to participants through an e-group newsletter. As this is a pilot we really need feedback on the practicalities involved. So we hope that this will be an interactive project that will be of interest to everybody.

If the initiative is successful, we hope to develop an extensive network of recorders across the whole of the UK, but in this first year a foundation group of maybe 50 participants would be sufficient to explore the practicalities of such an initiative. Ultimately, who knows how many recorders might be generated?

Advertisements placed on the Yahoo Hoverflies group, DF and HRS websites yielded an immediate response from widely differing localities in England and also from Ireland. This is encouraging as it looks as though this initiative will recruit a range of recorders who are new to hoverfly recording. This is great, but we do need to have an input from a group of experienced recorders – all welcome.

Recorder name	**Date visited**
Site Name	**Time visited**
Brief site description	**Grid ref**
Weather conditions	

Recorder experience	10+ years		3-10 years		1-3 years		novice	
	Takes specimens		Photo record only		Field ID only			
	Yes/no		Yes/no		Yes/no			

Species	Number recorded*	Species	Number recorded*

*optional

Since placing advance notice of the idea on the Yahoo Hoverfly Group and the Recording Scheme website, we have had a good response and more than 20 volunteers have been recruited.

Xanthogramma pedissequum group

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In *Hoverfly Newsletter* 50 ; spring 2011 (accompanying *Bulletin* 71), Martin Speight provided a key to *Xanthogramma* which included *dives* and *stackelbergi* as previously unrecognised species split from *X. pedissequum* : at least one of these extra species occurs in Britain.

The ideal is to have characters with unequivocal yes/no answers. Seemingly life is not so simple, making some couplets long and in places tortuous to allow for variation, including the segregation into male and female couplets. The major limitation in Speight's key is that the split between the true *pedissequum* and the other two species is based on a character which is unreliable and often difficult to interpret, and supplementary descriptive characters are not given for *pedissequum*. Thus I have teased out the characters for comment and provide a more pragmatic key.

The membrane between the tergites and sternites. Because the tergites are wider than the sternites, one has to view the ventral side of the abdomen. Ideally, segments 3 and 4 would have a completely yellow membrane in the extra species and mainly dark in *pedissequum* but there are exceptions

Second basal cell: percentage bare of microtrichia. Each species has a range of percentages. which overlap. Taking the figures given in Speight's key there are some useful thresholds, especially if playing on the safe side (I have allowed 10% margin). Thus if the second basal cell is 0-15% free of microtrichia, *pedissequum* is the only qualifying species. Above 50% bare qualifies as *dives*.

Number of yellow spots on the pleura. This can range from 1 to 5. The minimum is a single vertically elongate yellow spot about the front of the pleura, perhaps the most frequent state among *pedissequum* s.l. in Britain: such specimens qualify as *pedissequum* s.s.. So far, so good. If there is a second spot, in principle the specimen still qualifies as *pedissequum* s.s.. If there are more than two spots, any of the three species could be entailed.

Wing apex clear of darkened. The degree of darkening is minor so this character may be overlooked at casual glance. It is a feature of *dives* though not always present.

Stigma and costal cells colour. The second costal cell is yellow (or grey) in *dives* but almost clear in *stackelbergi.*

Shape of tergite markings. There are some differences between species, though variation occurs. Illustrations will be needed.

Lower squama marginal hair colour in females: dark in *dives*, yellowish in *stackelbergi*. (probably variable: *pedissequum* can be either).

Pragmatic key to *Xanthogramma pedissequum* Group

1. Side of thorax with a vertical yellow strip, otherwise black. **pedissequum**

\- Side of thorax with a vertical yellow strip plus one or more additional yellow markings.....2

2. Wing below the stigma with any darkening confined to the cell immediately below (i.e. not crossing the next vein, R_{2+3}.
   [Male tergites 3 and 4 with yellow bars pinched in width about the lateral margin; tergite 2 yellow markings usually with the posterior margin angled obliquely forward (rather than backwards as a triangular wedge). Female frons with the median stripe usually narrowed or pinched-out in front (about the top of the lunules situated above the antennae).].....
   ..... **stackebergi**

   Wing below stigma with a dark patch continuing below R_{2+3}.
   .[Male tergites 2 and 3 with yellow bars that maintain their width at the lateral margins; tergite 2 triangular. Female frons with median stripe rather variable but often expanded in front to extend along the outer side of the pair of lunules.].....3

3. Apex of wing with faint darkening.at the apex. Second basal cell at least 50% bare of microtrichia.
   [Male tergite 2 with the yellow bars often pointed at inward end, but not always.]..... **dives**

\- Apex of wing with no hint of darkening.. Second basal cell at most 15% bare of microtrichia (the % difference can be less extreme, but safe figures are chosen).
   [Male tergite 2 with the yellow bars usually rounded at their inward end.]
   .....**pedissequum**

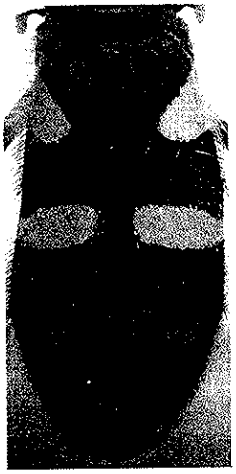
On this basis it should be possible to recognise *stackelbergi* as being distinct from *pedissequum* without recourse to the often fraught interpretation of

the colour of parts of the membrane between the tergites and sternites. The membrane character (explained above) should still be checked. If in the slightest doubt, vouchers will needed for verification.

Unfortunately *dives* does not always have the wing darkened at the apex and even then the marking can be faint. As yet I am not aware of a British specimen. If a clear-winged specimen were to escape recognition, it would run to the commonest species, *pedissequum*, where a misidentification would not be too serious.

All existing data already lodged with the Hoverfly Recording Scheme will have to be treated as *pedissequum* s.l. (broad interpretation of that species). Where vouchers for any of those records can be checked, data can be resubmitted as *pedissequum* s.s. (strict sense) or as one of the 'new' species if there is no room for ambiguity of characters. If *dives* is reported, verification will be essential.

Male *pedissequum* s.s.
Tergite 2 spots triangular
Tergites 3 & 4 spots uniform width to outer end



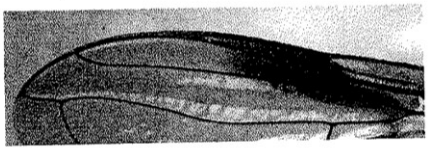
Male *stackelbergi*
Tergite 2 spots oblique
Tergite 3 & 4 spots pinched at outer end

Female *pedissequum* s.s.
Frons stripe wide in front

Female stackelbergi
Frons spots tapered in front

pedissequum s.s. pleura
Vertical strip on mesopleuron only

5 spot pleura
Vertical strip on mesopleuron
Spot below at top of sternopleuron
Spot in front of propleuron
Spot in front of haltere
Spot below the latter



pedissequum s.s.
Dark area decends below R_{2+3}

stackelbergi
No darkening below R_{2+3}

Where does Marmalade come from?

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Most readers of the Bulletin will probably have heard *Episyrphus balteatus* referred to as the Marmalade Hoverfly. Despite the name being somewhat whimsical, there seems to be no criticism of it, even among the most serious of dipterists. Perhaps that's because the transparent orange colour and strand-like bars of the fly's abdomen actually fit the title rather well. Certainly, this is a name to catch the imagination of our fellow-citizens, particularly children: and it's good to have a common name for such a common insect.

My question is: does anybody know who first coined the name? For helping to spread awareness, at least, the originator should be the toast of hoverfly-enthusiasts everywhere!

(Editor's comment: I first encountered the name in **Hoverflies of the Sheffield Area and North Derbyshire** by Derek Whiteley, published by the Sorby Natural History Society in 1987, as Sorby Record Special Series No. 6 (ISSN 0260-2032). In this excellent book three species are illustrated by line drawings, and each of the three is captioned with its scientific name accompanied by an imaginatively chosen English name. The three are *Episyrphus balteatus* (The Marmalade Fly), *Rhingia campestris* (The Heineken Fly) and *Helophilus pendulus* (The Footballer). The only other English names for hoverflies that are used in the book are the few well-established ones such as Drone Fly and Narcissus Fly. I do not know whether these names were coined by Derek Whiteley himself or by others. Perhaps, Derek, if you read this, you, or anyone else who knows, would let the newsletter know who was the author of these names).

The Marmalade Fly *Episyrphus balteatus* (photo: David Iliff)