Hoverfly
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Stuart Ball and Roger Morris refer in the Recording Scheme update to the inconsistency of hogweed as a nectar source for hoverflies. I have noticed something similar this year with another umbellifer, fennel, several plants of which I have in my garden. Until the final third of July this year the flowers of these plants attracted many social wasps but scarcely any hoverflies. Then a sudden transformation occurred, and the umbels are now covered daily with numerous hoverflies (and very few wasps). The species involved have comprised large numbers of *Episyrphus balteatus*, and *Syrphus* in perhaps even greater numbers, plus smaller populations of several other species; on most days there have been a few *Scaeva pyrastri*, which is also being found in several other areas – it is encouraging to see that this elegant hoverfly seems to be having a good year after a number of lean ones.

Articles and illustrations (including colour images) for the next newsletter are always welcome. Copy for **Hoverfly Newsletter No. 50** (which is expected to be issued with the Spring 2011 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 November 2010. Please note the earlier than usual date which has been changed to fit in with the new bulletin closing dates.

The hoverfly illustrated at the top right of this page is a female *Platycheirus peltatus*. Those in other recent newsletters were *Scaeva selenitica* male (no. 48), *Cheilosia illustrata* male (no. 47) and *Dasysyrphus albostriatus* (no. 46).

### Hoverfly Recording Scheme update July 2010

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This year started quite nicely. April was equable and there were reasonable numbers of flies about. May too was productive, but declined towards the end. In Lincolnshire it was the best year for a long while for *Dasysyrphus venustus* which has been virtually absent for many years. But from June onwards the question has been "has anyone found any hoverflies?" There appears to be nothing at hogweed at all in eastern England, and numbers in general seem to be well down, except perhaps in Warwickshire where Steve Falk continues to report goodies, the latest being a very nice female *Mallota cimbiciformis*. Roger joined a small group in Shropshire in early July for a meeting of students on the Birmingham University certificate in Biological Recording. They

barely found any hoverflies, even in a large field full of hogweed. Whilst this is discouraging, the bigger issue is the knock-on effects on the chain of predators that depend upon insect larvae. After a harsh winter a good breeding season might have replenished numbers of small birds, but if prey is as scarce as it appears to have been it is likely that insectivorous birds will have fared poorly.

For us, 2010 has been a very busy year but not in the field. Our big news is that we have secured a grant from OPAL (Open Air Laboratories [OPAL] network administered by the Natural History Museum) to fund a camera microscope and printing course material so that we can run our hoverfly identification courses more effectively. The microscope and camera should also help us develop new teaching aids and illustrations for books (it will also help develop other Dipterists' products and events), whilst funding the handouts we provide to participants on courses means that we are no longer reliant upon good will from the conservation agencies who are going through worrying times. So a huge thank

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you to OPAL. We have already commissioned the printing and have the microscope and camera on order.

On the issue of teaching, we are about to depart for Shetland to provide a course for the Biological Records Centre in Lerwick. This arose when we were offered a contribution towards the cost of travel to the Shetlands (it is jolly expensive) and both of us felt that the combination of teaching and a wildlife holiday would be a nice change. Stuart has a list of birds he wants to see, and Roger has his eyes on looking at storm debris on the cliffs on the west coast (plus of course otters, killer whales and maybe the odd bird).

The teaching season then starts with our Introduction to Hoverflies course at Preston Montford in late August. We are very pleased to see high levels of interest, with the course oversubscribed. Our tour then progresses to Glasgow in September, Newcastle in the autumn and a further course for the Northants Trust and Natural History Museum this winter. We are very keen to organise additional courses and so if you have a group that would like a course, all we need is for you to organise a venue and microscopes. We will bring all the necessary material. A contribution towards travel and subsistence is always welcome - we reckon the costs of travel to a mainland UK location between southern Scotland and Cornwall is in the order of £200-300 for a weekend, so provided a group of 10 can be secured, the cost per person need not be exorbitant.

One possibility that has emerged is that we have found a venue in Wells (Somerset) that might be suitable for an elementary class in Diptera and hoverfly identification. No promises yet, but it would be helpful if readers who would be interested in such a course (perhaps 3 days) would let Roger know so that we can judge possible demand. Timing would be during the School's summer holidays.

Despite doing little fieldwork, we have not been idle. Our most interesting foray was a quick trip up to the Spey Valley for what is becoming a tradition at the end of May. This time we went in search of *Microdon analis/major* to see whether we could make progress on the disjunct distribution of *M. analis*. We know that the Scottish population is not *M. miki* (pupae found this year confirm that), but we have still to investigate *M. major*. More in due course.

Our Scottish jaunt lasted a whole 4 days – travel up on Saturday, searching for larvae and pupae in the rain on

Sunday and then a jaunt round Culbin Forest on Monday, followed by a long journey home on the Tuesday – a total of 1200 miles. Apart from finding a single *Microdon* pupa and four larvae at Loch Morlich, we took *Parasyrphus nigritarsis*, *Sphaerophoria batava* and *Eriozona syrphoides* at Culbin and spent a delightful half hour watching and photographing a narrow bordered bee hawk moth at birds foot trefoil.

The Dipterists summer field meeting at Stackpole Head proved to be a great disappointment from a hoverfly perspective. There were very few about, although we did see *Rhingia rostrata* at numerous localities. There was also the first reported British record of all four *Sphegina* at the same site (a wooded stream with hemlock water dropwort *Oenanthe crocata* in dappled light). This experience illustrates the need to hold on to numerous specimens because the full list arose from a sample of around 20 specimens dominated by *S. clunipes*.

Watch out for reports of new species. There have been two added to the British list this year by Mick Parker and Ian Rabbarts. The proper announcements will be made in due course, and we cannot say any more. Both illustrate the need to be vigilant as they might have been expected but could easily be overlooked.

And finally, we did say we were going to produce a Wildguide on hoverflies. We have not forgotten and are slowly progressing. Our aim is to start with a more compressed book that illustrates the 60 commonest species or at least a selection that might be expected to occur in parks and gardens. The full guide, which will emerge later, will illustrate around 150 species and so it should help the aspiring hoverfly worker. It will not replace Stubbs & Falk, and indeed the recent discoveries emphasise very clearly that a popular guide may lead to species being overlooked. Our objective, therefore is to encourage recorders to develop an interest before progressing to the big book.

**Stop press:** The day after this note was written Dipterists Forum visited the Somerset Levels and at Shapwick Heath we saw hogweed in action as it used to be. Lots of *Cheilosia, Chrysogaster solstitialis* and a few *Syrphus*, plus the odd *Leucozona laternaria*. There were also plenty of muscids, a few *Tachina fera* and the occasional *Mesembrina meridiana*. Maybe all is not lost after all, and where there is a bit of rain the hogweed still performs.

### Separating Sphegina sibirica – a clarification

Roger Morris

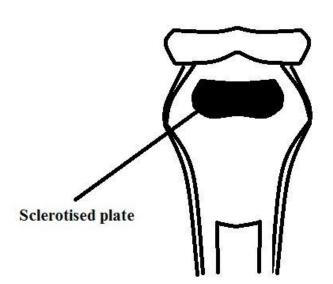
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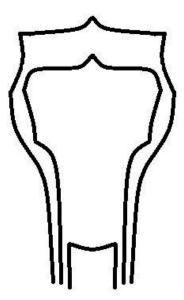
Sphegina sibirica is rapidly becoming a widespread and indeed common species that may turn up in the most unlikely situations. This was illustrated by the records of specimens taken in the car park at the foot of the ski-lift at Cairngorm in 2008 (Morris, 2009) and more recently by the record by Peter Chandler of two males at the flowers of *Oenanthe crocata* on Skomer Island (Morris 2010).

In Stubbs & Falk (2002) the separation between *S. siberica* and the remaining three British species is theoretically achieved by comparing the completeness of the coxal bridge at the base of the abdomen. This character does not work however, and several more useful features are needed to make the separation. Consequently, it is possible that specimens will run to *S. verecunda* (Peter Chandler pers. comm.) using Stubbs & Falk. The

following characters should therefore help to make this split more simply.

- The coxal bridge is complete but there is no sclerotisation on the first abdominal sternite unlike the small shining sclerotised area in other British *Sphegina* (figure 1).
- The sternopleuron has a large dust-free shining area that is readily apparent in all specimens.
- There is huge variation in colour forms of *S. siberica* and wholly or partly yellow specimens are highly likely to be this species (but check other characters).
- The middle and front tarsi are generally black in *S. siberica* contrasting with the pale tibiae and femora (not reliable but useful indicator).





**Figure 1**. Sternite 1 of Sphegina sibirica (right) and S. clunipes (left) showing the sclerotised plate that exists in all other British Sphegina. After van Veen (2004).

Whilst on the question of *Sphegina*, I often find it helpful to look at the genital processes of males because those of *S. clunipes* are much longer than those of other species, making it possible to sort this species from *S. verecunda* and *S. elegans* with relative ease.

#### **References:**

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## Eristalis nemorum males and Hymenoptera

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Eristalis nemorum is well known for its courtship behaviour which involves the male hovering above a female which is perched on a flower or on foliage. In Hoverfly Newsletter No. 7 (April 1988) I described an occasion in Tenby where I saw a male E. nemorum hovering in precisely that manner, but the object of its attention on the flower below was not a female of its own species but a honey bee (Apis mellifera) worker. I was intrigued by this incident and being something of a novice at the time wondered whether the male hoverfly was in fact confused as a result of its mimicry and actually mistook the bee for a female E. nemorum. I submitted a note on the incident to the Hoverfly Newsletter in which I posed the question "are hoverflies sometimes fooled by their mimicry?" The Newsletter editor of the time, Graham Rotheray, wisely substituted the following: "Is it the aggressiveness of nemorum males or the effectiveness of hoverfly mimicry that causes males to show considerable interest in bees?"

On 8 August 2009 in Sheffield Botanic Gardens I once again saw a male *Eristalis nemorum* hovering above a bee. In this instance the bee was a queen buff-tailed bumblebee (*Bombus terrestris*). The hoverfly's behaviour again seemed to be exactly the same as during its courtship display: when the bumblebee flew to a new position the hoverfly immediately followed and resumed hovering above her.

Whereas on the earlier occasion I had wondered whether the incident was associated with mimicry -E. nemorum does somewhat resemble a honey bee is size and colouration – it seems clear that this could not have been the explanation for this behaviour on the more recent

occasion, as *nemorum* is certainly not a bumblebee mimic and is considerably smaller than a *Bombus terrestris* queen.



Eristalis nemorum male and honeybee



*Eristalis nemorum* male and Buff-tailed Bumblebee (photos: David Iliff)

### Dipterists Forum

## Photography of the *Pyrophaena* subgenus of *Platycheirus*

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In **Hoverfly Newsletter No. 25** (February 1998) I wrote an article entitled "*Pyrophaena*: the hoverfly photographer's most irksome genus" and in **Hoverfly Newsletter No. 41** (Spring 2006) I contributed another entitled "Hovering behaviour of female Syrphinae". I certainly never expected that an opportunity would later arise to link these two apparently unconnected articles in a single follow-up note.

In the first of the original articles I lamented the fact that while the two hoverflies of the genus Pyrophaena (since relegated to a sub-genus of Platycheirus) are colourful and picturesque it was difficult for a photographer to do justice to their splendour as, when at rest, they eclipse their abdomens with their darkened wings. Both Platycheirus granditarsus and P. rosarum have darkened wings which are deep blue in life. P. granditarsus has a fiery orange abdomen; that of P. rosarum is less spectacular, but it is still a very pretty-looking hoverfly. In my experience P. rosarum sometimes perches with its wings extended, but more often covers its abdomen with its wings, and P. granditarsus always seems to cover its abdomen with its wings when at rest. This is of course the typical resting attitude of Platycheirus, but in the case of Platycheirus species not in the Pyrophaena sub-genus the wings are clear and the abdominal colours can be seen through them. The problem for the photographer with Pyrophaena, especially with P. granditarsus, is that because of their attitude at rest the dark wings obscure the colourful abdomen from view. For this reason I was always on the lookout for opportunities to photograph them in while they were hovering, but these were few and far between and the quality of the results was unacceptable.

The purpose of my note on the hovering behaviour of female Syrphinae was really to challenge the myth that has been perpetuated in much hoverfly literature that it is only the males that hover. In support of this I cited many instances of sustained hovering by females of several species of the Syrphinae.

On 16 August 2009 I participated in a field meeting at Farmhouse Lake, Lower Mill, in the Cotswold Water Park. On that day hoverflies were abundant at the site and a wide range of species was present. Among them were many examples of *P. granditarsus* and *P. rosarum* hovering. Equipped by now with a digital camera, which unlike its film equivalent, allows the user to take numerous shots without the fear of running out of opportunities, I tried to capitalise on this unexpected chance to resolve my problem. I therefore took as many shots as I could and at least some of the results were satisfactory and I obtained acceptable images of these hoverflies in which their abdominal colours were clearly displayed.

When I later uploaded the images and examined them I discovered that all the hovering specimens of both species that I had photographed were females.



Platycheirus granditarsus female in flight (photo: David

# Observations on hovering behaviour of *Epistrophe eligans* and *Xanthogramma pedissequum*

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For hoverfly recorders one of the most familiar sights in spring in this country must be that of Epistrophe eligans males hovering in areas well away from vegetation for long periods at heights typically about a metre above ground level. I am accustomed to watching them in my garden when the weather is fine between mid-April and early June. I have assumed that the purpose of this is territorial. During 2009 I noticed that these hoverflies seemed to favour one particular part of my garden, the airspace above an area of about two to three square metres of lawn, for this activity. Although there are plenty of other apparently similar areas in the garden these were apparently ignored. This year I found that the new generation of E. eligans males were hovering in the same little area as those in 2009; on most days there were two or three males hovering in close proximity to one another. Periodically one of the males would buzz another one in an aggressive manner as if trying to drive it away. This was never successful and normal hovering was immediately resumed. I was left wondering what attracted these males, when so much other territory was available, to compete day after day for the same airspace.

A different part of my garden seems to hold a special attraction as a hovering site for *Xanthogramma pedissequum* males. In the summer of 2009 a male of this species hovered for long periods on a number of days between *Acanthus* and *Crocosmia* plants situated close to a panelled wooden fence in a herbaceous border. On 4

July of this year I noticed a male X. pedissequum hovering in the same position. It hovered for long periods while oscillating in an elliptical pattern. When I observed the insect closely I saw that it was an example of the form that has multiple yellow spots on the pleura in place of the usual single one; this form has been considered as a candidate to be split off as a separate species (British Hoverflies, 2nd Edition, page 234). I had seen this form previously, but never before in Gloucestershire. On 16 July I saw a repetition of this behaviour, again at the same part of the herbaceous border; the Xanthogramma male was again exhibiting the elliptical oscillation while hovering. My initial thought was that this would be the same individual that I had seen in the previous week. However on this occasion the subject was a typical pedissequum, with only a single spot on the pleura.

As was the case with the *Epistrophe*, I was at a loss to explain what special attraction this one particular site in my garden should have for males of *Xanthogramma* in different years.



*Xanthogramma pedissequum*, form with additional spots on pleura (photo: David Iliff)

#### Merodon equestris in Hippeastrum

**Rachel Carter** 

6 Church View, Wootton, Northampton, NN4 7LJ Last summer I had about half a dozen small (2–3 cm) amaryllis bulbs (*Hippeastrum*) on a bench in our greenhouse/conservatory. It has roof lights which open automatically, almost every day in summer, and casement windows which we rarely open (because they get in the way outside). The door opens on to the utility room, near the door to outside which is often open. It enjoys more or less full sun. The small bulbs are offsets from larger ones which I have had for many years (the oldest is about 40!). They all appeared to be healthy and undamaged when I planted them. One failed to thrive; the leaves did not grow and then became yellowish, but I kept it and in the autumn

I dried it off with the rest. In January I investigated. On removing the dead leaves, I found the bulb was hollow. Further probing unearthed a brown cylindrical object (reminiscent of a guinea pig dropping!) which we decided must be a pupa. A Google Images search for 'pupa + Hippeastrum' led to the Narcissus Fly (Merodon equestris). The picture in this link corresponded closely to what we observed.

Only one plant was affected, and we have never had this problem before in amaryllis (though we may have done on *Narcissus* in the garden; we wouldn't necessarily know).

### Interesting Records for Northamptonshire in 2010

John Showers

103, Desborough Road, Rothwell, Kettering, Northants, NN14 6JQ Cheilosia chrysocoma was first noted on 28 April where one was seen flying short sorties over bluebells and dog's mercury in an ancient coppiced woodland in the north of the county. It kept settling briefly on the herb layer foliage but appeared to be patrolling an area of about 5m square. After a few minutes it disappeared into the wood. On 1 May in the same wood one male was observed on dead leaves on the ground by the side of the ride. This sort of resting place has been noted several times before. A second C. chrysocoma flew within about 50cm of the sitting individual, which immediately took off and flew straight at the incoming one. There was a very brief aerial tussle and the incomer departed into the wood. The original returned to the same leaf on the ground. At another part of the wood on the same day two individuals were seen settled about 100 cm apart on the bare ground

of a ride. A third flew into the area and all three tussled in the air briefly before they split up. One disappeared into the wood and the others returned to the ground but at different places from originally. It was not possible to confirm the sex of any of these individuals but it is thought that the individuals on the ground may have been males holding territory.

Portevinia maculata was noted on 28 May on ramsons in a private wood, to which I had been given permission to sample. This wood is in SP77, well away from previous records in Northants, which are all in the north-east of the county.

As part of a study of nectar-feeding at dogwood in a wood in the north of the county on 19 June, Claire Templeman took a female hoverfly which I identified as *Callicera aurata*. This is only the second county record of this species. The first, a male, was found in a garden in Northampton, about 25 miles to the south-west a few years ago.

#### 6th International Symposium on the Syrphidae, Glasgow, provisional date 5-8 August 2011

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The past five symposia have been amazing events with lots of great talks and inspiring conversation with amazing people. They have also been in some fantastic places: Stuttgart, Alicante, Leiden, Helsinki and Novi-Sad. 2011 is the turn of Glasgow.

In the past the UK contingent has been small, comprising a nucleus of Stuart Ball, Malcolm Edmunds, Francis Gilbert, Yvonne Golding, David Iliff, Roger Morris, Graham Rotheray, & Alan Stubbs. Our attendance was highest in Stuttgart and has declined substantially since then. Only four of us were present in Novi-Sad in 2009.

We therefore hope to stimulate members to attend the UK edition of the road show in August 2011. Full details have yet to be posted on the DF website and there will be opportunities to register and to offer papers. We really hope that there will be a big UK contingent at this event. At the moment the Hoverfly Recording Scheme is linking up with the Scottish Hoverfly Scheme (Kenn Watt) to produce a joint atlas that will be part of the conference pack provided we can secure sponsorship, so that is a further incentive to attend.

If interested, please let Roger Morris know: <a href="mailto:roger.morris@dsl.pipex.com">roger.morris@dsl.pipex.com</a> and keep an eye on the Recording Scheme website <a href="https://www.hoverfly.org.uk">www.hoverfly.org.uk</a>.