Hoverfly Newsletter

No. 7 - April 1988

At Dipterists' Day last year several people expressed concern about recording away from home - which Local Advisor should receive the records? The answer is, would everyone please send records to the Local Advisor for the area where the records came from, if at all possible. This helps Local Advisors to keep tabs on work done in their areas - names and addresses of Local Advisors in hoverfly newsletter no 5.

Several field meetings and events are planned for 1988 (see 'announcements' below) and I would like to include short reports in future newsletters - organizers please note! The range of work currently going on with hoverflies is very encouraging. Keep up the good work - contributions for the next issue by 1 September 1988 please.

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Flower visiting by Chalcosyrphus nemorum

Chris Palmer, Liverpool Museum, William Brown Street, Liverpool L3 8EN

During a visit to Delamere Forest, Cheshire on 30 June 1987 I was surprised to observe large numbers of Chalcosyrphus nemorum and Xylota coeruleiventris throughout the area visited. In Warwickshire I have never seen C. nemorum in more than ones and twos, either settled on vegetation along woodland rides or on dead wood and mud at the side of alder fringed woodland pools. [Larva under bark of fallen branches in wet situations (Hartley 1961, Proc. Zool. Soc. Lond., **136**, 505-75). Ed] Never, before my visit to Delamere, had I seen this species in such large numbers or indeed at flowers. On this sunny but windy day males and females of both species were settled on and seemed to be feeding from Ranunculus flowers. So engrossed were they in feeding that tubing them was easy. Flower visiting has, I know, been recorded in X. coeruleiventris, but I can find no reference to this behaviour in C. nemorum.

Xylota segnis feeding at buttercups

Iain MacGowan, NCC, Fraser Darling House, 9 Culduthel Road, Inverness IV2 4AG

On 17 July 1987 I visited Rassal Ashwood NNR in Wester Ross, Scotland. Within the reserve are two fenced off exclosures where regeneration of the ashwood is being encouraged. Consequently a lush ground flora is developing. In one of these exclosures I was intrigued to see large numbers of Xylota segnis feeding at buttercups. As was pointed out by Francis Gilbert who has made detailed studies of the relationship between hoverflies and flowers, this species is not a common flower visitor. Instead it gleans pollen and homopteran honeydew from the surface of woodland leaves. Stubbs and Falk (1983) note that the adult has been seen at buttercups but say that this is unusual.

One explanation for buttercup feeding at Rassal may be the floral composition of the woodland. Ash, hazel and rowan are the dominant tree species and, in Scotland anyway, honeydew-producing Homoptera are rather scarce on these trees. Their leaf shape and texture may also be important. Ash and rowan have highly dissected, narrow leaves whilst those of hazel are rather downy. None of these are ideal surfaces for pollen attachment. Thus, little food is probably to be had from leaf surfaces at Rassal.

This suggests that in places where pollen and honeydew are scarce, perhaps due to the floral composition and structure of the woodland, as at Rassal, then X. segnis turns to a less favoured strategy of obtaining nutrients from flowers.

Hoverfly in a moth trap

Tim A Lavery, Country Watch, Farnes, Castlemaine, Co Kerry, Ireland

On the night of 31 July 1987, along with other insects, a single Meliscaeva cinctella was taken in a mercury vapour moth trap at Farnes. Does this suggest that adult hoverflies are active at night?
[Predacious hoverfly larvae are nocturnal (Rotheray 1986, Zoo. J. Linn. Soc., **88**). Adult hoverflies are suposed to rest in the vegetation at night (Lewis & Taylor 1967, Introduction to Experimental Ecology, p. 188. Academic Press) but investigation is badly needed. Ed]

Courtship in *Eristalis nemorum*

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In Jon Heal's interesting article 'Observations on eristaline behaviour' (Hoverfly Newsletter 5), he writes that to his knowledge *Eristalis nemorum* is the only eristaline to indulge in courtship behaviour where the male hovers for long periods above a feeding female. I have never noticed this behaviour in any other *Eristalis* species, such as *arbustorum* which are probably more common than *nemorum*, and I would therefore support his view. Two recently published books contain photographs of pairs of *Eristalis*, described as *arbustorum*, engaged in this behaviour. The subjects of these photographs are almost certainly *nemorum*.

Is it the aggressiveness of *nemorum* males or the effectiveness of hoverfly mimicry that causes males to show considerable interest in bees? Last year at Tenby I observed and photographed a *nemorum* male hovering for several minutes above a honey bee worker just as they do over females. In this case the encounter ended when the bee flew away but it would have been interesting to know what would have happened if the hoverfly had pressed his suit further!

Field mnemonic for *Eristalis*

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Norman Frankel's note about the field characteristics of *Eristalis tenax* (Hoverfly Newsletter 5) prompts me to mention an identification mnemonic I use for the genus. I call it a mnemonic rather than a key because there is an assumption that the user already knows what an *Eristalis* is, and has some prior knowledge of the range of variation in each species. Most field workers quickly accumulate just this sort of knowledge and the mnemonic serves to remind one of the salient features of the rarer species so that they are not overlooked in the field.

In my experience, close visual scrutiny, preferably in the hand, is necessary to correctly identify even the 'easy' species. For example, *E. tenax* can sometimes be hairy enough to look like *E. intricarius*, and *E. abusivus* can look very similar to *E. arbustorum*, particularly with regard to the scanty facial stripe, etc. Foolproof keys, if such exist, are often so cumbersome that they are rarely practical. Mnemonics may be easier to use but specimens that do not fit the mnemonic or appear in any way unusual should obviously be retained for further study. I personally find *E. nemorum* a difficult species to determine in the field and in the following mnemonic it is identified by elimination.

1. Eye with conspicuous central welts of upstanding hairs.
   Hind tibia entirely dark ..... *E. tenax*

2. Very hairy all over, hairs beneath wingbase black ..... *E. intricarius*

3. Front and mid tarsi pale ..... *E. pertinax*

4. All legs mostly (hind tibiae entirely) pale.
   Antennae orange ..... *E. cryptarum*

5. Mid tibia entirely pale. Arista almost bare ..... E. abusivus

6. Hind metatarsus entirely pale, conspicuous wing cloud. Abdomen with reduced yellow markings ..... E. rupium

7. Conspicuous wing cloud. Tergites with large yellow marks and narrow apical yellow bands ..... E. horticola

8. Face mostly or entirely yellow. Mid-tibia darkened at tip or cf abusivus. Arista sub-plumose ..... E. arbustorum

9. Tiny quadrate stigma. Hind metatarsus not as wide as tibia (or cf with arbustorum) ..... E. nemorum

It is also worth remembering that the hind metatarsus is narrower than the hind tibia in E. nemorum, E. horticola and E. rupium, but is conspicuously swollen in E. arbustorum and E. abusivus.

Size, as advocated by Rupert Hastings in Hoverfly Newsletter 6, can be extremely variable, especially early or late in the year and so it is not an absolutely reliable way of separating E. tenax/E. pertinax from 'the rest'.

Volucella bombylans var. plumata 'in cop'

Tim A Lavery, Country Watch, Farnes, Castlemaine, Co Kerry, Ireland

On 5 July 1987 I was out collecting in the evening. It had been a long warm day with little or no wind and I was walking in an overgrown bog surrounded by grassland. At about 6.30 I suddenly spotted a pair of mating Volucella bombylands var. plumata flying low to the ground. Their flight was slow and awkward with frequent landings on the vegetation. The curious thing was that the male was 'dragging' the female along behind him! I watched their antics for over 10 minutes before they disappeared. Unfortunately little seems known of mating in hoverflies so I cannot say whether this is normal behaviour for V. bombylans. Has anyone further information?

Platycheirus melanopsis on the south-facing slopes of Creag Meagaidh NNR, Inverness-shire

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Platycheirus melanopsis is one of 3 British montane (mountain-dwelling) hoverflies. The others are Melanostoma dubium and Cheilosia sahlbergi. All these species are considered rare and their biology is poorly known. As part of a general investigation of mountain insects I set pitfall and white water-bowl traps at various altitudes ranging from 280m to 1000m on the south-facing slopes of Creag Meagaidh in Inverness-shire.

Between 17 June and 9 July 1983 a total of 137 P. melanopsis were caught (82 males, 55 females). They were trapped at all except the two lowest altitudes with most (61%) being caught between 510m and 790m in Calluna or Vaccinium heath.

There was no woodland near my traps although some parts of Creag Meagaidh have birch woodland which is developed up to about 600 m. My captures from the deforested slopes show that the species is abundant around the tree line but also extends well above it.

My only other capture of P. melanopsis was also on a south-facing slope, in Deschampsia caespitosa grassland at 1050 m in Coire Bhrochain on Braeriach in the Cairngorms. Six females were caught in white water-bowl traps in operation between 15 June and 14 July 1986. The results to date suggest that P. melanopsis prefers the heather or bilberry heaths on the mid-slopes of mountains and that the species is a lot more common than has perhaps been thought.

Meliscaeva auricollis - hibernation or early emergence?

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On a particularly mild sunny Saturday at the end of January 1987 a colleague of mine at Liverpool Museum, Denis Murphy, was picnicking with his family at Caldy Hill on the Wirral when a hoverfly landed on his sandwich! Not surprisingly the specimen was rather sluggish and it was duly captured and presented to me. It proved to be a very fresh female M. auricollis var. maculicornis. It is interesting to speculate whether this specimen had hibernated or was recently emerged, although its condition perhaps favours the latter.
[According to Torp, E 1984, De Danske Svirrefluer, p. 143, this species overwinters as an adult in central Europe. Ed]

Survival tactics in the overwintering larva of Myiathropa florea

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Understanding how insect larvae cope with winter is important because as we know from life history studies a great deal of mortality occurs at this time. The rat-tailed larva of Myiathropa florea lives in rot-holes of various trees and by the onset of winter most have reached the third and final stage. They do not develop further until spring and spend the winter in their rot-holes. Rot-holes can freeze or dry up in winter and rates of survival could be low. My study was concerned to find out what the larva of M. florea does during winter and to see what problems life in a rot-hole might involve. The study will be published soon but the main results are described here.

With the aid of Graham Rotheray and a stepladder I surveyed 25 rot-holes in beech and sycamore trees on Corstorphine Hill, Edinburgh in November 1986. Their sizes varied from shallow depressions of a few square cms to cavities up to 35 cm deep. The numbers of larvae varied from 0 to 41 with a mean of 7.9 larvae per rot-hole. Of rot-hole dimensions, depth best explained the number of larvae per rot-hole. Most of the larvae were buried in a layer of detritus at the bottom of the rot-hole.

When we returned in the following spring and sampled again we found that most rot-holes were dried up and only about 5% of larvae had survived the winter. Dry rot-holes often contained predators such as centipedes and rove beetles which may have eaten M. florea larvae.

To investigate larval behaviour I set up "artificial rot-holes" in glass jars containing pond water and rot-hole detritus. These jars enabled a range of experiments to be carried out. For instance larvae put into water nearly always buried themselves within 15 minutes. They fell to the bottom of the water and using their crochets to hold on, pushed their heads into the

detritus. Lifting their posterior ends verticially a series of contractions finally enabled them to disappear under the detritus where movements eventually ceased. Breathing tubes sometimes protrude from the detritus to the surface of the water. There was an interesting, but hard-to-explain, late afternoon peak in the appearance of breathing tubes.

Larvae are negatively phototactic and this may provide the stimulus to expel air from the breathing tube and fall to the bottom of the water. That air in the breathing tube creates buoyancy was shown as early as 1895 by Buckton in E. tenax and M. florea is probably the same. At the bottom of the water a second stimulus appears to elicit burrowing. This is low-thigmokinesis ie larvae move around until a high degree of contact stimulation is obtained.

Why do larvae burrow in the first place? The answer could be to breathe without floating to the surface where they are exposed to predators and where the water freezes first. When air is taken in buoyancy increases but being buried stops them from floating upwards. Also, in being buried, they may be somewhat protected from freezing and drying up. Experiments showed, however, some ability to tolerate these conditions eg as a rot-hole dries larvae move to the centre of the detritus which is the last place to dry out.

The picture that emerges from this study is of a larva utilizing various mechanisms to help it survive the winter. It prefers to be buried in the detritus where it is out of sight and respires using its extensible breathing tube without having to come to the surface. Most larvae occur in deep rot-holes which are least likely to freeze or dry up, although they have some ability to tolerate these conditions.

In dried-up rot-holes, larvae may be vulnerable to predation from other invertebrates and possibly from birds. Such predators may have been the chief cause of the huge overwintering mortality observed in this study.

Dasysyrphus friuliensis in Cleveland

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While collecting at Castle Gill, Cleveland on 5 May 1987 I came across a Dasysyrphus specimen that I did not recognize. In Stubbs and Falk it came out as friuliensis, a species thought to be associated with conifers and only on the British list since 1979. My identification was kindly confirmed by Philip Entwistle.

Castle Gill is a 7 acre strip of old, damp woodland dominated by dead and dying elm and centred around a steep sided gully. If the conifer association is genuine then the origin of this particular specimen may have been a small larch plantation to the west of the site. From the available literature this capture appears to be the earliest and most northerly to date. It is worth adding that this site yielded 36 species of hoverfly in 1987, of which 6 are given as indicators of primary woodland in Stubbs (1982, Sorby Record, **20**, 62-67).

Syrphids in native pinewoods

Iain MacGowan, NCC, Fraser Darling House, 9 Culduthel Road, Inverness IV2 4AG

The native pinewoods of Scotland are a unique and very special type of habitat. Formally widespread they are now reduced to some 25 scattered remnants comprising about 26 000 acres.

It is the big, rare hoverflies that come immediately to mind in relation to native pinewoods; species such as Callicera rufa and Blera fallax. Only a handful of records of C. rufa exist since the first British specimens were taken in the Black Wood of Rannoch at the end of the last century. The larvae live in rot-holes in pines [see Hoverfly Newsletter 6 for a recent record Ed] and can take several years to develop. Adults are captured most frequently from the trunks of mature pines. B. fallax was first recorded as British in July 1873 by Verrall who caught a specimen near Braemar. Colonel Yerbury wrote that this species has an undoubted attraction for wild raspberry flowers. Recent captures reveal an association with the stumps of cut pines and the base of living trees. Larval biology is unknown.

However, is it the more common and mundane species that make up most of the hoverfly fauna. Over the past 4 years I have operated Malaise traps in 3 different pinewoods to try to describe their general dipteran communities. The woods were: Tyndrum - a south-westerly wood with a high rainfall; Rothiemurchus - a Speyside wood with moderate rainfall and Glen Tanar - the most easterly pinewood with a low rainfall.

Species which occurred in all 3 woods were: Melanostoma scalare; Cheilosia longula; Meliscaeva cinctella; Platycheirus albimanus; Platycheirus peltatus and Sericomyia silentis. Species which occurred in two of the woods were: Chamaesyrphus scaevoides; Chrysotoxum arcuatum; Dasysyrphus venustus; Melangyna lasiophthalma; Melanostoma mellinum; Parasyrphus punctulatus; Sphaerophoria philanthus; Syrphus ribesii; Syrphus vitripennis and Xylota coeruleiventris. These 16 species make up most of the pinewood community of hoverflies.

By far the most common species is M. scalare which usually outnumbers the others by a factor of 5 to 1. Of the above 16 species only C. scaevoides is solely confined to native pinewoods. The larval biology of this species is unknown but adults are associated with heather under mature pines. C. longula is a characteristic pinewood species. Its larva feeds on those Boletus fungi that are themselves pinewood specialists. C. arcuatum, S. silentis and S. philanthus are moorland and grassland species. X. coeruleiventris has spread from native pinewoods into conifer plantations. The remaining species have aphid-feeding larvae. Those of Dasysyrphus, Melangyna, Parasyrphus and Syrphus probably feed on pine tree aphids, with the rest on aphids low down in the understorey.

A variety of uncommon pinewood hoverflies, such as Microdon eggeri, were not captured in my Malaise traps. The adults of this species are typically found sitting on rotten logs. Ants are very abundant in the pinewoods and it is puzzling why this species, whose larva lives inside ant nests, is not more common. Metasyrphus neilseni is another pinewood species although it has spread into conifer plantations. Other species that may have spread in a similar way are Metasyrphus lapponicus and Didea intermedia. It is, however, very unlikely that species such as C. scaevoides, C. rufa and B. fallax will ever become established in conifer plantations. The methods practised in modern forestry do not permit the growth of overmature trees which these species seem to require.

The Scottish native pinewoods have clearly acted as a refuge for various hoverflies which are now spreading into other areas. Whether species associated with conifer plantations such as Eriozona syrphoides and Dasysyrphus friuliensis that have recently been added to the British list will eventually find their way into these woodlands, in a reverse movement, remains to be seen. Whatever happens our ancient native pinewoods, obviously contain a dynamic and partially unique hoverfly fauna that merits continuous scrutiny.

Tropidia scita in woodland

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I was interested in I K Morgan's note in Hoverfly Newsletter 6 on the occurrence of *Tropidia scita* in less than ideal habitat in Wales. Here too, in north-east Essex, I have found this species in, or close to, dry woodland. Although not common, this attractive hoverfly has been found flying along the perimeter ditches of Stour Wood (62 (TM) 31) on several occasions, as well as on flowers of cow parsley growing in ditches in neighbouring farmland.

It also occurs in Stour Wood itself which is a dry, sweet chestnut coppice with a few damp areas in the northern section of the wood - here too I associate it with ditches. These are a poor substitute for its apparently preferred habitat, but then north-east Essex is hardly noted for 'open fens and lush marshes' referred to in Stubbs and Falk.

Aphid galls and syrphid larvae

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Gall production is one of the ways aphids affect their foodplants, although not all leaf and stem distortions caused by aphids are true galls. Nonetheless, a wide range of species are involved (see Darlington, A 1968 *Pocket Encyclopaedia of Plant Galls*, Blandford) and protection from enemies is one of the presumed advantages of living inside galls.

However, there are a number of hoverflies that have apparently overcome any difficulties posed by gall structure and are more or less specialized predators of this group of aphids. The majority belong to that most enigmatic group of hoverflies, the Pipizini. Records of pipizines from aphid galls go back well into the last century (Kurir 1963, *Z. angew, Ent.*, **52**, 61-83). Most come from aphid galls on poplars, elms and certain conifers. The gall-forming aphids on these plants belong to two small aphid families, the Pemphigidae and the Adelgidae.

Apart from causing galls and having arboreal (tree-dwelling) primary foodplants, these aphids share another feature. They all produce white flocculence or wax which tends to cover them over. Adelgids are known as 'woolly aphids' for this reason. Wax is used by aphids in various ways. Drops of sticky honeydew, which accumulate inside galls, are coated in it thus preventing aphids from being gummed up. It may reduce desiccation and it may also have a defensive function; within it, aphids are out of sight and difficult for predators to grab hold of. Wax production is common in aphids other than adelgids and pemphigids.

Since pipizines only exploit a limited number of gall-forming and wax-producing aphids it seems unlikely that the key to understanding their prey ranges is gall or wax production as is occasionally asserted. More probable is an association with these particular groups of aphids. However at least one gall-dwelling pipizine, *Triglyphus primus*, is associated with an aphid from a completely different family (*Cryptosiphum artemisiae* on mugwort) and 3 pipizine species are known from non-gall forming aphids (*Pipiza austriaca* ex umbellifer aphids; *P. bimaculata* ex *Aphis sambuci* on elder and *P. noctiluca* from a wide range of arboreal and non-arboreal aphids).

One of the problems facing syrphid predators is how to get inside galls. Most leaf-roll galls are tightly packed. Other galls are closed except for brief periods at the end of the life cycle of the aphid. It is interesting therefore to note that pipizine larvae are remarkable for their ability to penetrate small spaces, as anyone who has kept them knows.

Another problem is honeydew. I have sometimes found dead pipizine larvae completely encased in a stiff, dry coating of honeydew. A conspicuous feature of pipizine larvae are their long posterior breathing tubes. Indeed, the larvae of Heringia heringi has the longest breathing tube of any known predatory hoverfly. Not only this, but the spiracles at the tip of the breathing tubes in pipizine larve are borne on elevated ridges. Pipizine larvae can move their breathing tubes up and down and it is quite likely that this ability and the extra height are adaptations to prevent the spiracles being gummed up with honeydew.

Larvae of other hoverfly species, such as Syrphus spp and Episyrphus balteatus are sometimes found in aphid galls. These are widely polphagous species so their presence is not too surprising, but little is known of how they cope with life inside galls.

Many new associations probably await discovery between gall-forming aphids and hoverflies particularly as several pipizine species are unknown in their larval stages and many gall-forming aphids have been little studied. Only last year Bowdrey (1987, Cecidology, **2**, 45) reported finding larvae of Sphaerophoria rueppelli in Hayhurstia atriplicis galls on Chenopodium sp. However, finding larvae could require some persistence - Kurir (1963) sampled up to 30 000 galls at a time!

The Platycheirus peltatus group, with notes on species A in Britain, and other allies

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P. peltatus is a widespread species, which in some seasons is quite common. It is the sort of familiar species that is easy to identify - so casual inspection is sufficient .... or is it? At a late stage in the preparation of British Hoverflies I became aware that some peltatus differed in the features on the mid tibia. With deadlines already pressing, and no time to consider whether intermediates would indicate a range of variation, this was a matter that had to be left aside. However, when given the chance of a supplement in the reprint of the book I introduced species A, though without illustration. At the time I thought Graham Rotheray was investigating this species, but in fact he was working on scutatus only.

My purpose here is to draw attention to species A, since not all hoverfly recorders will have seen the supplement, and illustrations of the crucial mid tibiae are given for the first time. I am now aware that Dr Vockeroth (of Canada) has independently recognized this species and will be describing it as new to science. Since I have already published the existence of this species, and the hoverfly newsletter is not a formal publication, it is reasonable to ensure that recording of peltatus and its allies is as accurate as possible pending a name appearing in print. Opportunity is also taken to draw attention to other related species that could occur in Britain.

P. peltatus/species A key

This is taken direct from British Hoverflies, Appendix to reprint, 1986.

P. peltatus males

- Scutellum with all hairs black. Tergites 3 and 4 transverse. Mid tibia mildly inflated at apex (view from side) ..... peltatus

- Scutellum on top with many hairs pale. Tergite 2 often elongate, tergites 3 and 4 often square. Mid tibia very swollen at the apex ..... Platycheirus species A

P. peltatus females

- Thoracic dorsum on top with all hairs pale ..... peltatus

- Thoracic dorsum with black hairs at least in centre, often all black ..... Platycheirus species A

Species A looks very like peltatus but is narrower. In the males, note that the mid tibia is not only much more swollen at the apex but that there are longish hairs 'on top' of the swelling.

Those of you who have joined our Scottish field meetings are very likely to have species A, since it would seem to be the more characteristic species in the Highlands. Mine are from Loch Vaa (near Aviemore), Loch Loy (Nairn), Acharn (Angus), Inver (Aberdeen). And if you've been on Welsh field meetings, note that I have one from Cwm Bychan (Merioneth). A female from Teesdale also appears to be this species. All peltatus from northern and western districts need careful assessment. My specimens were taken between 15 June - 5 August.

Now while we are all hopefully peltatus-conscious, it is time to look out for two more species, jaerensis (described from the lowland coastal belt of south-west Norway) and ovalis (which gets quite close across the Channel). There is at least one other peltatus-group species in Europe, tatricis.

The peltatus group has the following characteristics:

- third antennal segment often orange tinged below (not always so and note that albimana, scutatus and perhaps allies, can also have orange)

- front femora with bushy hairs behind, though not always as dense as peltatus

- front tibia with longer hairs on posterior edge, bulging at apex (less so in jaerensis)

- front metatarsi usually broad, and usually with oblique apex (less so in jaerensis)

- ventral surface of mid tibia: with long hairs one-third from base; with erect short hairs two-thirds from base (except ovalis); and with a bulge at apex that often has modified hairs (except ovalis).

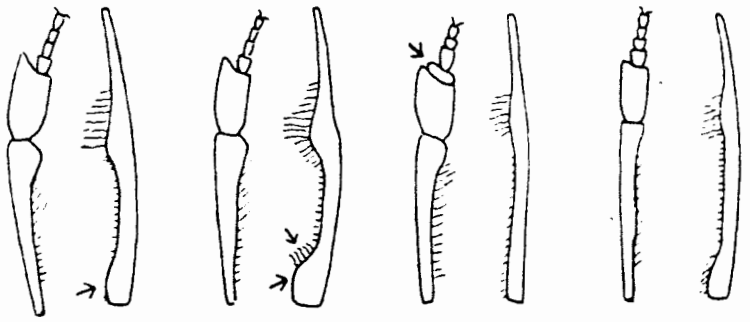
P. jaerensis Nielsen ought to occur on the Scottish coastal belt. Superficially, it looks rather like peltatus but the front tibia and tarsi are slender and may disguise its affinity to peltatus. The antennae, including

the basal segment are orange (the third segment a bit darker above in the female) which is unusual for a Platycheirus. The mid tibia is obviously of the peltatus pattern.

P. ovalis Becker has male front tarsi with segment 2 broad, suggestive of melanopsis, but the first segment is strongly oblique at the apex rather like peltatus. The front tibia is somewhat abruptly broadened at the apex, so in the male key they arrive at peltatus and then cause uncertainty because of the tarsi. The mid tibia is less obviously of the peltatus type. Females are more of a problem but the abdomen has more rectangular spots, the hind edge being parallel with the hind margin of the segment, rather than the more oblique pattern of the other species.

There are further European Platycheirus that we ought to be looking for, especially among Scandinavian species that could occur in Scotland. Some more splits among our familiar species is also yet possible. I am currently developing a European key to assist a more critical awareness of this very interesting genus.

Platycheirus peltatus group



Right front tibia + tarsus; right mid tibia (at twice scale) with ventral (inner) surface displaying characteristic hairs.

Uncommon and rare hoverfly records from the 1986 BENHS Annual Exhibition
(extracted from Proc. Trans. Br. Ent. nat. Hist. Soc. 1987, **20**, 57-60)

Xanthandrus comtus - Furnace Wood, E Sussex, 13.8.86 (P Hodge); Oxenbourne Down, Hants, 7.85 and Botley Woods, Hants, 9.86 (I Hudson); Dasysyrphus friuliensis - Cragside, Northumberland, 20.8.86 (D K Clements & K Alexander, National Trust); Megasyrphus annulipes - Allen Banks, Northumberland, 20.8.86 (Clements & Alexander); Callicera aenea - grass verge of A27, 7.85 and Russel Wood, W Sussex (Hudson); Cheilosia carbonaria - Ashstead, Surrey, 11.6.86 (G A Collins); Ferdinandea ruficornis - Lewes, E Sussex, 27.7.86 (Hodge); Rhingia rostrata - Oxenbourne Down, Hants, 7.85 and Botley Wood, Hants (Hudson); Brachyopa bicolor - Mark Ash Wood, Hants (Hudson); Brachyopa pilosa - Limpsfield, Surrey, 1.6.86 (Collins); Myolepta luteola - Harrock's Wood, Herts, 19.8.86 (A Godfrey); Neoascia obliqua - Ruskin Reserve, Cothill, 30.5.86 (Clements & Alexander); Anasimyia interpunctata - bassenhally Pits, Cambs, 15.7.86 (P Kirby and S Lambert, NCC); Anasimyia lunulata - Bishop's Dyke, New Forest (Hudson); Eumerus sabulonum - Studland Bay, Dorset, early July (Hudson); Psilota anthracina - New Forest (Hudson); Weald Park, Essex, 25.5.85 (Kirby and Lambert); Pelecocera tricincta - Stour Park, Devon, 5.6.86 (S G Ball, NCC), Bromshill, Hants, 5.7.86 (Collins); Triglyphus primus - St Ann's Hill, Surrey, 7.6.86 (Collins); Caliprobola speciosa - Denny Hill, New Forst, 16.6.84 (Godfrey); Chalcosyrphus eunotus - Shrawley Road, Worcs., 4.6.86 (A N B Simpson); Criorhina floccosa - Collins Green, Worcs., 14.6.86 (Simpson); Pocota personata - New Forest, 6.86 (Hudson); Microdon eggeri - Denny Wood, New Forest, 9 and 16.6.84 (Godfrey); Microdon devius - Hackhurst Down, Surrey, 21.6.86 (Collins).

Announcements

Would everyone please note these Local Advisors changes of address:

Ian Hudson (Hants/IOW) - 'Eaglehurst', 7 Ladram Road, Alverstoke, Gosport, Hants
Malcolm C Aldridge (Herts/Middx) - 38 Napier Road, Isleworth, Middlesex TW7 7HP

Hoverfly workshop, Liverpool Museum, Saturday 30 April 1988, 1300-1630 hrs
An opportunity to identify, talk and argue hoverflies for an afternoon! Microscopes, keys, 'experts', and a very comprehensive museum reference collection will all be available for consultation. Numbers limited so for a booking and/or further information please contact Chris Palmer, Liverpool Museum, William Brown Street, Liverpool L3 8EN (tel: 051 207 0001 ext 236).

Field meeting at Roddlesworth, nr Blackburn, Lancashire (SD 670210), Saturday 16 July 1988 (joint meeting with the Lancs & Cheshire Entomological Society)
Permission has been granted by North West Water to explore this Pennine-edge mixed woodland. Indications are that this site is very rich ..... Further details from Chris Palmer, Liverpool Museum, address and tel. no. above.

Field meeting at Wyre Forest National Nature Reserve, 6/7 August 1988
Details from Colin Plant, Passmore Edwards Museum, Museum Nature Reserve, Norman Road, London E6 4HN.
Hoverfly records are badly needed from this grade one site to help evaluate the status of various species that appear to have been lost in recent years. Accordingly, would anyone who has, or knows of, hoverfly records from this area let Colin know as soon as possible and/or attend the field meeting to help provide new information.

Field meetings in Hampshire
Ian Hudson is setting up a local Hants Hoverfly Recording Group and has arranged an initial meeting in the East Hampshire Hangers for the end of May. Would all hoverfly recorders in the area and anyone visiting Hampshire please get in touch with Ian (new address above) who will provide further details and information on local sites etc.

Field meetings in Scotland
Tarradale House near Inverness, 17-19 June with a possible extension up to 24 June at Beinn Eighe NNR Field Centre. Details from David Robertson, 3 Claremont Park, Leith, Edinburgh EH6 7PH.

Sphegina from Gwynedd
Philip Entwistle (12 Upland Park Road, Oxford OX2 7RU) is trying to get in touch with the person who sent him 3 Sphegina species for identification early last year. There was no name or address with the material, which has now been identified.

New hoverfly maps for Staffordshire
David Emley has updated distribution maps for Staffs and they are available in booklet form **free** from the Biological Records Centre, City Museum and Art Gallery, Broad Street, Hanley, Stoke-on-Trent on receipt of an A4 size SAE.

Peter Crow Sadly, Peter died last November after a long period of poor health. Among many things Peter will be remembered as the first person to record Eriozona syprhoides in the British Isles. (Crow, P 1979. Ent. Rec. J. Var., **81**, 237-8)

Recent publications

ALLEN, A.A. 1987. Sphegina kimakowiczi Strobl (Dipt. Syrphidae) in west Kent and south Essex. Entomologist's Rec. J. Var., **99**, 250.

ALLEN, A.A. 1987. Melangyna guttata Fall. (Dipt. Syrphidae) etc at Carlton south-east London. Entomologist's Rec. J. Var., **99**, 267.

BLOXHAM, M.G. 1988. The Diptera (Syrphidae) of the Sandwell Valley. Entomologist's Rec. J. Var., **100**, 11-19.

BOWDREY, J.P. 1987. Aphid galls and hoverflies. Cecidology, **2**, 45.

DUSEK, J. & LASKA, P. 1987. Copulation behaviour and modification of male terminalia in the subfamily Syrphinae (Diptera). Acta Entomol. Bohemoslov, **84**, 335-41.

HOVEMEYER, K. 1987. The population dynamics of Cheilosia fasciata (Dipt. Syrphidae): significance of environmental factors and behavioural adaptations in a phytophagous insect. Oecologia, **73**, 537-42.

OATES, M. 1987. Some late sightings of butterflies and other insects in and around Hampshire during the mild autumn of 1986. Entomologist's Rec. J. Var., **99**, 222-24.

OWEN, J. 1988. Sericomyia silentis (Harris) (Dipt. Syrphidae): the 44,834th hoverfly. Entomologist's Rec. J. Var., **100**, 44.

ROTHERAY, G.E. & DOBSON, J. 1987. Aphidophagy and the larval and pupal stages of the syrphid Platycheirus fulviventris (Macquart). Entomologist's Gazette, **38**, 245-51.

ROTHERAY, G.E. 1988. Larval morphology and feeding patterns of four Cheilosia species (Dipt. Syrphidae) associated with Cirsium palustre L. Scopoli (Compositae) in Scotland. J. nat. Hist., **22**, 17-22.

SCHMID, U. 1987. The occurrence of hoverflies and soldierflies (Dipt. Syrphidae and Stratiomyidae) on the German Wadden Sea island of Scharhorn. Beitr. Naturk. Neidersachsens, **40**, 249-64.

SPEIGHT, M.C.D. 1987. External morphology of adult Syrphidae (Diptera). Tijdschrift voor Entomologie, **130**, 141-75.

SPEIGHT, M.C.D. 1988. Doros destillatorius, espece nouvelle pour la France, avec designation des types des deux especes europeenes du genre Doros, description de leurs pupes et cles de determination des adultes et des pupes (Dipt. Syrphidae). Bull. Soc. ent. Fr. **92**, 193-200.

SPEIGHT, M.C.D. & CLAUSSEN, C. 1987. Redefinition of Cheilosia aenea and C. argentifrons with records extending the known range of these species in western Europe (Dipt. Syrphidae). Annls. Soc. ent. Fr., **23**, 299-308.