# HOVERFLY NEWSLETTER

**NUMBER 16**
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*Hoverfly Recording Scheme* *Biological Records Centre*


At the time I am writing the weather is getting warmer, hoverflies are becoming easier to find and the new "season" has begun. In future years, once we have all become familiar with the larvae as a result of Graham Rotheray's forthcoming book, perhaps there will no longer be such a thing as an off season for hoverfly recording.

As in previous years, it is my intention that the next newsletter should be available by Dipterists' Day (6 November). To enable me to meet this deadline I would be grateful for contributions by 1 October. Please send them to me, **David Iliff, Green Willows, Station Road, Woodmancote, Cheltenham, Gloucester, GL52 4HN.**

## HOVERFLY MAILING LIST


**Brian Eversham**
**BRC, ITE Monks Wood, Abbots Ripton, Huntingdon**
**Cambridgeshire, PE17 2LS**


My apologies to those of you who did not receive last Autumn's newsletter; your copy should be enclosed with this mailing. Our mailing list is becoming out of date, so please let BRC know if this newsletter reached you via an address which is not the one you would like us to use. Each year, we lose touch with a few recorders whose mail returns, marked 'Gone Away'. If anyone has a current address for the following recorders, please let me know.

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|---|---|---|
| Dr E T Burtt | Mr N Grattan | Mr J H Marshall |
| Mr K M Catley | Mr A C Hubbard | Ms A Reboul |
| Mr S R Davey | Dr R Jones | |
| Dr M J Ebejer | Mr L H T Large | |

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## HOVERFLY WORKSHOP AT PRESTON MONTFORD

More than forty people attended the workshop organised by Roger Morris and Stuart Ball which was held at the Preston Montford Field Centre in Shropshire from 5 to 7 March 1993. The organisers were delighted with the response, because not many weeks before the event it appeared that the minimum attendance of twenty needed for the workshop to be viable might not be reached.

The choice of activities included an introduction to hoverfly identification for beginners, led by Roger; aid in the identification of the species of difficult genera (notably *Platycheirus* and *Sphaerophoria*), from Alan Stubbs; an illustrated introduction to the larvae, followed by field trips in search of them (Graham Rotheray); and guidance on the usage of a computer for recording and on hoverfly photography from Stuart. I commend the organisers for the comprehensive range of activities, my only difficulty being the impossibility of being in two places at once!

The beginners' group was very well supported, participants being provided with specimens but not their identification, and working their way through the keys in Stubbs and Falk. The enthusiasm of this group never seemed to falter, many seeming to remain at their microscopes from before breakfast until the bar opened in the evening!

Alan Stubbs provided revised keys for *Platycheirus* and *Sphaerophoria* and guided his audience through the revisions which had been made since the latest supplement to his book; in particular the species new to the British list which resemble *P. peltatus* (*P. amplus* and *P. nielseni*) and *P. clypeatus* (*P. europaeus*, *P. occultus* and *P. ramsarensis*). Alan also provided us with lists of further European species of these genera which might yet appear in Britain. Most participants in these sessions had brought specimens, a number of which turned out to be examples of the newly recognised species, though there were some rogue specimens of *Platycheirus* which did not precisely fit the keys, causing some to wonder whether yet more species so far undescribed are already in Britain (Editor's comment: being conscious of the ever-increasing number of *Platycheirus* species that need to be considered when making identifications, I noted with some apprehension that among the European *Platycheirus* in the list of hoverflies which might yet appear in Britain were species called *P. confusus* and *P. complicatus*!).

Although the two fore-mentioned genera occupied the greater part of Alan's sessions, he also provided illustrations of *Pipizella* genitalia, a key to female *Neocnemodon* (previously only males could be identified to species), and an alternative key to *Cheilosia* written by Steven Falk.

Graham introduced the subject of hoverfly larvae on the first evening, illustrating his talk with the numerous colour photographs which are due to appear in Dipterists' Digest No 9, which will be his definitive work on the subject. Graham not only showed the audience what the various larvae looked like, but illustrated examples of habitat and gave guidance on how to find them. Graham's researches have also yielded new insights into the way in which the

various groups are related; these discoveries will result in a revision to the traditional check-list order for hoverflies.

Graham also led two field outings to search for larvae. The first was to Wrekin, where techniques to investigate rot holes and sap runs were demonstrated. *Brachyopa* larvae and the larva of *Myathropa florea* were readily found. Brief leaf litter searches revealed the larva of *Parasyrphus punctulatus*. The second trip was to Attingham Park where more sap runs (some very good ones on horse chestnut), rot holes and stumps were investigated, but no extra species were found.

Stuart demonstrated the hoverfly data base and the biological recording package RECORDER to small groups throughout the weekend. Most readers will have already seen the output of the system in the form of dot maps (see pages 5 and 6). Recorders will soon have the benefit of being able to extract records from the data base in a variety of formats.

On the Saturday evening Stuart described techniques and equipment for hoverfly photography, illustrating his talk with a range of slides of hoverflies and other wildlife subjects. Following this other participants were able to show their hoverfly slides.

Brigette Peterek gave a short talk on a PhD study she has just begun at the University of Central Lancashire (Preston), investigating hoverfly mimicry and ecology.

The Preston Montford Field Centre proved to be an excellent venue, being very comfortable and convenient and having a friendly atmosphere. Its setting, close to a quiet and attractive reach of the River Severn, and the excellent weather throughout the weekend further enhanced what was already a most successful event.

## HOVERFLY RECORDING SCHEME: PROGRESS REPORT MARCH 1993

**Stuart Ball and Roger Morris**
**Joint Nature Conservation Committee, Monkstone House, City Road, Peterborough PE1 1JY**

A year ago, we were delighted to report that the scheme had passed the 100,000 mark for computerised records. This was a very important landmark because it signified the revival of the scheme. The impact of this news on recorders was particularly apparent in the autumn when we received a deluge of new records including some huge packs of RA33s containing records covering the last six years or more. This response has been magnificent.

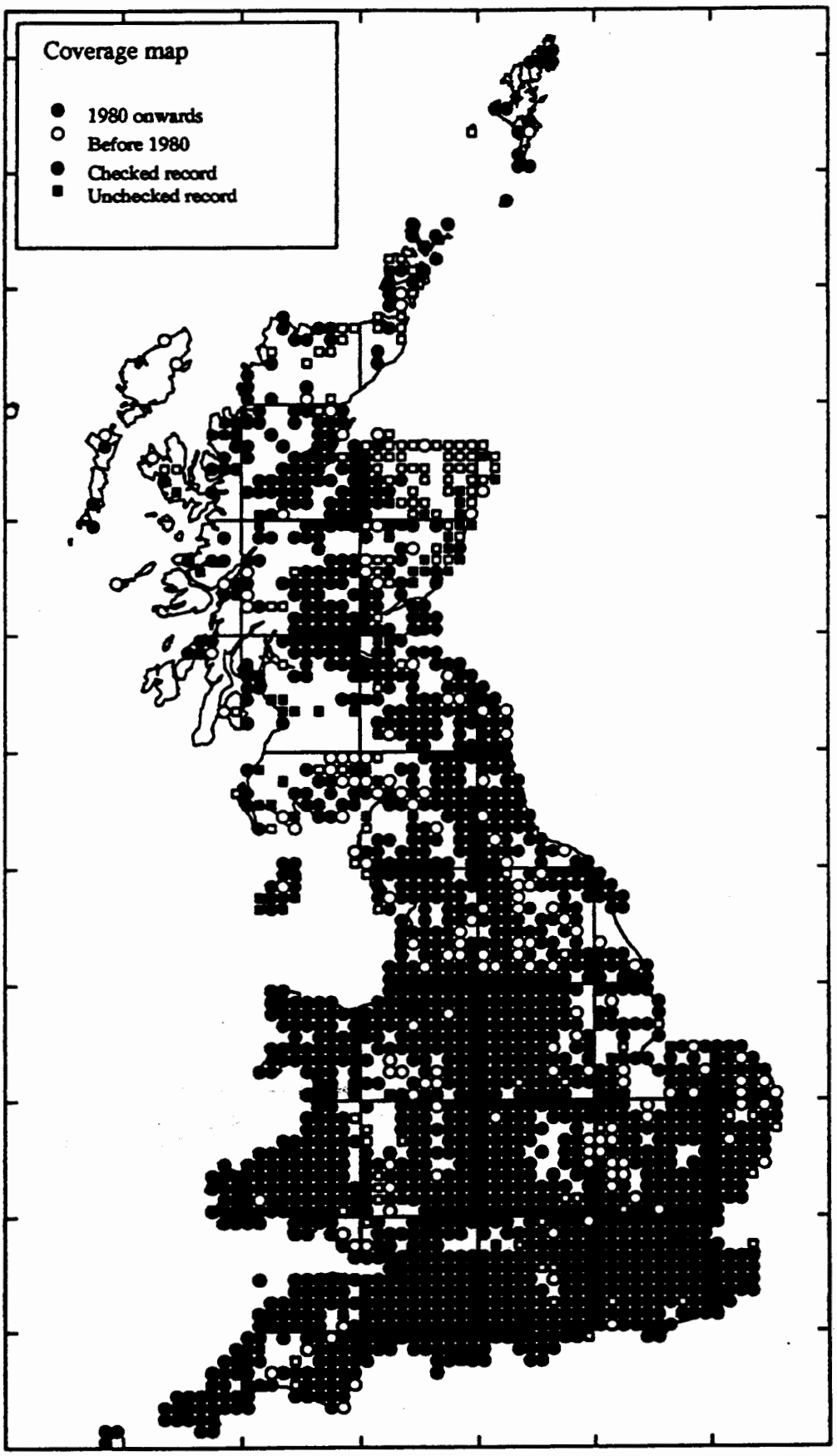
All incoming data on RA33s and a significant proportion of in-coming Gen7s have been entered on to computer this autumn by RKM. Much progress has also been made on entry of the backlog of Gen7s, and we are pleased to report that the backlog now stands at below 30,000 records, even after the arrival of the Essex dataset from Roger Payne. **The total**

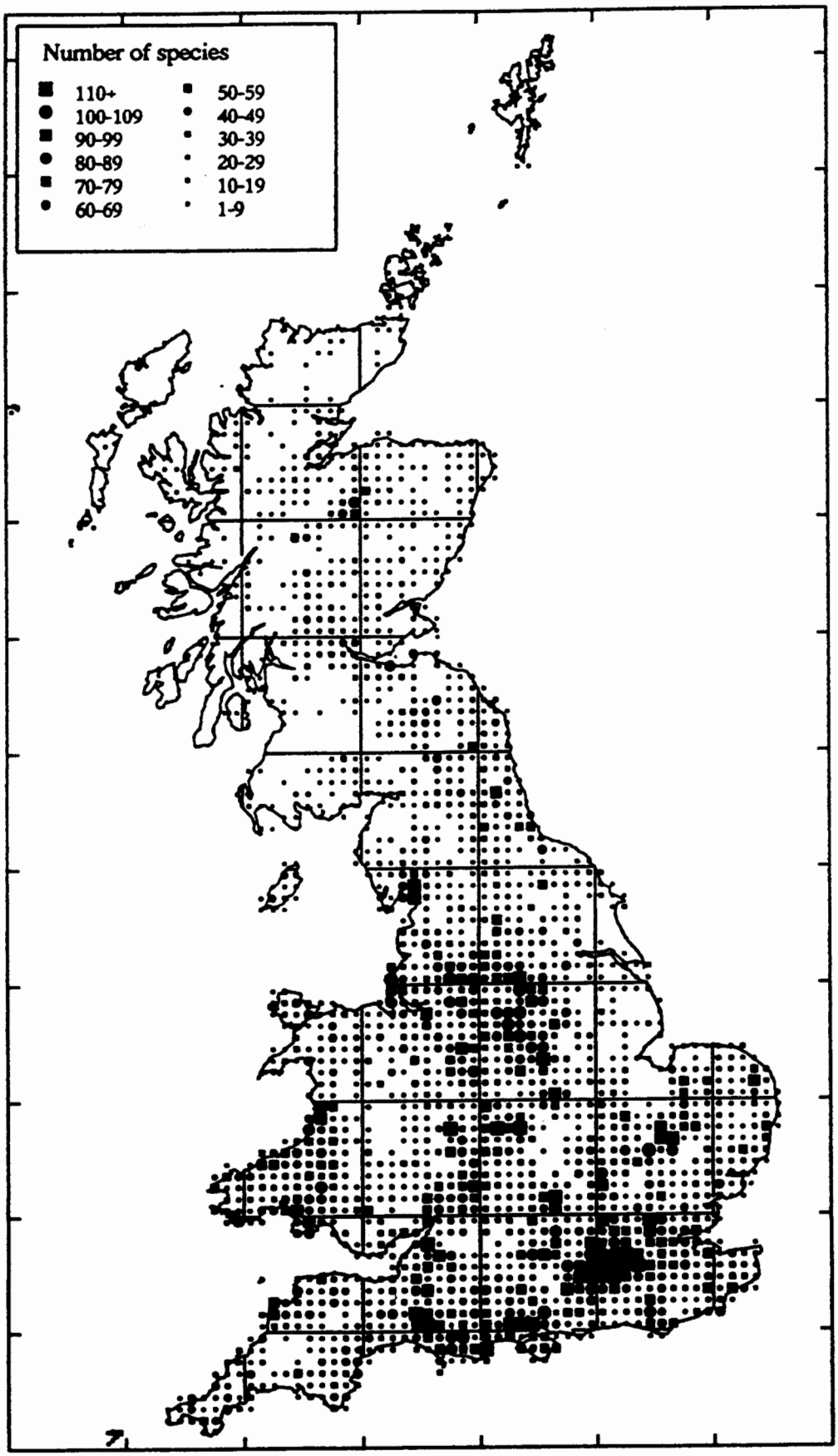
**number of computerised records now stands at 162,500 records**. There remain a number of large computerised datasets to be incorporated, including 16,000 or more Scottish records compiled by Kenn Watt, 5,000+ new records compiled by Darwyn Sumner and a further 3,000+ Surrey records compiled by Roger Morris. Together with the backlog of Gen7s awaiting entry, this means that the prospective dataset already exceeds 200,000 records.

The accompanying maps of coverage and number of records per 10km square clearly indicate areas where there is a deficiency in records. In particular, the Welsh borders, north west England, south west Scotland and Lincolnshire need attention. Another obvious gap exists in Wiltshire. If anyone can help with these areas, we would be most grateful for records.

Some years ago, a network of Regional Representatives was established. This has now fallen into disrepair and we would be keen to reinvigorate it. In part, this network represented known local Recording Schemes and we would like to know about any current initiatives. County Recording Scheme organisers please let us know; once we have entered the backlog of data (by the end of winter 1993/94), we will be in a position to download data to you for your scheme.

Before the field season gets under way, please remember that all records with a date and at least 4-figure map reference will be most welcome; we can use this to examine the phenology of many species.


Coverage map
1980 onwards
Before 1980
Checked record
Unchecked record


Number of species
110+
100-109
90-99
80-89
70-79
60-69
50-59
40-49
30-39
20-29
10-19
1-9

# THE IMMATURE STAGES AND HABITAT OF *ERISTALINUS AENEUS*

**John F Lamerton**
**Church Cottage, Mary Tavy, Tavistock, Devon PL19 9PR**

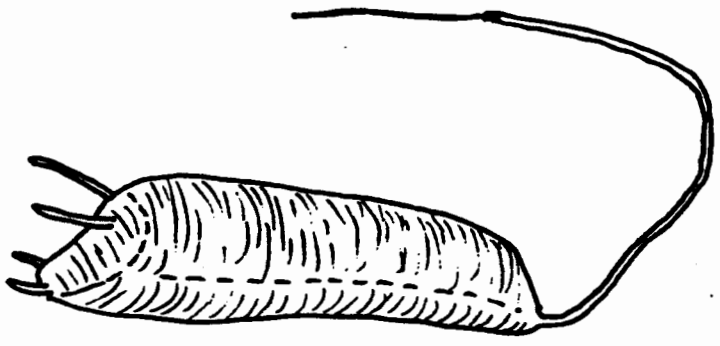
Hartley (1961) described the immature stages of many hoverfly species, as a contribution to their taxonomy. For his account of *Eristalis* (now *Eristalinus*) *aeneus*, only one pupa was apparently available, and that was not completely developed. Specimens have been found at a location on the south Devon coast, and additional observations have been made.

Third instar larva: As described by Hartley. The tracheae are visible through the cuticle; they are virtually straight when the larva is extended. Puparium: As described by Hartley, taking *E. aeneus* and *E. sepulchralis* together, ie a typical Eristaline pupa. However, the combination of strongly protruded larval spiracles (1 mm) and long pupal spiracles (2 mm at least), below and above the concave 'face', give a distinctive four-horned appearance. The pupal spiracles develop about 3 days after pupation, which lasts 7-10 days overall. Biological notes: The preferred larval habitat is in pools immediately above high water spring tides. The water is characteristically foul and brown-coloured. Rotting seaweed, as reported by Hartley, often occurs, but will have been cast up by storm, as seaweed does not grow in these pools.

The larvae tolerate a wide variety of salinity and nutrition. Salinity varies according to recent salt spray or rainfall. Larvae have been found in water fresh enough to allow mosquito and midge larvae to breed through. By contrast, in a rainless season these pools may dry up completely. In such a season a few larvae have been found in a high-tide pool with growing *Enteromorpha* in clear water, sheltering under a scrap of wet newspaper.

No one pool, therefore, is necessarily suitable or even available from year to year. Apart from drought, this shore is heavily battered by winter storms. Overwintering as eggs or larvae would be extremely hazardous. Pupae might survive in the turf above, or in crevices in the shaly rock, but none has been found so far. The earliest date for third instar larvae here is 23 May, pupation in captivity by 3 June. Specimens have been sent to Graham Rotheray at the Royal Museum of Scotland at Edinburgh to complement Hartley's specimens which are lodged there. I am grateful to him for helpful advice.

Reference: HARTLEY J C (1961): A taxonomic account of the larvae of some British Syrphidae. Proc. Zool. Soc. Lond. 136 (4): 505-573.



***Eristalinus aeneus* puparium**

## MALE SWARMING IN *PLATYCHEIRUS* (SYRPHIDAE)?

**Roy Crossley**
**1 The Cloisters, Wilberfoss, York YO4 5RF**

On 19 July 1992 I noticed that numbers of small syrphids were hovering in the dappled sunlight amongst trees bordering a small stream in a deep, narrow valley in Dalby Forest, North Yorkshire, (SE/91.90).

The flies were hovering in what appeared to be several loose swarms of up to about ten individuals, and to a height of about two metres.

All of them looked to be the same species, and those collected for subsequent examination proved to be males of *Platycheirus nielseni* Vockeroth.

## *CHEILOSIA GRISEIVENTRIS*: STATUS AND DISTRIBUTION

**David Iliff**
**Green Willows, Station Road, Woodmancote, Cheltenham,**
**Gloucester GL52 4HN**

When I first submitted a record for *Cheilosia griseiventris* from Gloucestershire its validity was questioned, with the suggestion that I had probably found *C. intonsa*. Although I subsequently submitted the specimen for examination and the identification as *C. griseiventris* was accepted and confirmed, I understood the original reluctance to accept the identification without confirmation. After all there were at the time very few records of *C. griseiventris* in the data base and the species still does not appear on the RA33 cards.

Since that first record I have taken *C. griseiventris* several times in Gloucestershire and once in Herefordshire, and am convinced that it is by no means a rarity, the dearth of records no doubt being due to the fact that until it was recently recognised as a distinct species specimens were recorded as *C. intonsa*. The recording scheme's dot maps show an interesting distribution with the majority of records coming from Gloucestershire and Wiltshire. Its status would therefore appear to be "locally frequent".

I understand that some authorities still question whether *C. griseiventris* is a good species rather than a form of *C. intonsa*. I am convinced that it is distinct. *C. griseiventris* is the larger species, its size typically approaching that of *C. variabilis*. The males of the two species are readily distinguishable: the eyes of the male *C. intonsa* touch for a longer distance, the inner edges of the eyes forming a straight line where they touch; in the case of *C. griseiventris* the curves of the eyes touch tangentially. When viewed from behind the males of both species have faint silvery markings on tergite 3 (these markings appear to be shinier than the remainder of the tergite which appears matt black). These markings on *C.*

*intonsa* are quadrate, those on *C. griseiventris* are triangular. In both sexes the frons of *C. intonsa* is obviously shiny, that of *C. griseiventris* is dusted.

I have usually encountered *C. griseiventris* on yellow composite flowers such as ragwort (several times) or dandelion, though I have also found it on white-flowered umbels. It seems to have a long season.

## *XANTHOGRAMMA PEDISEQUUM* AT CONISTON, CUMBRIA

**David Iliff**
**Green Willows, Station Road, Woodmancote, Cheltenham**
**Gloucester GL52 4HN**

One of the things I look forward to with eager anticipation when travelling away from home is the chance of coming across hoverflies, perhaps rare ones, which I am unlikely to find in my own area. A lesson I learned during a visit to the Lake District in 1989, is not to ignore hoverflies which are common in one's own area; they may be rarities in the place one is visiting!

*Xanthogramma pedisequum* is such a colourful and attractive hoverfly that it is always a delight to see it. However, although specimens are usually found singly it is relatively common around Gloucestershire and indeed in most areas of the country where I have regularly recorded. Thus when I found a female of this species on the shores of Lake Coniston, not far from Coniston village, I did not get especially excited nor did I make a great effort to rush through the record to the scheme's organisers. Only later did I read, in the supplement to Stubbs and Falk, that both species of *Xanthogramma* are regarded as great rarities in northern England, although they had been taken near Carlisle in the past. The recording scheme's provisional atlas has no recent records for *X. pedisequum* for anywhere within 150 km of Coniston; indeed there are more records for the rarer (in the south) species *X. festivum* (= *X. citrofasciatum*) in the north of England.

## FINDING *BRACHYOPA INSENSILIS* AT SAP RUNS OF HORSE CHESTNUT

**Roger Morris**
**241 Commonside East, Mitcham, Surrey CR4 1HB**

For a long time, *Brachyopa insensilis* has been regarded as a rarity. This does not appear to be the case in south London, however. The adults are readily found at wet and dry sap runs on horse chestnut and, armed with this knowledge, I examined a great many park and roadside horse chestnuts in 1992. Not every tree has an active sap run, but crumbly sappy patches are remarkably common on horse chestnut; and where these are to be found, *B. insensilis* is often in attendance.

After some initial success, I mentioned this experience to Colin Plant who had also been aware of this association for some time. He too had found *B. insensilis* to be widespread. Colin also advised me that adult *B. insensilis* could be attracted by stirring up the sap run. Having tried this myself, I can confirm its effectiveness.

At the moment there are very few records for *B. insensilis*, but a little effort should change the situation. I would therefore urge recorders throughout the country to look for this species and help establish its true distribution. It is possible that other species of *Brachyopa* will be found, so do not assume the specimens to be *B. insensilis* just because they were found at horse chestnut sap runs.

## THE IMPORTANCE OF SUNLIT LEAVES FOR HOVERFLIES

**Roger Morris**
**241 Commonside East, Mitcham, Surrey CR4 1HB**

I wonder how many recorders pay special attention to sunlit leaves as an important situation in which to search for hoverflies? In the spring and early summer, sunlit young leaves of lime, horse chestnut and sycamore are excellent locations for finding basking hoverflies. By looking at such locations, I and other recorders in Surrey have found a great many interesting species including *Epistrophella euchroma* on a number of occasions. Other species frequently attracted to sunlit leaves include *Parasyrphus punctulatus, Melangyna lasiopthalma, M. cincta, M. triangulifera* and *Brachyopa scutellaris*.

Species of *Pipiza* and related genera are more frequently found on sunlit leaves than on flowers; *Heringia heringi* is particularly prone to such habits. Pipizine hoverflies are generally poorly recorded and if recorders infrequently examine such situations this might help to explain the comparatively low frequency of records for this group. Do please retain specimens of *Pipiza*, even if you are not confident of identifying them. The more material there is available, the better the chances are of sorting out the group.

## *PIPIZA LUGUBRIS*: A POSSIBLE HABITAT LINK

**Roger Morris**
**241 Commonside East, Mitcham, Surrey CR4 1HB**

In my experience *Pipiza lugubris* appears to be associated with damper locations. One feature common to many localities where I have found this species is the presence of meadowsweet (*Filipendula ulmaria*), upon whose flowers *P. lugubris* can sometimes be found.

Females of *Pipiza lugubris* are readily identified because they have an almost chocolate brown wing shade which is quite unlike the greyish shading of *P. noctiluca*.

## RECENT LITERATURE

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