# Soldierflies and Allies Recording Scheme

## Newsletter 3, autumn 2015

Edited by Martin C. Harvey ISSN 2053-471X (print) ISSN 2053-4728 (online)

Silver Colonel, Odontomyia argentata, added to the county list for Leicestershire by Steve Lane in 2014, and recorded and photographed in 2015 by Graham Calow



Welcome to the Soldierflies and Allies Recording Scheme newsletter. This issue has some excellent examples of fieldwork techniques for finding particular species (see pages 2 and 6), a rather more serendipitous discovery arising from an orchid photo (page 3), and news of recent and forthcoming publications (pages 3 and 6), including a very comprehensive account of the soldierflies and allies of Surrey. This new book will be richly illustrated, full of ecological knowledge, and of great interest well beyond the county's borders – I can't wait to see it!

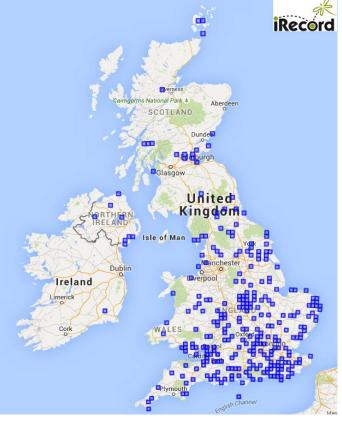
A good number of records has been arriving through the year, via iRecord and via email - many thanks to all who have sent records in. I am however a long way behind in dealing with this data at the moment, so apologies if you have added records to iRecord and not yet had them checked, or are waiting to hear via email. I intend to catch up over the winter. From what I've seen of the incoming records, Dotted Bee-fly

Bombylius discolor has had a good year, taking advantage of some hot spells in early spring, and there have been further records of two species that are spreading: Downland Villa Villa cingulata and Tree Snipefly Chrysopilus laetus.

A few items have been added to the <u>recording</u> <u>scheme website</u>. See our "Identification resources" page for links to a wide range of documents and websites that can help with identifications. The most recent addition at the time of writing is a downloadable copy of Malcolm Smart's detailed paper on identification of the smaller *Machimus* robberflies (originally published in Dipterists Digest in 2005) – thanks to Malcolm for providing this.

By the time you read this we will have had an identification workshop at Oxford University Museum of Natural History (held on 27 September, courtesy of Zoë Simmons and colleagues). Hopefully this will help inspire even more recording and studying activity next year.

The distribution of records arriving on iRecord during 2015



## Xylophagus ater in the Vale of York

by Ian Andrews

I had always thought of *Xylophagus ater*, the Common Awl-fly, as a rather enigmatic species which was unlikely to be found in the rather treeless expanses of the Vale of York. I had seen just one Yorkshire specimen before, in Alder carr woodland at Dalby Forest in the North York Moors in 2012, and it was not a species I was expecting to find more locally. Stubbs and Drake talk of Awl-flies being "fairly elusive as adults".

Talking to Roy Crossley this May, he mentioned having just taken *Xylophagus ater* on the North York Moors. Stubbs and Drake talk about Awl-flies having a short flight period and state "It would seem that the main emergence period is short. In some seasons it may be possible to find adults at several sites over a period of a week or so, but in other years none will be found, presumably because the peak flight period has been missed." It seemed worth dedicating a short period to searching for the species.

Between 26 May 2015 and 6 June 2015 I found *Xylophagus ater* quite easily at three local Yorkshire Wildlife Trust reserves. At Allerthorpe Common (SE761475) on 26 May two males were found on a birch stump about 7 feet high. At North Cliffe Wood (SE860374) on 30 May two males were found on the trunk of a large dead Alder and at Calley Heath (SE751496) on 6 June five males and two females were found on the trunks of mature Alders alongside a small stream across the reserve.



Xylophagus ater on tree trunk (lan Andrews)

The species is not obvious at all when sitting still on a tree trunk, especially in the gnarled bark of mature Alders. What made them easy to find was the behaviour of males, which would fly slowly up the trunk from a couple of feet above the ground until up to about 15 feet, when they would drop down and start again. The flight was slow, with the hind legs dangling down so that they looked for all the world like a dark ichneumon patrolling the bark. At each site, the flies chose to settle at about head height, which made observation easy, and they were simple to net while slowly flying up the trunks.

It is a species that might repay a concerted effort in late May and early June.

#### Reference

Stubbs, A.E., and Drake, M. 2014. British Soldierflies and their allies (2<sup>nd</sup> Edition). BENHS.

#### The Hunchback of Watlington Hill

by Suzanne Croxford

On 24 June I spent a sunny morning on Watlington Hill in Oxfordshire searching for the frog orchids that usually grow there. After finding just one, I photographed a few of the other orchids in flower, including a pretty pyramidal orchid with an "interesting" fly sitting on it, and headed home to write a blog post about the mornings discoveries.

Later that day I received a tweet from Ryan Clark saying that he'd seen my latest blog post and the fly sitting on the pyramidal orchid was actually as rare as the frog orchid that I'd been hunting for. I had no idea what it was when I included the photo in the post, but I was very glad Ryan had spotted it and contacted me.

Martin Harvey later confirmed its identity as a Smart-banded Hunchback fly, *Ogcodes gibbosus*. He says it's an elusive, rarely observed fly and this was the first record for Oxfordshire since 2006. I have to say it didn't seem particularly shy and sat there quite happily while I took a couple of photos of it, but then perhaps it knew that I had no idea at the time that it was anything special!

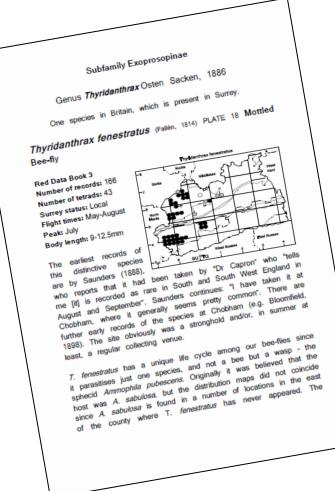


You can read the full blog post at <a href="mailto:blogspot.co.uk/2015/06/foxes-frogs-and-bees.html">bugmadgirl.blogspot.co.uk/2015/06/foxes-frogs-and-bees.html</a>



## New publication: Soldierflies, their Allies and Conopidae of Surrey

Hoverflies of Surrey by Roger Morris, published in 1998, was the fourth in the Surrey Wildlife Trust atlas series. There have been ten since, including three on aculeate Hymenoptera, but until this year no other Diptera had been dealt with.



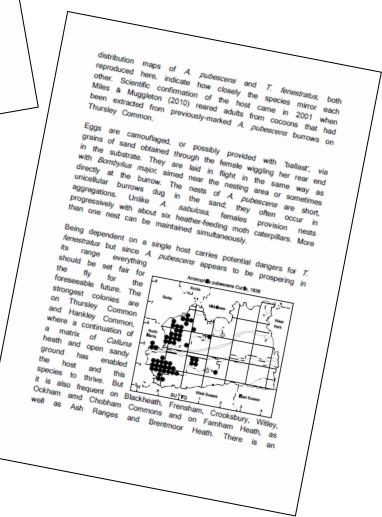
2002, Eupachygaster tarsalis as larvae in 2002 and adults in 2013, Chrysopilus laetus in 2003, Cliorismia rustica in 2005 and Stratiomys longicornis in 2015.

Surrey remains the best place for finding *Leptarthrus vitripennis*, which had the first specimen for Britain identified there nearly 20 years ago. It also has a high, or the highest, number of records by vice-county for *Choerades marginatus*, *Eutolmus rufibarbis* and *Thyridanthrax fenestratus*.

For each species the atlas will carry an account including a distribution map, total records with full details for those below 20 in number, details of sites, status, flight period, plus notes on appearance and observed behaviour where appropriate. There will also be sections on such

This is partly a reflection of there simply not being enough records of any families to allow the production of a detailed atlas. The absence will be put to rights in October with the publication of *Soldierflies, their Allies and Conopidae of Surrey* by David Baldock and Jeremy Early. The atlas, in A5 format, will consist of 208 pages of text and 32 colour plates, with a Foreword by Alan Stubbs.

Surrey (Vice-County 17) is land-locked, so cannot be expected to host strictly coastal species, but there are records in VC17 of 102 of the 159 British soldierflies and their allies. This is 64% of the total fauna and there are getting on for 10,000 records. Six species have been found new to Surrey this century, namely Oxycera morrisi in 2001, Nemotelus nigrinus in



topics as recording, important sites, habitats and enemies, along with nine appendices. The plates will show more than 70 species, all but three of them living specimens, plus 11 Conopidae.

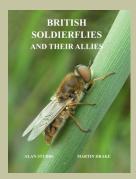
The launch will be at the <u>AES Annual Exhibition and</u> <u>Trade Fair</u> at Kempton Park, Sunbury-on-Thames, on 3 October.





## British soldierflies and their allies, by Alan Stubbs and Martin Drake

As announced in the previous newsletter, *British Soldierflies and their Allies* by Alan Stubbs and Martin Drake is now back in print as an enlarged second edition. The book includes all the families covered by the Recording Scheme. The additional sixteen pages of the new edition arise mainly from incorporating many observations on the biology and distribution of the flies that have been made and published during the last twelve years. There are also a few minor corrections to the keys here and there, and a more substantial improvement to the keys to Tabanidae (horseflies).



The price to Dipterists Forum members remains at £20. The book will be on sale at the AES and BENHS Exhibitions, and at Dipterists Day. Copies may also be obtained by post from the BENHS Sales Secretary, subject to an additional charge for postage & packing. He is Dr M. Darby, Malthouse Books, The Old Malthouse, Sutton Mandeville, Wiltshire, SP3 5LZ (www.malthousebooks.co.uk). When ordering, please state if you are a member of DF and/or BENHS.

#### Tabanids and cars

by Malcolm Storey

Alan Stubbs suggests using a hot dark-coloured car as a trap for biting tabanids (Stubbs and Drake 2014, p. 259, "A hot vehicle") as they locate hosts by heat and dark colours. On a recent visit to Arne, I parked the (greenish-brown) car in a layby, then opened the tailgate to sit in to put my boots on. 10 July 2015 was a very hot day and I was immediately surrounded and continually buzzed by tabanids. Of course by the time I had my boots on there were only odd ones to be seen. Sod's Law, I thought, then it occurred to me: host-seeking female tabanids are also strongly attracted to carbon dioxide ( $CO_2$ ; e.g. the famous "how the zebra got its stripes" paper, Blahó *et al.* 2013) and I was sitting next to an exhaust pipe full of hot  $CO_2$  exhaust gases which had since dissipated!

So I started the engine. Tick-over wasn't as effective as arrival after an hour's driving but it did bring in a few *Chrysops* (and a couple of *Culex* mosquitoes, also known to be attracted by  $CO_2$ ). So the moral is – look for tabanids before changing your boots not afterwards.

An hour's searching produced about 20 tabanids of six common species: Atylotus fulvus (singleton), Chrysops viduatus (several females and 2 males), Haematopota pluvialis, Hybomitra distinguenda, Tabanus autumnalis and T. bromius. All were females unless otherwise stated. There were no Chrysops sepulcralis nor rare Haematopota spp.



Size variation in *Haematopotus pluvialis* from Arne (*Malcolm Storey / www.bioimages.org.uk*)

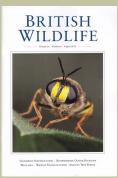
The two male *Chrysops* are interesting as these allegedly do not bite. Perhaps they meet their partners near the host.

#### References

- Miklós Blahó, Ádám Egri, Dénes Száz, György Kriska, Susanne Åkesson, Gábor Horváth. 2013. Stripes disrupt odour attractiveness to biting horseflies: Battle between ammonia, CO2, and colour pattern for dominance in the sensory systems of host -seeking tabanids, *Physiology & Behavior* 119: 168–174.
- Stubbs, A.E., and Drake, M. 2014. British Soldierflies and their allies (2<sup>nd</sup> Edition). BENHS.

## Soldierflies in British Wildlife magazine

The August 2015 edition of *British Wildlife* magazine (vol. 26 no. 6) has a splendid article by Alan Stubbs, entitled "Bringing soldierflies to attention". Alan provides an overview of the soldierfly family, and focuses in on the "big five" species, that is the five largest species in Britain: four species in genus *Stratiomys* plus *Odontomyia ornata*. For these five there are species accounts and a set of superb illustrations by Richard Lewington.



Alan uses these charismatic species to highlight the importance of seepages and spring-fed streams, habitats that support a range of flies and other invertebrates, but which are rarely given much of a profile in conservation research and policy. Climate change and pollution both pose serious threats to these habitats, and Alan calls for more attention to be paid to recording and understanding them. Soldierfly recorders can play an important part in this, by adding to our knowledge of where the species are found, and investigating their requirements, especially as larvae. Well worth a read.