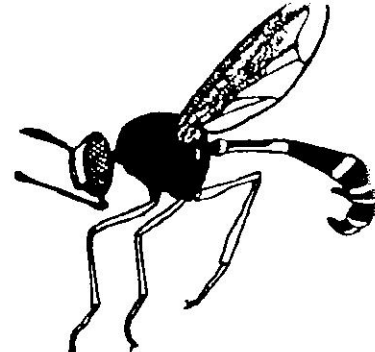


Conopid Recording Scheme



INCORPORATING THE LONCHOPTERIDAE STUDY GROUP

NEWSLETTER 2
MARCH 1989

*** NEW ADDRESS ***

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The response to Newsletter 1 has been extremely encouraging, and first I must thank everyone who has written to me either directly or via the Biological Records Centre regarding the Conopid scheme. As you will see from the above, my address has changed, since I no longer work for the National Trust. All correspondence and records should be sent to this new address. Moving house and changing jobs has meant that I have had little time to devote to entomological pursuits, so I must now apologise for the inevitable delay in producing this newsletter, and for delays in dealing with correspondence. By the time this reaches you, I should have caught up with the backlog. If there is still anyone out there awaiting a reply I can only offer my sincere apologies.

I'm very grateful to those who have extracted their back-records, and also to those who have found time to contribute notes for the newsletter. Keep up the good work! I must also express my gratitude to the staff at BRC, especially to Brian Eversham and Jayne Abblitt, for their enthusiasm and hard work on the scheme's behalf, especially as BRC has had such a difficult year in the face of threatened redundancies.

Scheme progress

The majority of documentary records have now been assembled on a card-file system, and I am making steady progress in extracting the older published records from the literature. At present the card-file contains about 1600 individual records, excluding many sent in the latter part of 1988. For some species, such as Conops quadrifasciatus and Sicus ferrugineus for example, there is probably enough coverage to produce some preliminary maps, except that many of the earlier records do not yet have grid references. However, I do hope to include a few maps in the next newsletter.

Identification

Identification notes for the genus Sicus are included with this newsletter. S. abdominalis is difficult to segregate from S. ferrugineus, especially in the

male, but the enclosed illustrations should help. As a rule of thumb, any Sicus specimen in which tergite 2 appears wider than long should be retained, as should any in which the theca is clearly visible in side view. Keys to the remaining Myopinae are in hand, even the dreaded Myopa!

Keys to the Conopidae of northern Europe

As mentioned in newsletter 1, the keys in Dr Milan Chvála's papers of 1961 and 1965 provide the most complete summary of the northern and central European Conopidae presently available. However, the papers are not easy to obtain, and are rather long to photocopy. Since the dispatch of newsletter 1, Dr Chvála has written to me, very kindly offering to make his small stock of bound reprints available to interested workers in Britain, at a nominal sum. Dr Chvála will be sending the reprints to me for distribution in the near future. Quantities will be small and orders will have to be on a first-come, first-served basis. Full details of cost and availability will appear in the next newsletter, at which time orders will be accepted. Watch this space!

More on Leopoldius brevirostris

By a strange coincidence, I received news of another capture of this rare insect just days after the dispatch of newsletter 1. Andrew Godfrey has very kindly sent the following account:

On 24.viii.1987, I took a single female of this very rare fly in a clearing in Sydenham Hill Wood, Forest Hill, London (G.R. 51/344725). This specimen was taken in a water trap filled with detergent and formalin and emptied once a week. Mr K G V Smith has kindly confirmed the identification,.

Records of this species may be found in Smith (1969, Diptera : Conopidae. Handbk. Ident. Br. Insects 10 (3a)) and in Clements (Entomologists mon. Mag., in press). The latter records the recent capture of another female in Gloucestershire in 1983; prior to this, the last specimen taken in Britain was in 1954. The species is obviously of great scarcity in Britain, but it is quite conceivable that it has been confused with the other British Leopoldius species, L. signatus, and with the similar Conops species.

A full description of the capture situation is given here. The clearing is roughly triangular, with ancient oak-hornbeam woodland on one side, and secondary birch-hazel-beech on another. The third side comprises a line of pollarded black poplars that were planted along the course of the former Peckham-Crystal Palace railway which now provides the main footpath through the wood. Buddleia, crab apple, wild cherry, hawthorn, rowan and guelder-rose are the main flowering trees and bushes that colonize the clearing. Flowering plants are plentiful, and include various buttercups, bramble, colt's-foot, white clover, dandelion, sow-thistles, yarrow, cow-parsley, daisy, creeping thistle, various willowherbs, ivy and hawkweeds. A number of calcicole plants such as traveller's-joy grow along the railway line, presumably thriving because of the chalk or limestone ballast put down on the track. The clearing proves very attractive to many flower-visiting insects, including hoverflies, anthomyiids and Hymenoptera. Several Bombus species occur here as well as Vespula vulgaris and Dolichovespula sylvestris. (The more frequently recorded Leopoldius signatus has been found at ivy and elsewhere among Vespidae, which has led a number of entomologists to suggest that these are the larval hosts.)

The abdominal markings in the London specimen are identical to those shown in Smith (op. cit., fig. 27) but differ quite significantly from the corresponding illustration given by Clements (op. cit.) for the Gloucestershire specimen. However, the theca of my specimen closely matches the illustration in the latter, supporting the suggestion that there is pronounced infraspecific variation in the female body markings, and that the most reliable features for identification lie in the genitalia.

It is interesting to note that despite a detailed Diptera survey throughout 1987 in Sydenham Hill Wood, no other Conopids were recorded.

My thanks to Peter Chandler, Dave Clements, Steven Falk and Colin Plant for their help, and to the London Wildlife Trust for much assistance in studying Diptera at this site.

Andrew Godfrey

Belgian Conopidae - a brief summary based on the work of Jacques Petit

I have received copies of two very interesting papers in French, which contain the results of over thirty years of assiduous Conopid recording in Belgium and its environs. These records, gathered by M Petit and his father, provide a valuable update to the works of Tonnoir and Maréchal, and vividly demonstrate the changing fortunes of many of the Belgian species. Most of these species are shared by Britain, so the findings are of great interest for comparison. Furthermore, the Belgian fauna contains several species additional to the British list, but which could conceivably be recorded here in the future.

The species recorded by Petit are :

<u>Leopoldius signatus</u>	* <u>Thecophora distincta</u>
<u>Physocephala rufipes</u>	* <u>Thecophora pusilla</u> (<u>sensu</u> Weidemann)
* <u>Physocephala vittata</u>	<u>Myopa buccata</u>
<u>Conops flavipes</u>	* <u>Myopa dorsalis</u>
<u>Conops quadrifasciatus</u>	<u>Myopa fasciata</u>
* <u>Conops scutellatus</u>	<u>Myopa polystigma</u>
<u>Conops strigatus</u>	<u>Myopa extricata</u>
<u>Conops vesicularis</u>	<u>Myopa tessellatipennis</u>
<u>Zodion cinereum</u>	<u>Myopa vicaria</u>
<u>Sicus ferrugineus</u>	<u>Myopa testacea</u>
<u>Thecophora atra</u>	* <u>Myopa variegata</u>
<u>Thecophora fulvipes</u>	

Species marked '*' are non-British.

Of these, P. vittata and C. scutellatus could reasonably occur in Britain. M. dorsalis has been wrongly recorded here in the past, and is perhaps less likely, being a southern European species. Britain is probably too far west for M. variegata, T. distincta or T. pusilla : the presence of the latter in Belgium is itself surprising, since most 'pusilla' specimens from western Europe are in fact referable to T. atra.

These additional species may be identified using Chvála's keys: see newsletter 1 for details. Of the two species seeming most likely to occur here, P. vittata is distinguished by its completely yellow face, without any central black markings at all. Conops scutellatus is one of the 'black and yellow' species, but should be distinguishable by its completely yellow scutellum.

According to Petit's investigations, four species have become extinct in Belgium, including Physocephala nigra and Zodion notatum, and several others have become much rarer and more restricted in range. He ascribes these losses and declines to a combination of habitat destruction (especially of the heath/grassland/scrub mosaic of the 'campinoise' and of calcareous grasslands) and climatic factors. The British Conopid recording scheme may well reveal similar declines among our own fauna.

My grateful thanks to M Petit for sending me reprints of his fascinating papers, and to Isobelle Van Groenigen for help in translating from the French original.

David Clements

References

PETIT, J (1984) Note sur les Conopides de la Belgique et des régions limitrophes.
Lambillionea 83: 92-98

PETIT, J (1985) idem : Part II Myopinae
Lambillionea 85: 18-27

Forthcoming issues

The next newsletter will contain an article by Rod Macfarlane and Y Maeta on the amazing similarities between the Conopid faunas of Britain and Japan.

As mentioned in the introduction, a new Myopa key is being prepared. However, Myopa species are something I encounter rarely. Could I please therefore beg/borrow/steal any spare specimens you may happen to have lying around unwanted in your collections? Donations are preferable to loans, since dissection is a likely fate, but all material will be gratefully received and duly acknowledged.

Don't forget those Lonchopteridae records! So far I have received only a handful, but would love to have thousands more. If you have sent your records to Martin Drake, there's no need to duplicate them to me, since we are co-operating on the study group.

Best wishes to all recorders, and here's hoping for a better season in 1989!

David Clements

BRITISH CONOPIDAE

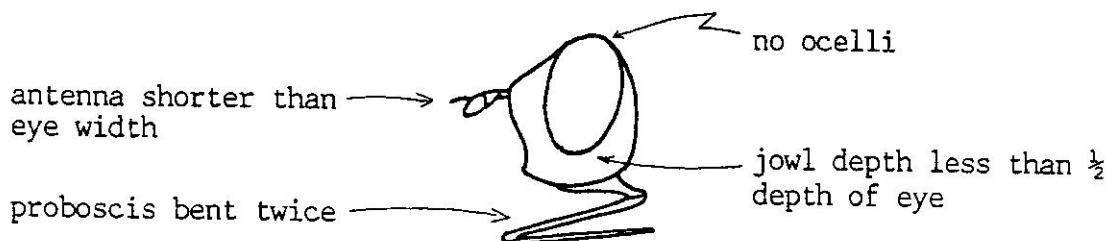
IDENTIFICATION NOTES pt. 2

MYOPINAE - SICUS Spp.

Sicus ferrugineus is the most commonly recorded Conopid in the British Isles, and one which most workers would feel confident of identifying in the field. However, the excellent review by Chvala (1963) established that there are five species of Sicus in the palaearctic region, much confused by earlier authors, and that a second species, S. abdominalis, occurs in Britain. This second species is apparently exceedingly rare, and there appears to be only one known British record, a solitary female recorded in Suffolk. Females of the two species are relatively easy to separate, but males are very much more awkward. This is compounded by the problem that many workers have difficulty in distinguishing sexes in the Myopinae generally, and in Sicus in particular. The following key should assist in resolving these difficulties.

It is abundantly possible that S. abdominalis has been overlooked in collections, particularly since both species show a degree of interspecific variation. However, this key should help in the tricky business of identifying possible candidates, which can then be checked against the fuller details given in Chvala's paper or submitted for vetting by a specialist (probably not me !)

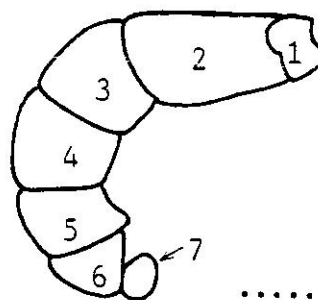
The genus Sicus can be distinguished by the following suite of characteristics:



CHVALA, M., 1963 : A review of the Conopid flies of the genus Sicus, Scop.
(Diptera, Conopidae).

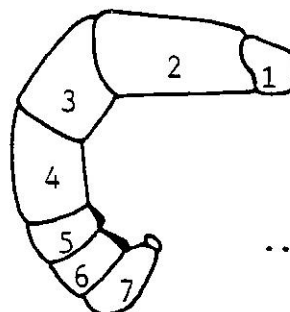
Acta Univ. Carolinae- Biologica 3 :275-282.

1. Abdomen viewed from side: segment 7 small & globular, smaller than segment 6.



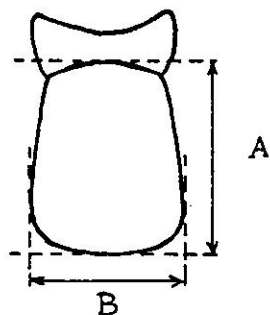
.....Males
(2)

- Abdomen viewed from side: segment 7 elongate & rather 'shoe-shaped', larger than segment 6.



.....Females
(3)

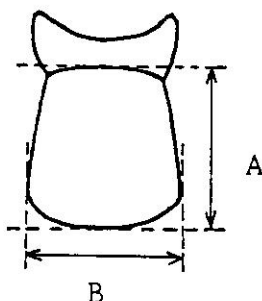
2. Abdomen viewed from above: segment 2 slightly but distinctly longer than greatest width.
(Succeeding segments usually slightly longer than wide).



$$A > B$$

..... S. ferrugineus

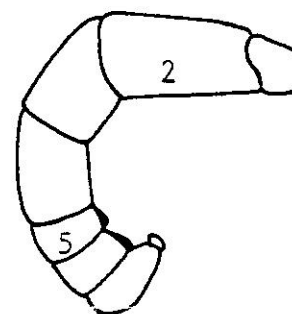
- Abdomen viewed from above: segment 2 at least as wide, usually distinctly wider, than long.
(Succeeding segments usually distinctly wider than long).



$$A < B$$

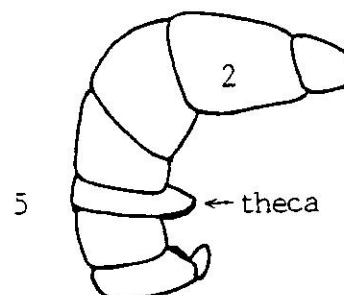
..... S. abdominalis

3. Abdomen viewed from side: segment 2 approximately twice as long as deep. No conspicuous theca projecting ventrally from segment 5.



..... S. ferrugineus

- Abdomen viewed from side: segment 2 at most $1\frac{1}{2}$ times as long as deep, usually more nearly subequal in these dimensions. Conspicuous theca projecting ventrally from segment 5.



..... S. abdominalis