NEURO NEWS

The Newsletter of the British Isles Neuroptera Recording Scheme



Number 26

Winter 2000/2001

Articles for this newsletter are warmly welcomed. Ideally, contributions should be sent by e-mail or else as a file readable by Word for Windows on a disk in a PC compatible format. Typed or hand-written contributions are acceptable if you do not have a word processor.

EDITORIAL ADDRESSES:

Neuro News is published by the BRITISH ISLES NEUROPTERIDA RECORDING SCHEME from the Biological Records Centre, ITE Monks Wood, Abbots Ripton, Huntingdon, PE17 2LS, England and is

EDITED BY Colin W. Plant at 14 West Road, Bishops Stortford, Hertfordshire, CM23 3QP, England.

Specimens for identification or verification are positively welcomed at the editorial address provided that they are accompanied by full data. Please, always state whether or not return of the specimen(s) is required otherwise they will be retained in my collection. For larger packages, please enclose return postage stamps. Telephone/Facsimile callers on 01279-507697 (UK) or ++-44-1279-507697 (from overseas). E-mail

Colinwplant@compuserve.com

Neuro News may now also be read on the internet at address http://entowww.tamu.edu/research/neur opterida/neuroweb.html

Back numbers of *Neuro News* may be obtained from Biological Records Centre, ITE Monks Wood, Abbots Ripton, Huntingdon, PE17 2LS, England.

Details of British Isles recording schemes for other invertebrate groups may be obtained from the Monks Wood address.

WELCOME

Unfortunately we missed out on the summer 2000 newsletter. I blame this directly on global warming! The rain which fell non-stop until 16th July this year put me so far behind with my consultancy field surveys that I simply did not have time to write one.

The wet weather seems to have put a damper on lacewing recording, with very few records indeed reaching me for the current year. If you are sitting on records, now would be a good time to send them in to me.

There have been one or two good things. Sympherobius klapaleki, was added to the British fauna only two years ago (Whittington, A., Entomologist's Rec. J. Var (1998) 110: 288 – 289). It has now turned up for the second time in Britain (in Essex, see Hackett, D., Entomologist's Rec. J. Var., (2000) 112: 129 - 130) and for the third (in Surrey, a \otimes in the Rothamsted light trap at Wisley Gardens, 18/19 August 2000, sorted by Andrew Halstead). In the AIDGAP key it will run to S. pellucidus, where you will find a footnote warning not to overlook it. It has the basal two segments of the antennae yellow but note, however, that Sympherobius elegans can also have first 2 basal segments of antennae yellowish (especially in alcohol-preserved material) so always check the number of branches to the radial sector. Males are easy, since the two species are in different sub-genera and the genitalia are markedly different. As far as I am aware klapaleki is the only member of subgenus Niremberge that has yellow basal segments. I am of the opinion that S. klapaleki is an overlooked resident; it may be rather more widespread than appreciated and everyone should be on the lookout for it.

Panorpa cognata has put in an appearance in Surrey (Roger Hawkins) and Oxfordshire (John Campbell) – always on chalk or in association with it. **Nothochrysa fulviceps** was found by Harry Eales at a lay-by on the A.68 road to the south of Folly Moss, South Northumberland (grid reference NY 933769) at 180 metres above sea level. The insect was beaten from hawthorn (*Crataegus monogyna*) scrub against a wall bounding a Scots Pine (*Pinus sylvestris*) plantation. A single oak tree was noted within 25 metres of the site.

MISSING READER?

We seem to have lost Rhodri Thomas. The last newsletter sent to him

. Does anyone know where he is? Is he reading

this notice?

THE SYMPOSIUM

The newsletter is not the only thing to have suffered from my overwork. Having paid my fee and bought a nonrefundable air ticket, I was all set to get myself over to Budapest for the International Symposium in August. Unfortunately, at the eleventh hour I could not make it! If anyone else wants to send me a brief report for the next newsletter I shall be pleased to receive it.

IN MEMORIAM — W. R. B. HYND

Peter Barnard, Natural History Museum, London SW7 5BD

After a long illness, Bert Hynd, of Farnham, Surrey died on 15 July 2000. Bert was an excellent all-round entomologist who specialised in the Neuroptera and his collection of lacewings was one of the largest in private hands in Britain. He donated his entire insect collections to The Natural History Museum, London, in 1998. During his career in the Ministry of Defence, Bert travelled extensively in Europe and USA, collecting as he went, and also becoming familiar with museums and entomologists around the world. As a consequence his were comprehensive collections and accurately identified. Following his retirement he also collected in Sulawesi, Sri Lanka and Tanzania.

Bert was a quiet, self-effacing man, but with strongly held opinions and a great determination to succeed. Despite his extensive knowledge of Neuroptera he was reluctant to consider himself equal with professional entomologists. Most of his time was spent in identifying and curating his collection, and taking many excellent photographs of insects. However, he attended the 4th International Symposium on Neuropterology in France in 1991, where he presented two papers, and also the 5th Symposium in Egypt in 1994.

Bert published very few papers, and the following list may not be complete:

Hynd, W. R. B. 1983. Records of Neuroptera from Corfu, Greece. *Entomologist's Gazette* **34**:129-131.

Hynd, W. R. B. 1989. *Coniopteryx lentiae* Aspöck & Aspöck (Neuroptera: Coniopterygidae) new to Britain. *Entomologist's Gazette* **40**:159-160.

Hynd, W. R. B. & Plant, C.W. 1991. *Coniopteryx* esbenpeterseni Tjeder (Neuroptera: Coniopterygidae) new to Britain, with a comment on the subgenus *Metaconiopteryx* in Britain. *Entomologist's Gazette* **42**:104-106.

Hynd, W. R. B. 1992. On some Neuroptera recently collected in Tanzania (Insecta). *In* M. Canard, H. Aspöck, and M. W. Mansell (eds) *Current Research in*

Neuropterology. Proceedings of the Fourth International Symposium on Neuropterology, Toulouse, pp. 183-188.

Hynd, W. R. B. 1992. New items in neuropteran distribution (Insecta: Neuroptera: Berothidae, Dilaridae, Ascalaphidae, Myrmeleontidae). *In* M. Canard, H. Aspöck, and M. W. Mansell (eds) *Current Research in Neuropterology*. Proceedings of the Fourth International Symposium on Neuropterology, Toulouse, pp. 189-192.

Aspöck, U. & Hynd, W.R.B. 1995. A new genus and species of Nosybinae (Neuropt., Berothidae) from eastern Africa. *Entomologist's Monthly Magazine* **131**: 107-113.

Lacewings by Royal appointment

Steve Brooks, Natural History Museum, London SW7 5BD

Work by Charles Henry, Peter Duelli, Ding Johnson and myself has shown that there are five species in the *Chrysoperla carnea*-group in western Europe. They can be segregated on the basis of their unique substrate-borne courtship 'songs', and the morphology of the genital lip at the apex of the male abdomen (Henry *et al.*, 1996; 1999; 2000). Our work analysing the courtship songs of hundreds of individuals collected from all over Britain, and studying the morphology of these and dead specimens from collections had lead us to conclude that two species were resident in Britain. These were *Chrysoperla lucasina* and a species we referred to as *Chrysoperla* Cc4.

I was therefore rather surprised and excited when I examined some specimens Colin Plant had collected in the gardens of Buckingham Palace. I was able to confirm his suspicions that morphologically they resembled a third species, which we have referred to as Chrysoperla Cc2. To confirm the identity and presence of this species in the UK it was imperative to obtain some live material for courtship song analysis. Therefore, in early February, Colin and I met in the gardens of Buckingham Palace to search for specimens of hibernating adult Chrysoperla. Initially, we were both rather sceptical about our likely success since neither of us had looked for lacewings so early in the year before. We concentrated our efforts in buildings and sheds, where Cc4 is known to hibernate, and in bushes and rolled up leaves where Cc2 is most likely to be located.

Our search of the buildings proved to be fruitless but our spirits rose when adult lacewings, in both green and brown colour phases, started to fall into our beating tray from cherry laurel bushes. Close examination of the habitat showed that most lacewings were clinging to dried, folded and rolled leaves of plane trees that had become deeply lodged in the evergreen bushes. We quickly collected about 25 adult specimens and noticed that most were in bushes that received direct sunlight and were sheltered from the wind. I quickly dispatched these specimens, suitably provisioned with damp cotton wool and yeast extract, to Charles Henry for courtship song analysis. His reply a few days later confirmed that indeed Cc2 was present amongst our collection and so a third species in the *C. carnea*-group can be added to the British list. The appropriate specific names for Cc2 and Cc4 have yet to be established. Two names are available, *C. carnea* and *C. affinis*, but correct assignation will require careful examination of the Stephens type series. We hope to have this work completed shortly.

Colin and I are grateful to Mark Lane for facilitating access to Buckingham Palace Gardens and his continuing interest and support of our work there.

References

Henry, C.S., BROOKS, S.J., Duelli, P. & Johnson, J.B. 1996. *Chrysoperla lucasina* (Lacroix): a distinct species of green lacewing, confirmed by acoustical analysis (Neuroptera: Chrysopidae). *Systematic Entomology* **21**: 205-218.

Henry, C.S., BROOKS, S.J., Duelli, P. & Johnson, J.B. 1999. Revising the concept of *Chrysoperla mediterranea* (Hölzel), a green lacewing associated with conifers: courtship songs across 2800 kilometers of Europe (Neuroptera: Chrysopidae). *Systematic Entomology* **24**: 335-350.

Henry, C.S., BROOKS, S.J., Thierry, D & Duelli, P. & Johnson, J.B. 2000. The common green lacewing, *Chrysoperla carnea* s.l. and the sibling species problem. In: McEwen, P. & New, T.R. *Lacewings in the crop environment*. Cambridge University Press, Cambridge. (in press)

CONFUSING CHRYSOPA

Last December, whilst working through the mountain of paper triangles full of lacewings from the Rothamsted light trap operated by Andrew Halstead at the Royal Horticultural Society Gardens in Wisley, Surrey, I came across a female *Chrysopa perla/dorsalis* specimen that what far darker than the normal examples which I see (from the night of 16/17 July 1999). The distal half of the forewing subcosta was black; in the basal half the black of the costal cross-veins spread laterally on the subcosta so that the basal half of the subcosta appeared black-and-green striped! On the hind wing, the subcosta was entirely black.

For one moment, I thought this was *Chrysopa dorsalis*, but there was a perfectly circular area of green on the vertex (in *dorsalis* this patch is oval to rectangular). Unfortunately, when I checked the tarsal claws I discovered that they all had swollen bases, which meant that the insect could not possibly be *dorsalis* (AIDGAP key - page 224, couplet 7) and must be *Chrysopa perla*.

Since it was a female, there was no way of checking, but short of it being a completely new species, the only other European candidate - *Chrysopa regalis* - also has simple tarsal claws (it also has a green subcosta).

Very few specimens of *Chrysopa dorsalis* seem to be encountered in Britain, and they are, of course, always associated with pine trees, but it is worth bearing in mind that the tarsal claw character should be checked carefully if anyone does come across one.

OVER-WINTERING LACEWINGS

The text books tell us that, amongst the lacewings, only *Chrysoperla carnea* passes the winter as an adult insect - at least in Britain. In spite of this, there have been several suggestions in the past that *Drepanepteryx phalaenoides* may also hibernate in this stage of its life cycle. To the debate, I can now add a positive report of an overwintering adult of *Wesmaelius subnebulosus* — I found a single female in a curled leaf in bushes in the garden of Buckingham Palace, London, on 21^{st} February 2000 whilst searching for over-wintering *Chrysoperla carnea* in the company of Stephen Brooks.

This seems to be the first record of this species during the winter period in Britain (unless you know different!). Interestingly, however, there are previous records of over-wintering further south in Europe. According to Laffranque & Canard (1975 *A. Zool.- Ecol. anim.*, **7** (3): 331 - 343), "All stages endure cold When the imagos overwinter, mating, vitellogenesis and oviposition occur if they receive suitable food". Their work was carried out in the Toulouse region of south-west France.

I wonder how many over-wintering lacewings are overlooked? Indeed, how many of us look for lacewings at all between November and March!? The search for over-wintering segregate species within the C. carnea complex combined with valuable information from Dominique Thierry on where these insects may be found to produce this female on the first winter field trip! Hibernation takes place inside dry, brown, curled leaves. At Buckingham Palace Garden the leaves which housed sleeping lacewings were of London Plane and were caught up in bushes growing in sheltered spots that catch the sunshine. None were found in leaves that were either damp or exposed at the edge of bushes. In forest situations, leaves remaining on saplings may be suitable if these are sheltered within the woodland. It is essential to carefully unroll each leaf in order to find the lacewings.

ONE TO WATCH OUT FOR

Chrysoperla mediterranea – has been recently identified by me in samples from Belgium (collected by Christian Fassote)and Luxembourg (collected by Evelyne Carrières). It looks like a very small, slim-line *C. carnea* but on close examination the tarsal claws lack any basal swelling. This relatively distinctive species may well be extending its range northwards from the Mediterranean basin; if this is the case then it is probable that it will soon arrive in Britain (if it is not already here). I would be keen to look at any specimens that you might consider candidates (i.e., no basal swelling of the tarsal claw).

OVIPOSITION BY ATLANTORAPHIDIA MACULICOLLIS

Ian Cross, Dorset

Little seems to be known in the literature about the ecology and behaviour of snake-flies in Britain and the following sketchy observations may be of interest. I encountered a female *A. maculicollis* on the edge of Warmwell Heath, Dorset (grid reference SY 754870) on 28th July 1999. She was observed walking across an oak fence strainer beneath some Scots pine. As she progressed, she trailed her ovipositor over the wood, sweeping it from side to side and dabbing the tip on the surface as she went (Fig. 1).



Figure 1.

Finding an apparently suitable site, she plunged her ovipositor to the hilt in a crevice (Fig. 2). I was, however, unable to find what the attraction of that precise spot was.





It is interesting that, although the area was overhung by pine, it was not actually pine bark that was the focus of her interest. I have encountered *A. maculicollis* once before in Dorset, again under young, self-sown Scots pine, but the precise ecological requirements seem to remain a mystery.

RECENT PUBLICATIONS

Recently published papers relevant to the study of Neuroptera, Raphidioptera, Megaloptera or Mecoptera will, if sent to me, automatically be included; older papers may be included if space permits or if they are particularly relevant.

Aspöck, U. & Aspöck, H., 1999 Was ist *Siniocellia* gigantos Yang 1985? (Neuroptera: Raphidioptera: Inocelliidae). *Linzer biol. Beitr.* 31: 487 - 492.

One of the two specimens of *Siniocellia gigantos* - the largest known lacewing - was re-examined. The validity of the species and the genus is confirmed. However, a definite assessment of its systematic position will not be possible until a male can be found and examined. In German.

Aspöck, H., Aspöck, U. & Rausch, H. 1999 Mongoloraphidia (Alatauoraphidia) pskemiana n. sp. aaus dem westlichen Tienschan und Beschreibung der Larven von M. (A.) eklipes U.A. & H.A. und M. tienshanica H.H. & U.A. & Rausch (Insecta, Neuropterida, Raphidioptera, Raphidiidae). Entomologische Nachrichten und Berichte **43**: 79 - 86.

M. (*A.*) *pskemiana* is described as a new species from Uzbekistan. There are only six species in the subgenus *Alatauoraphidia*. *M.* (*A.*) *eklipes* has now been reared and the larva is here described and figured. Additionally, the larva of *M. tienshanica* is described and figured: the larval characters do not suggest a close relationship with *Alatauoraphidia* even though adult male genitalia do. In German.

Collins, G. A., 2000. The snakefly *Xanthostigma xanthostigma* (Schummel, 1832) (Raphidioptera: Raphidiidae) reared. *Entomologists Record & Journal of Variation* **112**: 24.

Gruppe, A., 1999. Zum Vorkommen heller und dunkler Individuen van *Hemerobius micans* Olivier 1792 (Neuroptera: Hemerobiidae). 5. Treffen deutschsprachiger Neuropterologen. Tagungsbericht. *Galathea* **5** Supplement (Nürnberg): 13 - 17.

Discusses the bright and dark phenotypes of *H. micans*.

Röhricht, W., 1999. Zur Habitatwahl von *Euroleon nostras* (Geoffroy in Fourcroy 1785) (Insecta: Neuroptera: Myrmeleontidae) in Halle (Saale)- Neustadt. 5. Treffen deutschsprachiger Neuropterologen. Tagungsbericht. *Galathea* **5** Supplement (Nürnberg): 18 - 25.

Discusses the distribution of *E. nostras* in a housing estate at Halle-Neustadt, eastern Germany. 780 balcony sites were occupied of which 63% faced south. Older housing areas were preferred to new estates.

Röhricht, W., 1999. Zum Überwinterungsvershalten von Chrysoperla carnea s. l. (Stephens) (Insecta: Neuroptera, Chrysopidae) [poster presentation] 5. Treffen

Neuro News number 26

deutschsprachiger Neuropterologen. Tagungsbericht. *Galathea* **5** Supplement (Nürnberg): 26 - 31.

The over-wintering populations of *C. carnea* sensu lato were examined in two eastern German 14-storey apartment blocks. The fourth storey held most specimens and was on a level with nearby tree canopy. Lit areas were more attractive than unlit ones. The number with reddish diapause colouration rose in the upper storeys.

Saure, C. 1999. Die Florfliege *Chrysoperla carnea* s. l. -Das Insekt des Jahres 1999 (Neur., Chrysopidae). *Entomlogische Nachrichten und Berichte* 43: 5 - 7.

The lacewing *C. carnea* - insect of the year 1999. A general summary - in German.

Saure, C. 2000. *Sialis sordida* Klingstedt, 1932 - eine für Mitteleuropa neue Schlammfliege (Neuroptera, Megaloptera, Sialidae). *Nachrichtenblatt der Bayerisschen Entomologen* **49**: 37 - 40.

Sialis sordida is reported from Germany - the first central European record of this normally Scandinavian species. In German.

Ševčík, J. 1999. New and interesting records of Neuroptera and Raphidioptera from Moravia and the Czech part of Silesia. *Klapalekiana* **33**: 75 - 82.

New records of 26 rare or little known species are reported. *Parainocellia braueri* (Abarda) is confirmed as a member of the Czech fauna.

Ševčík, J. 1999. Notes on the distribution of *Panorpa* scorpionflies (Mecoptera: Panorpidae) in Moravia and Silesia (Czech Republic). *Klapalekiana* **35**: 41 - 47.

All six Czech species of *Panorpa* occupy this territory. In English.

Ševčík, J. 1999. [translated title] Snakeflies (Insecta: Neuropteroidea: Raphidioptera) of Silesia and northern Moravia - the present state of knowledge. *Čas. Ślez. Muz. Opava* (A) **44**: 251 - 258.

Seven species are reported during 1994 and 1995. Three of these are reported for the first time in the area studied.

Ševčík, J. 1999. [translated title] A contribution to the knowledge of Neuroptera of the Hruby Mountains (Czech Republic). *Čas. Ślez. Muz. Opava* (A) **47**: 225 - 232.

31 species in four families are recorded. In Czech.

Ševčík, J. 1999. Neuoptera. *In*: Opravilová, V., Vaňhara, J. & Sukop, I. (Eds.), Aquatic invertebrates of the Pálava Biosphere Reserve of UNESCO. *Folia Fac. Sci. Nat. Univ. Masaryk. Brun, Biol.*, **101**: 199 - 200.

Three species occur — Osmylus fulvicephalus, Sisyra fuscata and Sisyra terminalis.

Stelzl, M. & Devetak, D., 1999. Neuroptera in agricultural ecosystems. *Agriculture, Ecosystems and Environment* **74**: 305 - 321.

Summarises information on biology and ecology of Chrysopidae, Hemerobiidae and Coniopterygidae followed by a description of neuropteran communities found in different natural and semi-natural ecosystems, with special reference to agroecosystems. Literature lists are also provided.

Tröger, E. J., 1999. Eine neuentdeckte Population von Dendroleon pantherinus F. (Neuroptera: Myrmeleontidae) am Schwarzwaldraand. 5. Treffen deutschsprachiger Neuropterologen. Tagungsbericht. Galathea 5 Supplement (Nürnberg): 5 - 7.

A new population of *Dendroleon pantherinus* is reported near the western border of the Black Forest.

Tröger, E. J., 1999. Neue Neuropteren-Funde auf Kreta.
Treffen deutschsprachiger Neuropterologen.
Tagungsbericht. *Galathea* 5 Supplement (Nürnberg): 8 New discoveries on the Neuroptera of Crete are reported.

IDENTIFICATION OF HEMEROBIUS

The December lacewing workshop, organised by the British Entomological and Natural History Society at their headquarters near Reading, Berkshire, revealed some confusion over the identification of Hemerobius. Wing venation is notoriously problematic in the Neuroptera and in some cases it is better to rely on male genitalia for proper identification. However, whilst the lateral view of the tip of the male abdomen is diagnostic in most species (though exercise caution with dried, shrivelled specimens) it does not help to separate the members of the Hemerobius pini group (atrifrons, contumax, fenestratus and pini), nor will it permit detection of H. handschini (related to H. nitidulus and of which I have seen a single possible female British example to date). For this, one needs a caudal view (looking straight up the insect's bum!) in a fresh specimen, one preserved in fluid or a dried (pinned) specimen that has been softened for half an hour in 10% KOH (potassium hydroxide). The relevant bits to look at are the modified tenth sternite, which has been likened to a flying bird with dangling legs. The illustrations printed overleaf might help. As always, I am keen to see any problem specimens.

Next issue

About July 2001. Please let me have all contributions by the end of June if possible. I look forward to hearing from you.

