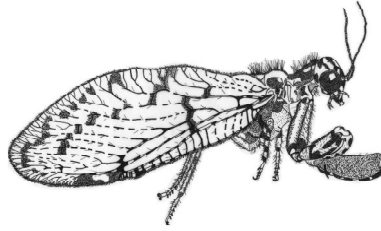


Lacewing News



NEWSLETTER OF THE INTERNATIONAL ASSOCIATION OF NEUROPTEROLOGY

No. 18

Spring 2014

Presentation

Hi all! Here's the 18th issue of *Lacewing News*. In these last six months some milestone neuropterological works have been edited. So please forgive me if for once I am not *super partes* and let me suggest to you all to consider a particular focus on two peculiar papers on larval morphology of antlions (Badano & Pantaleoni, 2014) and green lacewings (Tauber et al., 2014). A lot of meeting reports and nice photos in this issue of LN!

So don't hesitate and go on to send me any suggestions, ideas, proposal, information, for the next issue!

Please send all communications concerning *Lacewing News* to agostino.letardi@enea.it (Agostino Letardi). Questions about the International Association of Neuropterology may be addressed to our current president, Dr. Michael Ohi (Michael.Ohi@mfn-berlin.de). Questions about the XII IAN Symposium (May 12th (Tuesday) through 15th (Friday) 2015, Mexico City, National University campus (UNAM), Instituto de Biología, is the venue. Field excursion: May 16th – 20th.) may be addressed to Atilano Contreras-Ramos (acontreras@ib.unam.mx).

Ciao!



Who is Who in Neuropterology

Maria A. Ventura

I was born on December 9th, 1963, on a small village from the north of Portugal called Algodres. Algodres is an historical village with hundreds of years of history, located near Serra da Estrela, the highest mountain of mainland



A picture of the Village of Algodres, with Serra da Estrela Mountain on the horizon.

Portugal and a natural reserve. There I lived until 3 years of age and then my parents moved to Lisbon, where I grew up and did all my studies until my final graduation in Biology in 1986, awarded by the Faculty of Sciences of the Lisbon University. Although living in the big city may have provided me the golden opportunity to take a college course, it did not prevent me from spending most of my summer vacations in the

village where I was born. The countryside exerted an enchantment impossible to match anywhere else. There, I could observe the life in the plants, the packs of wolves more or less abundant at the time, the different types of birds or even insects. Every life form fascinated me and gave me an opportunity to discover more about the meaning of life. This was the main reason for taking a biology course.

But the vast sea that surrounds Portugal and lays near Lisbon, inspired me to take marine biology classes and my first scientific work was on the benthic populations of the Óbidos Lagoon, located in the Portuguese west coast. This work was developed at the National Laboratory of Industrial Engineering and Technology, where I stayed for three years working within the Industrial Impact Assessment Group. During this period, I took some important advanced courses among which, one on Biology of Marine Organisms at the Station D'Océanologie et de Biologie Marine de Roscoff (France), and another in Remote Sensing applied to Land Planning. In the meantime I moved from the Industrial Engineering Laboratory to teaching high school classes, where I finally discovered my passion for teaching. But I missed the scientific component in my life, making field trips, working at the lab, and so on. Thus, when the opportunity to apply to a University came, where I could finally join research and teaching, I did not think twice, even if it meant to get on a plane and fly almost 2000 km across the Atlantic Ocean, on to the Azorean islands.



At the symposium that took place in Slovenia (2008), enjoying some good moments with my Neuropterists' friends (from left to right): Dominique Thierry, Mihaela Paulian, Michel Canard and my student Raquel Mendes.

It was upon my arrival to the archipelago that I firstly got in touch with the entomology group working at the University of the Azores. But because of my poor scientific knowledge on insects, I was sent back to Lisbon to fulfill my gaps. In the Faculty of Agronomy I took a Course on Auxiliary Arthropods in Agriculture, and when I returned to the Azores I finally started my research on the Neuroptera group of insects. But my boss knew all about ladybugs but not much about Chrysopidae, so I looked for possible people to help me out with these insects and that's when I came across the work of Michel Canard, working at the Paul Sabatier University in Toulouse. In the summer of 1993 I visited his lab for the first time and he introduced me to a Brazilian citizen (César Carvalho) doing his PhD with him, who latter on came to the Azores to exchange knowledge on the Chrysopidae family. In fact, it was Michel Canard that also encouraged me to participate on my first Neuropterology Symposium, which took place in Cairo (Egypt), in 1994. There I got to meet most of the entomologists that worked with this group some of them unfortunately already deceased. Among these, Dominique Thierry helped me with my "carnea complex" systematic problems and we became good friends and collaborators, ever since.



On a field trip with ... (do you remember the name of the guy that is with Raquel?)

For my Master thesis I had done some applied research on biological control agents, focused on the effects of an entomopathogenic fungus on the auxiliary *Chrysoperla* spp., but because of the mess caused by the "carnea complex" discover, and since Charles Henry from the USA had offered to make the courtship song analysis

of the Azorean specimens, I decided to send him live populations of the Azorean Chrysopidae. Thanks to that, he has described what he considered to be a new species of *Chrysoperla* within the “carnea group” (*Chrysoperla agilis*), and confirmed me a second species as being *Chrysoperla lucasina*, already identified through morphology analysis by Dominique Thierry. My PhD was then focused on the study of the biology of these two species, and their compatibility with other biological control agents. This research turned into an international R&D project, with partners from France, Canada and Brazil. This project allowed us, for the first time, to shed some light on the Molecular systematics of the *Chrysoperla carnea* group (Neuroptera: Chrysopidae) in Europe, a work published on the J. Zool. Syst. Evol. Res. But this was just the beginning and a long way still needs to be undertaken, in order to unravel the mysteries of the “carnea complex” or “carnea group”, or wherever it is one wants to name it.



In São Miguel (Azores) at the XIth Symposium in Neuropterology that took place in 2011.

After my PhD, and because ecological studies of insects are not so prone to get good financing, and some of my best students like Raquel Mendes had to leave in search of better chances of getting a decent job, I had to turn into more “appealing” subjects such as sustainable development or environmental management, but I never gave up hope of re-starting a line of research with my lovely insects. And this opportunity came in 2012, when I had two scholars approved to work with Chrysopidae, one for a PhD and a second one for a Pos-Doc. Due to family problems, the PhD student had to give up but Leila Morgado, my Pos-Doc, has

been developing a wonderful job on the trophic ecology of auxiliary insects, studying their foraging behaviour on pollen, and our first results will come out on 2014 on the European Journal of Entomology. I promise to send a copy to those interested on this subject, and I hope this will be the first of many interesting articles on the Azorean Neuroptera trophic behavior.

Nouvelles frontières

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The very first moment that I started studying chrysopids was back in 2003, almost eleven years ago, when I was offered a PhD position at the Laboratory of Agricultural Entomology and Zoology (Aristotle University of Thessaloniki, Greece). For the next four years, I studied the life-history traits of the chrysopid *Dichochrysa* [now *Pseudomallada*] *prasina* Burmeister and their interactions with biotic and abiotic factors. While working on my PhD project I was fascinated by lacewings in general and it was two years later, in 2005, when I discovered that the International Association of Neuropterologists was organizing in collaboration with Prof. Pantaleoni and his collaborators the IX Symposium in Ferrara, Italy. This was my first meeting, where I had the great opportunity to meet most of the world’s Neuropterologists, who very kindly accepted me in their society! Later on, in 2008, I was very

excited to attend the X Symposium organized by Prof. Devetak and his collaborators in Piran (Slovenia).



With Prof. Ulrike Aspöck and all female participants of the IX International Symposium of Neuropterology in Ferrara, Italy.

In 2007 I defended my PhD thesis, which resulted in five publications in peer-reviewed international journals and one review article. Besides my PhD study, my chrysopid-related work includes life-history studies of the cryptic species of the *carnea*-group, such *Chrysoperla agilis* Henry et al. and *Chrysoperla lucasina* (Lacroix), as well as other *Dichochrysa* species, such as *Dichochrysa flavifrons* (Brauer) and *Dichochrysa zelleri* (Schneider).

Last December (2013), I was very happy to be appointed as a lecturer in Entomology and Zoology at Democritus University of Thrace (Greece). Up until then, I had been doing several postdocs in Greece and abroad (The Netherlands and Germany) on topics relevant to insect-plant interactions. Since two years ago, I have been in continuous communication with Prof. Charles Henry (University of Connecticut), and within the framework of a PhD project he and I collaborate with Prof. George Broufas (Associate Professor, Democritus University of Thrace) and Prof. Peter Duelli (Swiss Federal Research Institute WSL) on studies relating to the biology and ecology of the European cryptic species of the *carnea*-group.

My chrysopid-related scientific interests mainly include the study of the nutritional ecology of certain species of agricultural importance and the identification of promising biological control agents which may have the potential for

inclusion in integrated pest management (IPM) programs. Since 2010, as a postdoc, and more recently after my appointment as a lecturer, I am a member of the [Laboratory of Agricultural Entomology and Zoology](#) at the Democritus University of Thrace. Currently, our group counts ten people (PhD, Masters and undergraduate students). More information can be found by following the link of our lab's webpage. Finally, in January 2014, I was elected a member of the Executive Committee of the [Hellenic Entomological Society](#) and accepted the role of Secretary for the following two years (until 2016).

I am very happy that I received the invitation from Agostino Letardi to contribute to the 'Nouvelles Frontières' column of this newsletter, and I am really looking forward to meeting you all again at the next Symposium.



Dear All,

It is time to start planning to attend the XII International Symposium on Neuropterology in Mexico. The symposium will take place at the Universidad Nacional Autonoma de Mexico (UNAM) main campus, located on the southern part of Mexico City. The university department that will host the symposium is the Instituto de Biologia (IB). As you know, contributions on any of the neuropteroid lineages (Neuroptera, Raphidioptera, and Megaloptera), extant and extinct, on any aspect of their biology,

systematics, life history, and evolution, including applied studies of the field, are welcome. Please start selecting results you may wish to share with the World community of neuropterists, and carefully consider whether you wish to do an oral presentation or present a poster. The official language of the event will be English. The symposium will take place from May 12th (Tuesday) through the 15th (Friday). We will have an afternoon of registration and a brief welcoming ceremony on the 12th, then full sessions of talks and posters on the 13th and 14th, with a short sight seeing excursion and banquet on the 15th. There will be a four day collecting trip to Los Tuxtlas Biological Station in Veracruz state immediately after the symposium (leaving on Saturday May 16th in the morning, returning to Mexico City on Wednesday May 20th late afternoon). Non entomologist spouses and partners are welcome (we will have excursions to visit museums and historic sites in the city prepared for them). May in Mexico City marks the end of the dry season (end of November through beginning of June), and so it is the warmest month just before rain season (June through November). Afternoons might be quite warm (up to 30°C or little more). However Mexico City is in a high plateau (about 2300 m above sea level) so even in May early mornings and evenings might be cool, as well as places in the shade, so a light sweater or light rain jacket at hand are always useful. Probability of rain is quite low, but scattered rains have always a chance in May. We will be posting more precise information soon in the symposium web site (www.neuropterology.unam.mx), meanwhile..., continue saving and start planning... Spread the word, see you all soon!

Atilano.

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Social meetings

Annual Meeting of the Entomological Society of America

David E. Bowles and Atilano Contreras-Ramos organized and moderated a symposium on the Neuropterida at the Annual Meeting of the Entomological Society of America, December 10-13, 2013 in Austin, Texas, U.S.A. The symposium was titled Americas Neuropterists Meeting. The presentations given at the symposium were:

- A review of the genus *Myrmeleon* in the Nearctic region (Neuroptera: Myrmeleontidae). **David E. Baumgardner** and John D. Oswald, Department of Biology, Texas A&M University, College Station, TX.
- The Mantispidae (Insecta: Neuroptera) from the Illinois Natural History Survey Insect Collection. **Daniel Reynoso-Velasco**, Enns Entomology Museum, Division of Plant Sciences, University of Missouri, Columbia, MO.
- The historical development of systematic Neuropterology in North America. **John D. Oswald**, Department of Entomology, Texas A&M University, College Station, TX.
- Progress in the systematics of owlflies (Neuroptera: Ascalaphidae). **Joshua R. Jones**, Texas A&M University, College Station, TX.
- An antlion (Myrmeleontidae) expedition throughout Australia. **Renato Machado**, Department of Entomology, Texas A&M University, College Station, TX.
- Towards a Phylogeny and Monography of Myrmeleontini. **Ben Diehl**, Texas A&M University, College Station, TX.
- Coniopterygidae of tropical dry forests of Mexico. Mariza A. Sarmiento-Cordero, and **Atilano Contreras-Ramos**, Instituto de Biología, UNAM, Mexico.
- Initial results on the Myrmeleontidae of tropical dry forests of the Mexican Pacific. **Roberto López-García**, and Atilano Contreras-Ramos, Instituto de Biología, UNAM, Mexico.
- Spongillaflyies of the Americas: state of our knowledge. **David E. Bowles**, US National Park Service, Republic, MO.

The presentations were informative and well received. The symposium was followed by a general discussion session, concluding remarks, and group dinner and social. Approximately twenty people attended the symposium this year. Atilano Contreras-Ramos agreed to organize another symposium for the 2014 Entomological Society of America annual meeting to be held November 16-19, 2014 in

Portland, Oregon, USA. Anyone interested in attending the meeting and giving a presentation in this symposium should contact the organizers.

From Horst & Ulrike Aspöck

In November 2013 we had the 80th Entomological Meeting of Upper Austria in Linz (Upper Austria). It was a very good congress with several excellent lectures. It was organised by the Society of Upper Austrian Entomologists (actually a working group at the Museum of Upper Austria in Linz). I (Horst) joined this society before my 13th birthday and I am remembering these people with deepest gratitude. I gave my first presentation when I was 15 years old and I presented my first lecture at a meeting when I was 17 years old (in November 1956) dealing with the results of an entomological excursion to Friuli (surroundings of Gemona) and to Conconello (a small village above Trieste). At that time, namely in Conconello, I got the inspiration to focus my entomological interest to Neuropterida, when I caught a specimen of *Libelloides macaronius* (at that time *Ascalaphus macaronius*). Thus, the roots of all my research on Neuropterida and secondarily and subsequently of that of Ulrike lie in Italy. One of the lectures presented in Linz now was a very fine presentation of Michael Ohl, and afterwards we spent a long evening together discussing many current questions of Neuropterology.



Also Hubert and Renate Rausch attended the meeting, and we took a photo of the group



From Axel Gruppe

Report on the 14th meeting of the work group „Neuropteren“ of the German Society for General and Applied Entomology (DGaaE) at Schwanberg castle near Würzburg, Germany.

The 14th meeting was held from March 14th to 16th 2014. Thirteen Entomologists from Austria and Germany participated in the congress and presented 11 lectures. Three talks dealt with pylogenetic aspects and with problems and meanings of pylogenetic trees. Another three talks were on faunistic topics worldwide from Central America to Central Asia. Beside that a bibliographic lecture was given on German-speaking authors who had described Raphidioptera in the 19th century.



Participants of the 14th meeting of the work group „Neuropteren“ of the DGaaE, March 2014 (from left); 1st row: H. Rausch, U. Aspöck, H. Aspöck, K. Rudnick, J. Gepp, M. Fuchs; 2nd row: L. Kirschey, S. Potel, C. Saure, M. Ohl, A. Gruppe, K. van der Dunk, K. Meißner, L. Weltner (Photo: A. Gruppe).

Regarding taxonomic groups there was a dominance of presentations dealing with

Myrmeleontidae. Here the body's water balance of myrmeleontid larvae was of particular interest. Abstracts of the presentations (in German language) will be available on the website of the DGaaE (<http://www.dgaae.de>). The round table discussion covered the preparation of an easy to use key for the German Neuropterida and the question of www presence of that key. Some discussion was on literature access for colleagues which are not associated to a scientific institution. However relevant literature on Neuropterida is available easily from the "Lacewing Digital Library" and an overview of recently published items is mentioned in "Lacewings News". Last but not least historical and recent reports of Mantispa in Germany were discussed.

The group decided to organize the next meeting end of April 2015.

Axel Gruppe, Freising (Germany)

From Horst & Ulrike Aspöck

Pebble stones from the 14th Meeting of German-speaking neuropterologists

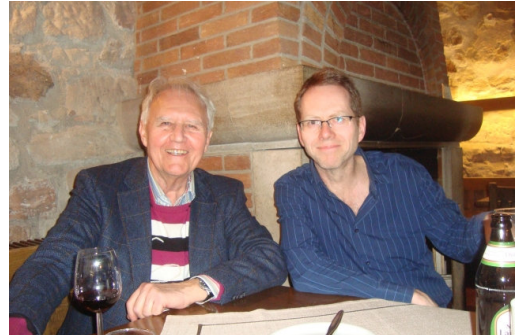


Horst Aspöck and Axel Gruppe. Schwanberg Meeting, 14 March 2014



Lukas Kirschey, Karl Meißner, Kurt Rudnick. Schwanberg Meeting, 14 March 2014

The meeting (see report by Axel Gruppe) gave again extraordinary opportunities for intensive discussions between the participants: see photographs.



Horst Aspöck (left) and Christoph Saure. Schwanberg Meeting, 14 March 2014



From left to right: Ulrike Aspöck, Michael Ohl, Lukas Kirschey. Schwanberg Meeting, 15 March 2014



Ulrike Aspöck (left) and Michael Ohl. Schwanberg Meeting, 15 March 2014



Johannes Gepp. Schwanberg Meeting, 16 March 2014



From left to right: Kurt Rudnick, Klaus von der Dunk, Leo Weltner, Karl Meißner, Christoph Saure. Schwanberg Meeting, 15 March 2014



From left to right: Hubert Rausch, Michael Ohl, Horst Aspöck. Schwanberg Meeting, 16 March 2014



Karl Meißner. Schwanberg Meeting, 15 March 2014



From left to right: Steffen Potel, Klaus von der Dunk, Leo Weltner, Kurt Rudnick. Schwanberg Meeting, 16 March 2014



Christoph Saure (left) and Hubert Rausch. Schwanberg Meeting, 15 March 2014



Lukas Kirschey. Schwanberg Meeting, 15 March 2014



From left to right: Klaus von der Dunk, Leo Weltner, Johannes Gepp. Schwanberg Meeting, 16 March 2014



Axel Gruppe. Schwanberg Meeting, 16 March 2014

The remote old castle provided the right frame and atmosphere to remember two outstanding German neuropterologists, both born 200 years ago, in 1814: Wilhelm Gottlieb Schneider (1814–1889) (see photograph), author of the first monograph of the Raphidioptera (1843), and Johann Philip Emil Friedrich Stein (1814–1882) (see photograph), who described the first snakeflies from Greece (which is one of the evolutionary and refugial centres of Raphidioptera) in 1863. We dedicated our lecture on the German-speaking authors of taxa of Raphidioptera in the 19th century to the memory of these two remarkable neuropterologists.

“Political correctness of algorithms versus plausibility in the phylogenetic trees of the Neuropterida” was the title of another lecture by the Aspöcks. It dealt with the problems resulting from discrepancies between phylogenetic trees on the basis of computerised (mostly biostatistical) analyses on one hand and on long-life knowledge and experience with the group on the other hand. This found a vivid echo

and was extensively discussed.



An old photograph of Wilhelm Gottlieb Schneider. The legend to this illustration should be: “Wilhelm Gottlieb Schneider (1814–1889), author of the first monograph of Raphidioptera. – Senckenberg Deutsches Entomologisches Institut, Historical Archive, Portrait Collection 3730.”



An old picture of Johann Philip Emil Friedrich Stein. The legend: “Johann Philip Emil Friedrich Stein (1814–1882). – Senckenberg Deutsches Entomologisches Institut, Historical Archive, Portrait Collection 4033.”

From Horst & Ulrike Aspöck

Neuropterologists at the Meeting of the Austrian Entomological Society in Graz (Styria), 22 March 2014.



Model of *Mantispa styriaca* Poda, 1761, in the Universal Museum Graz, 22 March 2014. (Photo: Aspöck).

The Meeting of the Austrian Entomological Society (Österreichische Entomologische Gesellschaft = ÖEG) at the Universal Museum in Graz, the capital of Styria, Austria, was a unique opportunity for a meeting of Austrian and Slovenian neuropterologists. The recently restructured museum harbours a wonderful, huge model of *Mantispa styriaca*, made by Styrian artists. *M. styriaca* is the first known representative of the family, described as *Raphidia styriaca* by Nikolaus Poda von Neuhaus in 1761. This insect is the heraldic animal of the Austrian Entomological Society. The photograph shows the Slovenian and Austrian neuropterologists at the model of *Mantispa styriaca* in the museum in Graz.



From left to right: Jan Podlesnik, Renate Rausch, Hubert Rausch, Ulrike Aspöck, Horst Aspöck, Vesna Klokočovnik, Johannes Gepp, Dušan Devetak. Meeting of the Austrian Entomological Society, Graz, 22 March 2014. (Photo: Aspöck).

From Catherine Tauber, Maurice Tauber and Gilberto Albuquerque

Our article on the evolution of debris-carrying in the Chrysopidae appeared as a Forum article in the Annals of Entomological Society of America (March, 2014) vol. 107: pp 295-314. A free PDF is available at: <http://esa.publisher.ingentaconnect.com/content/esa/aesa/2014/00000107/00000002/art00001>.

The article includes a systematic review of published information on debris-carrying particularly in relation to current chrysopid phylogenies. It also contains a number of images as examples (including many provided by generous colleagues).

An important feature of the article is an extensive Catalog of all the published information we could find on the debris-carrying status and larval descriptions of chrysopid taxa. The Catalog accompanies the article as Supplementary Material in the on-line version of the publication; it is not included in the printed article or the PDF reprint. We intend this catalog to be a working document; indeed, we have some additions since we approved the proofs and we will up-date the listings regularly. For an updated copy please contact us via e-mail (cat6@cornell.edu, gsa@uenf.br). Also, we would appreciate comments from anyone who has a suggestion or finds a reference that we overlooked !!

Editorial note:

I strongly suggest to view this lovely video, at url: <http://www.youtube.com/watch?v=ByDzTa15IWY&feature=share>



From Janakiraman Poorani

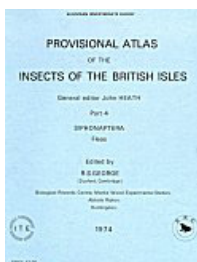
Our colleague Poorani Janakiraman from India (poorani@gmail.com) send us a photo. Thanks a lot!



photo montage of *Chrysacanthia* (Chrysopidae) from Southern India by Poorani Janakiraman

The (pre)historic newsletter “*Neuro News*, The Newsletter of the British Isles Neuroptera Recording Scheme” is back! Last available issue was released the previous millennium (<https://insects.tamu.edu/research/neuropterida/news26.html>), but our colleague Colin Plant wrote me on Thu, 6 Mar 2014: “Hi Agostino,

I do not have any time to write something for you at the moment BUT I will tell you that myself, together with Stephen Brooks and Ben Price - both at BM(NH)- are now (March/April 2014) waking up the British Isles Neuropterida Recording Scheme!



For the last 15 years I have been too busy, but in the next two years I hope I can retire from working and so I will have time to return to lacewings.

During the 1980s and 1990s, of course, I organised the British Isles lacewings alone (but with support from the national Biological Records Centre); now it will be a joint effort with Stephen and Ben sharing some aspects.

We will start with a newsletter in April 2014 - in this we will probably say very little, but we will mention the many new things that are planned. For example, in the 1980s and 1990s we did not really have the Internet - now things are very different. Stephen and Ben will be looking especially at this aspect whilst I will remain in charge of taxonomic issues and data gathering.

If YOUR readers would like to see OUR newsletter, please ask them to send an e-mail to me at << cpauk1@ntlworld.com >> and IN THE SUBJECT BOX please write the word << NEURONEWS >>. Then I will add them to the list.”

So, hurry up and let’s write an email to Colin!!

From Maria da Anunciação Mateus



News on the Proceedings

We are finally giving the last touches in the proceedings of the XI International Symposium on Neuropterology. Almost three years have gone by since our meeting in June, 2011 at Ponta Delgada (Azores, Portugal) thus, is more than time to get the publication finally out. I

would like to apologize to those of you who have submitted articles for publication in the proceedings, for this unexpected delay on its release, but given the financial crisis that has affected us the most, this task became a little harder than would be expected. For this reason, a pdf version will be out soon, whereas the printed version that will be sent to each of the authors, will take a little longer to come out. Thanks for your understanding and hope to get back to you soon.
Maria A. Ventura

Travels and research notes

From Rebecca Cairns

Our colleague Rebecca Cairns from Scotland send us this message

Call for *Megalomus hirtus* information!



Photo by P. Duelli in Wachmann & Saure, 1997

Arthur's Seat in Edinburgh is thought to be the last remaining site that may still provide a home for the Bordered brown lacewing (*Megalomus hirtus*) in the UK. *Megalomus hirtus* has not been reported here however since 1982, meaning its continued British existence is currently in question, with an urgent need to research.

I am currently volunteering with Buglife – The Invertebrate Conservation Trust in Scotland, and am hoping to carry out a surveying project this year with them to search for and study *Megalomus hirtus*. This will be on Arthur's Seat

in Edinburgh and possibly at other old record sites in Scotland.

I would be very grateful and pleased to hear from neuropterologists that may have previous experience studying *Megalomus hirtus* - whether it be information on the species' autecology or advice on the best methods of how to find it. Anything would be appreciated. Thank you in anticipation of your help. Please email me at rebecca.cairns@buglife.org.uk

From Caroline Ring

Diversity, inside and outside

On July 17th I headed for the United States. It was the first time that I was up to cross the Atlantic Ocean and I was excited and curious about this big country at the other side. Until then, I only knew it from the movies. Within two months I was now going to see New York, Arizona and California.

Moreover, I was eager to find what I was looking for: The mantidfly *Climaciella brunnea*. It's probably the most famous species of mantispids in North America, known for its polymorphic mimicry on polistine wasps. Even their behaviour is wasp-like, as they lift their wings and curl the abdomen when they are threatened.



Sorting the haul of a collection trip at the South Western Research Station in Portal, Arizona

There are six different and distinct colour morphs, each resembling one up to a handful of wasp species. While the model species are distributed in definite regions, the mimic can be found from Canada to Costa Rica. Plotted on a map, there are no definite borders between the colour form distribution areas, though they are more or less abundant at certain places. The wide distribution, added to the strong model-mimic relationship plus the fact that there are only distinct colour shadings but no intermediate forms raises the question whether *C. brunnea* is indeed just one species or rather consists of a species complex. As there are no further sufficient morphological differences within this group transmitted, I'm working on this with genetical methods. It is the topic of my master thesis at the Museum für Naturkunde in Berlin in the work group of Michael Ohl.



This Malaise trap even holds its shape when you leave it hands-off

However, this is one of the main lessons that I learned during my trip: You can prepare yourself as good as you can – the reality will be unpredictable. From label data of about 600 specimens I learned that chances should be good in Arizona in August. The literature says that *C. brunnea* does not prefer a certain habitat. They can be found literally everywhere: bushland, flowers, tree barks in altitudes up to 1500 m. It's supposed to be the most abundant daylight mantispid, but several specimens were collected at light traps. I was told that there are two peaks of abundance during the year, one in May and another one in August-September. But when I was there, with hand nets, malaise traps, lights and blankets, I personally could not find any – at least not alive. Because apart from the requests I sent out to many US collections, I was able to have a look at the collections at the

AMHN, CalAcademy, Bohart- and Essig-Museum by myself.



One ambitious entomologist and the Chiricahua Mountains

I met several regional entomologists who looked out for *C. brunnea* and even found them and also my research fellow Martin, who joined me on the trip, was luckier when he found one specimen on a light trap.



Sorry, this light trap is already fully booked

To date, I have nearly 150 specimens of *C. brunnea* available for my project. Most of them are borrowed material from ten different collections. One quarter of them is preserved in ethanol, but the major part consists of dried specimens younger than 1990. At the moment, I'm stuck into lab work and sequence analyzing. Soon I will hopefully get the glimpse of an answer to my question of what color diversity tells us about genetic diversity in that species.

Caroline Ring

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From Agostino Letardi, Horst Aspöck & Ulrike Aspöck

Neuropterida and the Fauna Europaea project

Fauna Europaea is a unique (standard) reference suitable for many users in science, government, industry, nature conservation and education. This project contributes to the European Community Biodiversity Strategy by supporting one of the main themes: to identify and catalogue the components of European biodiversity into a database to serve as a basic tool for science and conservation policies. Fauna Europaea kicked-off in 2000 as an "European Community -Framework Programme 5" four years project, delivering its first release in 2004. The basic reference for Neuropterida in Fauna Europaea has been the West-Palaearctic catalogue compiled at the beginning of the third millennium (Aspöck et al. 2001). After the first release (presented on 27 September 2004), more than 400 papers with faunal data regarding European Neuropterida published between 2000 and 2013 have been analyzed in order to extract potential new reports (see the last 2.6 version released on 29 April 2013). Since then further recent papers have been continuously accumulating for an update of a new release of FaEu. Species and subspecies distributions in Fauna Europaea are registered at least at a country level, meaning political countries. For this purpose the FaEu geographical system basically follows the TDWG standards.

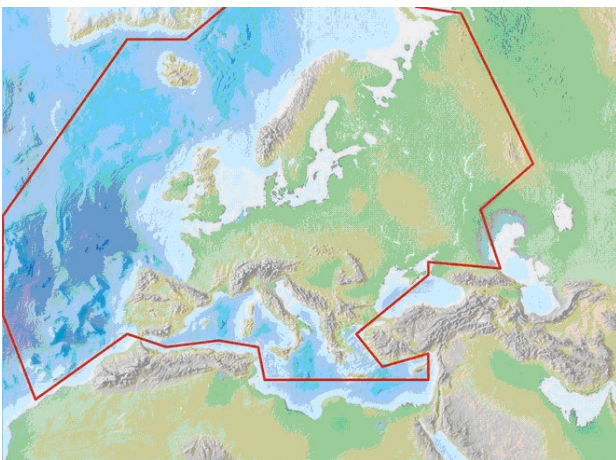


Fig.1. Area covered by Fauna Europea

The covered area includes the European mainland plus the Macaronesian islands (excl.

Cape Verde Islands), Cyprus, Franz Josef Land and Novaya Zemlya. Western Kazakhstan and the Caucasus are excluded (see Fig. 1).

Fauna Europaea was an active partner in the ViBRANT (<http://vbrant.eu>) project on delivering cross-platform operability between the different e-Taxonomy Platforms. A summary of the results can be found here:

http://vbrant.eu/sites/vbrant.eu/files/ViBRANT_D4.3 .

Similarly Fauna Europaea can now be accessed and integrated with data from other resources using the Virtual Labs developed in BioVel (<http://www.biovel.eu>). Fauna Europaea remains one of the most popular sites on taxonomic information considering the web portal statistics:

- Total number of page views in 2013: 5,525,641
- Total number of visitors in 2013: 834,347
- Number of unique visitors in 2013: 637,535

In addition, Fauna Europaea data are accessed via copies hosted at other platforms, like the PESI portal. In this context around 80 formal licenses for downloads have been approved and disseminated since the Fauna Europaea initial release. Some licenses are regularly renewed, like the GBIF Checklist Bank and the PESI Focal Points.

In ViBRANT (<http://vbrant.eu>), the Biodiversity Data Journal (<http://biodiversitydatajournal.com>) was launched as a next generation platform for publishing biodiversity science and data. For all 57 Fauna Europaea taxonomic sectors represented by group coordinators, draft BDJ data papers are prepared in the Pensoft Writing Tool: the Neuropterida one is in preparation. For Neuropterida, data from three insect orders (Raphidioptera, Megaloptera and Neuroptera,), containing 15 families and 397 species, are included: Horst & Ulrike Aspöck and Agostino Letardi are Group Coordinators for Neuropterida. We check continuously and consistently the related literature but, as you can easily understand, it is not a simple task to control a frequently scattered and huge number of journals where these data have been published, thus any suggestions, support and reports from the European community of neuropterologists will be greatly appreciated and acknowledged. Besides all publications dealing with records of Neuropterida within the frame of FaEu, moreover all papers concerning other parts of Western Palaearctic (particularly Northern

Africa, Anatolia, Near East) are very welcome in order to obtain information on the possible occurrence of species to be expected but so far not yet recorded within FaEu.

Aspöck H., H. Hölzel & U. Aspöck (2001):
Kommentierter Katalog der Neuropterida
(Insecta: Raphidioptera, Megaloptera,
Neuroptera) der Westpaläarktis. – Denisia 02:
606 pp.

Obituary

From John D. Oswald

On Thu, 24 Oct 2013 John sent me this email:

Hi Agostino,

Attached here is a PDF of an obituary of K. A. J. Wise, who wrote many papers on the Neuroptera of New Zealand. I received a copy of this from Ollie Flint this morning. Wise passed away in March of 2012, but I have just now learned of this. ... Note that Wise's monograph on the New Zealand Neuroptera and Megaloptera should also be appearing soon (if it is not already out; but I haven't seen it).



Keith Wise in the Entomology Department at Auckland Museum, September 1986. Photo: B. Gill.

Below a short abstract from Early, J.W. 2012.
[Obituary] Keith Arthur John Wise F.R.E.S.
1926–2012. Rec. Auckland Mus. 48: 107.114.

With sadness we record the passing of Keith Wise, Auckland Museum's first Curator of Entomology, on 31 March 2012. Keith Wise was born on 1 June 1926 in Wellington, son of Victor John and Grace Evelyn Wise. At the time of his death he was working on a monograph of the lacewings (Neuroptera) and alder flies (Megaloptera) of New Zealand, a synthesis of his long-standing research into these insects. The manuscript is largely completed and will be published posthumously in the Fauna of New Zealand series. Keith is survived by his children Gillian, Jenny, Vicki and Martin.

From Department of Animal Developmental Biology, Wroclaw, Poland

It is with deep regret that we inform you of untimely demise of Professor Janusz Kubrakiewicz. Prof. Kubrakiewicz passed away on Sunday, March 10, 2013, aged 56, after a battle with cancer.

Colleagues from Department of Animal Developmental Biology

From Emilio Insom



Prof. Salvatore Carfi at the 4th International Symposium on Neuropterology in Bagnères-de-Luchon (France, 1991)

It is with deep regret that we inform you of untimely demise of Professor Salvatore Carfi. Prof. Carfi passed away on Tuesday, March 11, 2014, after a long battle against bone cancer.

Reader replies to past issue of Lacewing News

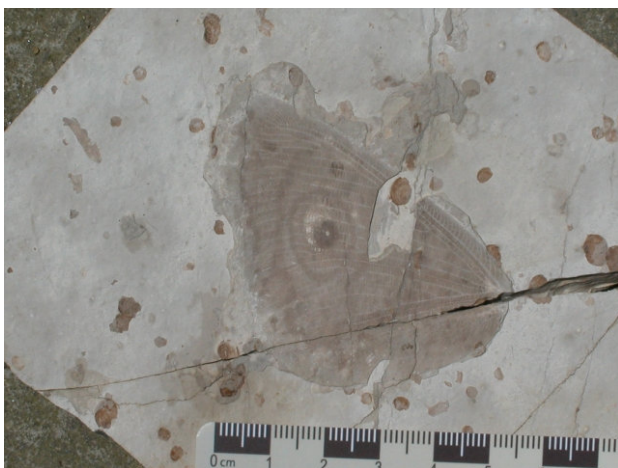
From Edmund Jarzembowski

After Lacewing News 17, I had a short exchange of emails with Ed concerning "Searching for Pseudimares in Morocco" by the Aspoecks in Newsletter 17 :

From: jarzembowski2@live.co.uk
Thu, 24 Oct 2013

Enjoyed the piece by the Aspoecks in Newsletter 17, but Kimmins should have known that Neuroptera have sported eyespots since the age of the dinosaurs, e.g. enc. some pictures of Kalligramma eyespots from the Early Cretaceous of England (Jarzembowski, 2011, fig. 13.19B; Jarzembowski, 1984, fig. 36, pl. III). They have been known from the Jurassic of Bavaria since Edwardian (Imperial) times, but as the Solnhofen specimens are a bit bleached, I enclose a wing from Daohugou, Inner Mongolia, instead- the pattern is most likely eumelanin. Incidentally, do we know what predates Pseudimares apart from neuropterists?

Ed (A. Jarzembowski)



From: agostino.letardi@enea.it
Thu, 24 Oct 2013

Olà Ed!

who doesn't know the fascinating eyespots of Kalligrammatidae?

Conversely, existing Neuropterida are usually not so flashy.... Thanks a lot for your papers and pictures! I think nobody know exactly what Pseudimares specimens predate, but usually adult of antlions are ... preyed by Asilidae, Odonata, Araneae, birds, lizards, bats, and so on....

Ciao!
Agostino Letardi

From: jarzembowski2@live.co.uk
Thu, 24 Oct 2013

*Thanks for yours
- sounds as if Kimmins didn't know if he thought Pseudimares was a fake at first (which wouldn't surprise me in the days of departmental segregation!) and of course, there are other eyespotted Mesozoic psychopoids using other eyespot strategies
But surely the Pseudimares eyespots cannot be for frightening Asilidae, Odonata, Araneae? And there are no bats and modern birds in the Jurassic... yet Pseudimares uses one spot per wing like Kalligramma and unlike butterflies
I'm inclined to think that Neuroptera were eventually not flashy enough which is why Pseudimares is an interesting modern exception*

- please keep me posted if we find out more about the ethology of this wonderful creature

Ed



Recent Literature on the Neuropterida (2013-2014)

Organized by Agostino Letardi, with the contribution of John Oswald's BotN

- Aistleitner, E. 2014. Chorologie und Iconographie des Fadenhaftes *Nemoptera bipennis* (Illiger, 1812) (Neuroptera, Nemopteridae). *Entomofauna* 35(13): 229-242. [r#15510].
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Picture of the semester



Necrophylus arenarius (Roux, 1833), intraspecific predation. Spain, Almería, Casillas de Atochares. Photo by courtesy of Davide Badano

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