

# Forum Herbulot Newsletter 1 (1)

August 2010



## CONTENT

Editorial .....	2
Letter from Charlie Covell .....	2
Report from Forum Herbulot VI .....	2
Date and Venue of Forum Herbulot VII ...	7
Phylogeny of the Geo- metridae .....	7
DNA Barcoding cam- paigns iBOL-Geome- tridae and Europe .....	8
Recent literature .....	9



### Editorial

Establishment of a Forum Herbulot newsletter was suggested by Charlie Covell during the Forum Herbulot meeting June 2010 in Gainesville, Florida. Let us try! Any kind of feed-back is welcome. This may be a forum for all geometridologists for posting questions and loan requests, for announcing informations and calls for cooperations. New, important literature on Geometridae may be presented as well as new projects, expeditions, collections a.s.o. The newsletter will be sent to all registered members of Forum Herbulot via e-mail, no print of the newsletter is envisaged. Therefore, contributions in the newsletter cannot be regarded as publication in the sense of the Code of Zoological Nomenclature. Please communicate all information you want to have included into the newsletter to Axel Hausmann ([Axel.Hausmann@zsm.mwn.de](mailto:Axel.Hausmann@zsm.mwn.de)).

### Letter from Charlie Covell

*Dear Friends:*

*I would like to thank Axel for initiating the Forum Herbulot series of conferences. Now, to further communication, we are going to send this newsletter from time to time as well. It is desirable for amateur and "professional" students of the Geometridae to be in contact with each other, and to combine our knowledge and resources to further the important work of revisions, biology, ecology and other aspects of "geometridology" - which is our chosen subdivision of lepidopterology.*

*I would also like to thank those of you who went to the great effort and expense to attend Forum Herbulot VI in Gainesville, Florida this past June. I enjoyed having you visit with us; and I hope you enjoyed meeting our colleagues and seeing our area and our collections. The meeting would not have been the success it was without the support I received from our Director of the McGuire Center, Dr. Tom Emmel, our staff (Jackie Miller, Debbie Lott, Andrei Sourakov), and our students and technicians (Montana Atwater, Christian Salcedo, Matt Sandridge, Kristin Rosetti, Megan Maxwell, Katie Lane, and others), our amateur friends (Jeff Slotten and Tom Neal), and most especially Delano Lewis, who did the heavy lifting in making reservations and arranging accommodations. By the way, Delano has now completed his PhD degree at the University of Florida and is the father of a new baby boy!*

*Best wishes to all of you: those who attended the meeting and those who could not. I hope this newsletter and emails will help us stay in touch and keep up with what others are doing.*

*Cheers,  
Charlie Covell*

### Report from Forum Herbulot VI in Gainesville, Florida

From 21 to 23 June, more than 30 participants met at the Florida Museum, McGuire Centre in Gainesville, Florida for the 6<sup>th</sup> Forum Herbulot. Charlie Covell and his colleagues (e.g. Delano Lewis, Deborah Lott, Jaqueline Miller, Andrei Sourakov) had organized that meeting in an outstanding and fascinating way.



Participants of Forum Herbulot VI  
Front (left to right): Cathy Young, Antoine Lévêque. Iva Mihoci, Charlie Covell, Erki Ounap. – 2nd row: Patrick Strutzenberger, Dave Wagner, Deborah Lott, Axel Hausmann, Toomas Tammaru. – 3rd row: James Adams, Patricia Gentili-Poole, Alfred Moser, Kristin Rosetti, Eckhard Wierig. – Rear: Bob Belmont, Thomson Paris (partially covered), Hermann Staude, Jeremy deWaard, Paul Hebert, Matt Standridge, Delano Lewis.

The following participants were registered (in alphabetical order): James K. Adams (U.S.A.), Montana Atwater (U.S.A.), David Auth (U.S.A.), Bob Belmont (U.S.A.), Charlie Covell (U.S.A., conference organizer), Jeremy deWaard (Canada), Tom Emmel (U.S.A., welcoming talk), Patricia Gentili-Poole (U.S.A.), Axel Hausmann (Germany, founder of Forum Herbulot), Paul Hebert (Canada), John Heppner (U.S.A.), Antoine Lévêque (France), Delano Lewis (U.S.A., conference co-organizer), Deborah M. Lott (U.S.A., meeting assistant), Iva Mihoci (Croatia), Jacqueline Y. Miller (U.S.A., meeting assistant), Alfred Moser (Brazil), Erki Ounap (Estonia), Kristin Rosetti (U.S.A.), Christian Salcedo (Colombia), Matt Standridge (U.S.A.), Andrei Sourakov (U.S.A.), Hermann Staude (South Africa), Patrick Strutzenberger (Austria), Toomas Tammaru (Estonia), Diego Tobar Lopez (Costa Rica), David Wagner (U.S.A.), Court Whelan (U.S.A.), Eckhard Wierig (Germany), Keith Willmott (U.S.A.), Catherine Young (Australia, Tasmania).

Charlie and his family had prepared us a very enjoyable reception at their home on June 21st evening with dinner and beverages and it was wonderful to meet again so many colleagues and friends from all over the globe.



Social gathering at the Covell home. Right photograph (left to right): Patricia Gentili Poole (U.S.A.), Delano Lewis (Jamaica), Hermann Staude (South Africa), Patrick Strutzenberger (Austria) and Jackie Miller (U.S.A.)



Left: Registration for Forum Herbulot (left to right): Paul Hebert (Canada), Hermann Staude (South Africa), Axel Hausmann (Germany), Jeremy deWaard (Canada) and Andrei Sourakov (U.S.A.); right photograph: Director Tom Emmel during his welcome talk

The scientific sessions on June 22nd and 23rd consisted of talks of the highest scientific quality (see program below). They included presentations of the iBOL campaign (International Barcode of Life) and the global initiative for DNA barcoding of the family Geometridae. There were fantastic insights into new findings of geometrid phylogeny (in amazingly good harmony with each other!) based on integrative approaches combining molecular and morphological techniques. Other contributions were on North American geometridology, importance of amateur contributions in biodiversity surveys, and numerous other behavioral, evolutionary, biological and ecological aspects of Lepidoptera in general and Geometridae in particular.





Forum presentation sessions: Left: Some participants during the meeting session; Center: Paul Hebert (Canada) and Cathy Young (Australia, Tasmania); Right: the meeting organizers Charlie Covell (left) and Delano Lewis (right).

## Program of Forum Herbulot 2010:

### Monday, June 21, 2010:

12:00 Noon – 6:00 PM Registration McGuire Center Conference Room  
Visits to the Butterfly Rainforest and collections (by arrangement)  
6:30 PM Open House - Covell residence, 207 NE 9<sup>th</sup> Avenue

### Tuesday, June 22:

8:00 – 8:30 AM Registration; Coffee and pastries McGuire Center Conference Room  
8:30 – 8:45: Dr. Doug Jones, Director of the Florida Museum of Natural History: Welcome  
8:45 – 9:15: Dr. Thomas C. Emmel, Director of the McGuire Center: Welcome & History of the McGuire Center  
9:15 – 9:30: Axel Hausmann, ZSM Munich, Germany: 10 years Forum Herbulot: Claude Herbulot and previous Forum Herbulot conferences, 2000 – 2008  
9:30 – 9:45: Iva Mihoci, Croatian Natural History Museum, Zagreb: Poster: “A Preliminary Checklist of the Geometridae of Croatia”  
9:45 – 10:00: Break  
10:00 - 10:20: Paul Hebert, University of Guelph, Ontario, Canada: “Geometrids and the International Barcode of Life Project”  
10:20– 10:40: Catherine Young, Hobart, Tasmania: “A new genus and species of a Tasmanian endemic geometrid restricted to Mt. Wellington”  
10:40 – 11:00: Axel Hausmann (presenter), Rodolphe Rougerie, and Paul Hebert, ZMS Munich, Germany: “iBOLand the Geometrid campaign: status and achievements”  
11:00 – 11:20: Jeremy deWaard, University of British Columbia, Vancouver, B.C., Canada: “The ‘barcode approach’ to combining molecular datasets: Reconstructing the phylogeny of North America’s Geometridae as an example”  
11:20 – 12:00: Discussion of DNA barcoding (Catherine Young, moderator)  
12:00 – 1:00 PM: Lunch; group photo

### Afternoon session

Moderator: Delano Lewis

1:00 – 1:20: Erki Ounap (presenter) and Jaan Viidalepp, Estonia: “Overview of the phylogeny of the Sterrhinae”  
1:20– 1:40: Niklas Wahlberg, Niina Snäll, Jaan Viidalepp, Kai Ruohomäki & Toomas Tammaru (presenter), Estonia: “Evolution of female flightlessness in Geometridae: a phylogenetic study”  
1:40 – 2:00: Patrick Strutzenburger, Florian Bodner, Gunnar Brehm and Konrad Fiedler, University Vienna, Austria: Phylogenetic patterns of host plant use in Neotropical *Eois* (Larentiinae).  
2:00 – 2:20: Pasi Sihvonen, Finland and Hermann Staude, Magaliesburg, South Africa (presenter): “Revision of the Afrotropical Scopulini moths (Lepidoptera: Geometridae: Sterrhinae)”  
2:20 – 2:40: Patricia Gentili-Poole, Smithsonian Institution, Washington DC: “The USNM Geometridae Collection – Status Report”  
2:40 – 3:00: Eckhard Wierig, Munich, Germany: “Assessing geometrid biodiversity: two new major ZSM projects”  
3:00 – 3:20: Break  
3:20 – 3:40: Antoine Leveque, Orleans, France: “Revision of the genus *Nepheloleuca* (Geometridae: Ennominae)”  
3:40 – 4:20: David Wagner, University of Connecticut, Storrs, CT: (title expected soon)  
4:20 – 5:00: James K. Adams, Dalton State College, Dalton, GA: “The biogeography of Georgia and the southern Appalachian Mountains.”  
6:00 – 7:00: Social gathering, Hilton Hotel (cash bar)  
7:00 – 9:00: Dinner and door prizes



Wednesday, June 23:

Morning session

Jackie Miller, Moderator

8:00 – 8:20: Deborah Matthews & Jacqueline Y. Miller, McGuire Center, Florida Museum of Natural History, Gainesville, Florida: "Moth Collecting at Pico Bonito Lodge, Honduras"

8:20 – 8:40: Diego Tobar L., GAMMA Program, Turialba, Costa Rica: "Conserving butterfly diversity in agricultural landscapes in Copán, Honduras and Matiguas, Nicaragua"

8:40 – 9:00: Andrei Sourakov and George Austin (deceased), McGuire Center, Florida Museum of Natural History, Gainesville, Florida: Richness and phenology of the moth community in north-central Florida.

9:00 – 9:20: Robert A. Belmont, Sanford, Florida: Collecting Geometrid Moths as a Hobby

9:20 – 9:40: Charles V. Covell Jr., McGuire Center, Florida Museum of Natural History, Gainesville, Florida: Comments on the status of our knowledge of the North American and neotropical Geometridae

9:40 – 10:00: Jacqueline Y. Miller, McGuire Center, Florida Museum of Natural History, Gainesville, Florida: An Overview of the Biogeography of Lepidoptera in the Caribbean Basin"

10:00 – 10:15: Business meeting and close

Many participants took the opportunity to work in their geometrid specialties after the meeting in the huge collections of the McGuire Center, Florida Museum of Natural History.



Left: scientific talks were continued during the breaks and after the meeting: left to right: Charlie Covell (U.S.A.), Jeremy deWaard (Canada), Paul Hebert (Canada); right: post-conference collecting in Florida (from left to the right): Jeremy deWaard (Canada), Antoine Lévêque (France), Paul Hebert (Canada), Erki Ounap (Estonia).

Post-conference collecting trips were perfectly organized to four varied and productive sites (despite the moonlight!) not far from Gainesville, Florida (June 23 - 26). Several collectors from the U.S.A. and members of the McGuire Center staff led the trips and provided equipment and assistance: Delano Lewis, Lucasz Barszczak, Bob Belmont, Jeff Slotten, Dave Wagner and Matt Standridge. Another post-conference feature was a collecting trip to Pico Bonito Lodge, La Ceiba, Honduras, led by Charlie Covell and Christian Salcedo, which also included Eric Anderson, David Auth, Iva Mihoci, Alfred Moser, and Eckhard Wierig. Moth collecting was excellent, although conditions were extremely hot and humid. They enjoyed good cooperation and fellowship at this popular and beautiful ecolodge.



Participants of the post-conference collecting group in Honduras. Left photograph (left to right): Charlie Covell, Alfred Moser, Eric Anderson, Eddie Atamian, Bedros Orchanian, David Auth, Eckhard Wierig, Christian Salcedo, and the empty chair of Iva Mihoci, who was ill that evening. Right photograph (left to right): local staff member, ErA, BO, EdA, CC, IM, EW (photo Alfred Moser).

#### **Date and venue of Forum Herbulot VII (2012)**

Date and venue of next Forum Herbulot is fixed on South Africa, February 2012 (ca 5<sup>th</sup> to 12<sup>th</sup>). It will be organized by Hermann Staude who presented, on Forum Herbulot in Florida a very appealing and appetizing presentation. This meeting will probably be scheduled as a mix-up of seminary sessions, extensive collecting, game drives, braai etc.

The date and venue of the next Forum Herbulot is to be in South Africa in February, 2012 (ca. 5th to 12th). It will be organized by Hermann Staude, who presented at the Florida Forum a very appealing and compelling presentation to win the bid to host the meeting. We are most grateful to Hermann for this invitation. The scheduled activities for this meeting will include a mixture of scientific sessions, extensive collecting, visits to game farms, braai etc.

Forum Herbulot 2014 is envisaged to be hosted in Europe, for Forum Herbulot 2016 there is an offer from Luis Parra to organize it in Concepción, Chile.

#### **Phylogeny of the Geometridae**

At present there are six major projects and working groups performing integrative analyses (combining molecular and morphological traits) of deep geometrid phylogeny at subfamily and tribe level:

- L. Kaila, M. Mutanen, P. Sihvonen (Finland)
- J. Regier, C. Mitter, S. Weller (U.S.A.; LepTree project; focus family / subfamily level)
- J. deWaard (Canada, PhD, in cooperation with LepTree group; focus Ennominae)
- C. Young (Australia, Tasmania; focus Nacophorini, Oenochrominae s.l., Geometrinae)
- E. Ounap, T. Tammaru (Estonia; focus Sterrhinae, winter moths)
- N. Wahlberg (Finland; new postdoc project; focus Ennominae)



There is good contact and cooperation between all these groups and intensity of interactions is further increasing. All groups are invited to post lists of needed taxa and further information on one of the next issues of this newsletter

**Launching of DNA barcoding campaigns iBOL and Lepidoptera of Europe**



After three years of planning, in September 2010, the Scientific Steering Committee of iBOL (international Barcode of Life Project) will officially launch the Project in Guelph (Canada). By 2015 the Lepidoptera section (see <http://www.lepbarcoding.org/index.php>) aims to generate DNA barcodes for 80K species worldwide, the Global Campaign Geometridae 20K species (87% of the species number described so far). Until now, there are 10K geometrid species with barcodes on BOLD, the database of the project (<http://www.barcodinglife.com/views/login.php>). Through the taxonomic browser of that Database all vouchers can be accessed open and online with images and georeferencing. Everybody is welcome to join the group of partners. If interested please contact Axel Hausmann ([Axel.Hausmann@zsm.mwn.de](mailto:Axel.Hausmann@zsm.mwn.de)).

The screenshot shows the iBOL Lepidoptera barcode of life: Europe website. It features a progress bar and the following statistics:

specimens barcoded:	27807
species barcoded:	4911
unnamed barcode clusters found:	1174

Below the statistics is a 'Barcode Coverage' section with a green progress bar. To the right is a large image of a butterfly. At the bottom, there are navigation options for 'OTHER LEPIDOPTERA BARCODE OF LIFE SUB-CAMPAIGNS', 'GEOGRAPHIC Continental Projects', and 'TAXONOMIC Family-based Projects'.

A campaign for DNA barcoding of all European Lepidoptera was initiated in June 2010 under the leadership of Rodolphe Rougerie (Canada), Erik Nieuwerkerken (Netherlands) and Axel Hausmann (Germany). So far there are 5K European Lepidoptera species on BOLD database. The challenge is to get suitable vouchers for the missing half. For that purpose, step by step, missing lists of 'desiderata' will be published in the web. Again, everybody is invited to participate. This new campaign will be officially announced in one of the next issues of *Nota lepidopterologica*.

For both campaigns, Global Lepidoptera and Lepidoptera of Europe, there will be workshops at the next SEL congress in Luxemburg, May 9-14, 2011.





**Recent literature on the Geometridae**

- Mutanen M, Wahlberg N & L Kaila 2010. Comprehensive gene and taxon coverage elucidates radiation patterns in moths and butterflies. – Proc. R. Soc. B 2010 277, 2839-2848.
- Strutzenberger P, Brehm G, Bodner F & K Fiedler 2010. Molecular phylogeny of *Eois* (Lepidoptera, Geometridae): evolution of wing patterns and host plant use in a species-rich group of Neotropical moths. – Zoologica Scripta, no. doi: 10.1111/j.1463-6409.2010.00440.x
- Sihvonen P & H Staude 2010. Revision of *Isoplenodia* Prout, 1932 with new records from continental Africa (Lepidoptera: Geometridae, Sterrhinae). – Zootaxa 2453: 25-41.

As mentioned in the editorial, we encourage everybody to communicate to us any new and important references for this section. Please use the exact formal criteria for citations as presented here, since we have not the resources to do large-scale editing.

The Forum Herbulot Newsletter appears irregularly one or several times per year and will be posted on the Forum Herbulot webpage [www.herbulot.de](http://www.herbulot.de). Old issues can be accessed there. Membership in the Forum Herbulot initiative is free. For information contact Axel Hausmann [Axel.Hausmann@zsm.mwn.de](mailto:Axel.Hausmann@zsm.mwn.de)