

Maquitico-Rocha *et al.*, National Autonomous University of Mexico (Mexico)
“Effect of artificial nocturnal light in the bioluminescent signals associated to the matting and predatory behaviors of *Photinus* and *Photuris* fireflies” Laia Gaitán Botero *et al.*, Rosario University (Colombia)

SESSION III. TAXONOMY, PHYLOGENY AND GENETICS

“Understanding comparative larviform morphology and its impact on the broader Coleopterology” Joseph. M. Cicero, University of Arizona (USA)
“Re-record of *Luciola nicolleti* (Coleoptera: Lampyridae: Luciolinae) from Sri Lanka” Dilshan De Silva *et al.*, University of Ruhuna (Sri Lanka)
“Systematic Review of Neotropical *Vesta* (LaPorte 1833): Distribution, Key and Description of New Species” Sara Rivera *et al.*, Western Carolina University (USA)
“On the natural history of the black-winged firefly, *Phosphaenopterus metzneri* Schaufuss, 1870 with comparative notes on Phosphaenina (Coleoptera: Lampyridae)” Viviane Nunes *et al.*, Universidade de Lisboa (Portugal)
“Shrouded in a flashing mystery: decoding the gene flow and species boundaries in the firefly *Luciola lusitanica* Charpentier, 1825” Viviane Nunes *et al.*, Universidade de Lisboa (Portugal)

SESSION IV. BIOLUMINESCENCE, BIOCHEMISTRY AND PHYSIOLOGY

“Hemocyte responses of *Lamprigera tenebrosa* larvae after bacterial infection” Parichart Laksanawimol *et al.*, Ratchabhat Chandrakasem University (Thailand)
“A firefly simple game for modeling synchronization” Stéphanie Depickère *et al.*, Hight University of San Andrés (Bolivia)
“Beetle bioluminescence outshines aerial predator” Yelena Pacheco, University of Georgia (USA)

SESSION V. CONSERVATION BIOLOGY

“The protection and restoration of terrestrial fireflies in Satoyama area in Taipei city, Taiwan—A 20+ years progress with the combination of Industry, Official and University” Chiahsiung Wu *et al.*, Taiwan ecological arboriculture society (Taiwan)
“Conservation Activities of the IUCN SSC Firefly Specialist Group” Vor YIU *et al.*, Hong Kong Entomological Society (Hong Kong)
“Fireflies (coleoptera: lampyridae) in the Collections of Croatian Natural History Museums” Darija Lemic *et al.*, University of Zagreb (Croatia)
“Roadmap for firefly conservation planning and action: North America as a case-study” Anna Walker *et al.*, New Mexico BioPark Society (USA)
“Keep the forest shiny: mapping threats to inform conservation planning of firefly species endemic to the Atlantic Forest hotspot” Stéphanie Vaz Campos, Federal University of Rio de Janeiro (Brazil)

SESSION VI. CITIZEN SCIENCE

“The distribution of lampyrids in Spain: an interpretation based on geography and history” José Ramón Guzmán Álvarez *et al.*, Citizen science web project “Has visto una luciérnaga?” www.gusanosdeluz.com (Spain)
“Fireflies’ Nights - a programme of environmental education” - Henrique N. Alves *et al.*, Parque Biológico de Gaia (Portugal)

PROGRAMME

WEDNESDAY 15TH JUNE

9:00 - Shuttle to the Conference Room
09:30 - 10:00 Registration
10:00 - 10:30 **Opening Ceremony**

SESSION I: ECOLOGY AND BEHAVIOUR

10:30 - 11:15 PLENARY TALK: “How to be attractive? Social and visual environment affect female success in glow-worms” Arja Kaitala, University of Oulu (Finland)
11:15 - 11:35 “Common glow-worms under artificial light: behavioural and evolutionary consequences” Mira Van den Broeck *et al.*, University of Antwerp (Belgium)
11:40 - 12:10 Coffee-break with Poster Session I: Ecology and Behaviour
12:10 - 12:30 “Why are female glow-worms particularly vulnerable to urbanization” Topi Lehtonen, University of Oulu (Finland)
12:30 - 12:50 “Space use behaviour of larvae of the common glow-worm” Stefan Ineichen *et al.*, Institut für Umwelt und Natürliche Ressourcen (Switzerland)
12:50 - 13:10 “The duration of artificial light defines sexual signalling in the common glow-worm” Christina Elgert *et al.*, University of Helsinki (Finland)
13:10 - 13:30 “Host condition and pathogen identity influence bacterial infection survival in the Common Eastern Firefly, *Photinus pyralis*” Sarah Lower *et al.*, Bucknell University (USA)
13:30 - 15:00 Lunch

SESSION II: ART AND SOCIETY

15:00 - 15:45 PLENARY TALK: “Fireflies pretext for warning” Francesco Mariotti, Artist (Switzerland)
15:45 - 16:05 “Beauty of fireflies through camera lens” Radim Schreiber, Firefly Experience (USA)
16:05 - 16:25 “Be Careful What You Wish For: Firefly Tourism in Pennsylvania” Peggy Butler *et al.*, Pennsylvania Firefly Festival and US Firefly Tourism Luminary Council (USA)
16:25 - 16:45 “The Lightscapes of Fireflies. From Literatures to their Habitat Restoration Landscapes: In the case of Thailand” Rachaya Wattanasirichaigoon, Harvard Graduate School of Design (USA/Thailand)
16:45 - 17:05 “On social bioluminescence” Chiara Falcone, Department of Social and Political Science of Unical (Italy)
17:15 - 17:45 - Coffee-break
17:45 - 18:00 Firefly Photography exhibition and Group Photo
18:00 - 19:00 Firefly Photography Class by Radim Schreiber (FireflyExperience.org)
“Covering basics and real world tips and tricks”.
19:00 - 19:30 Firefly Music Sessions (Raphael de Cock)
19:30 - 21:00 Dinner at Parque Biológico de Gaia
21:00 - 23:30 PBG Excursion to see Fireflies
23:30 - Bus to hotel

INTERNATIONAL FIREFLY SYMPOSIUM



15_16_17_18 JUN 2022

BIOLOGICAL PARK OF GAIA, PORTUGAL

Organisation committee



Partners



THURSDAY 16TH JUNE

SESSION III. TAXONOMY, PHYLOGENY AND GENETICS

8:30 - Shuttle to the Conference Room

9:00 – 9:45 PLENARY TALK: "Museum collections as information repositories on fireflies and training tools for new lampyrid researchers: the case of the University of Porto" José Manuel Grosso-Silva, Natural History and Science Museum of the University of Porto (Portugal)

9:45 - 10:05 "Firefly Sensilla Diversity: with Emphasis on Sexual Signaling" Yelena Pacheco *et al.*, University of Georgia (USA)

10:05 – 10:25 "A taxonomic conundrum in *Pteroptyx*: how to solve it and what it means for conservation of mangrove fireflies in Southeast Asia" Wan Jusoh *et al.*, National University of Singapore (Singapore)

10:25 – 10:45 "Understanding comparative larviform morphology and its impact on the broader Coleopterology"; Joseph Cicero, University of Arizona (USA)

10:45 – 11:05 "The fireflies of Israel – taxonomy, ecology and the potential effect of light pollution" Ella Fishman *et al.*, Tel Aviv University (Israel)

11:10 – 11:40 Coffee break with Poster Session III

SESSION IV. BIOLUMINESCENCE, BIOCHEMISTRY AND PHYSIOLOGY

11:40 – 12:25 PLENARY TALK: "Resurrecting the ancient glow" Yuichi Oba, Chubu University (Japan)

12:25 – 12:45 "Light color evolution in fireflies" Kathrin Stanger-Hall, University of Georgia (USA)

12:45 – 13:05 "Investigating the role of pigmentation in firefly bioluminescence color" Margot Popecki *et al.*, University of Georgia (USA)

13:10 – 14:30 – Lunch

14:30 – 14:50 "A Modeling Approach for Studying Firefly Synchronization" Gonzalo Marcelo Ramírez-Ávila *et al.*, Higher University of San Andrés (Bolivia)

14:50 – 15:10 "Three-dimensional tracking: Insights into firefly behavior and conservation" Orit Peleg, University of Colorado Boulder (USA)

15:10 – 15:30 "*Pteroptyx bearni* firefly flash fewer and shorter when exposed to increasing brightness of white light LED" Vickly Mobilim, University of Malaysia Sabah (Malaysia)

15:30 – 16:00 Coffee break with Poster Session IV

SESSION V. CONSERVATION BIOLOGY

16:00 – 16:45 PLENARY TALK: "Firefly conservation: Protecting the Jewels of the Night" Sara Lewis & Sonny Wong, Tufts University, Boston USA & Malaysian Nature Society, Kuala Lumpur & IUCN Firefly Specialist Group (USA & Malaysia)

16:45 - 18:15 Workshop and Discussion – Standardising Methods to Monitor Fireflies Populations – IUCN Firefly Specialist Group – Vor Yiu, Hong Kong Entomological Society (Hong Kong)

18:20 – Bus to Lousada municipality (50 km)

19:15 – 22:30 – Workshop of fireflies capture techniques by Raphael de Cock, University of Antwerp (Belgium) and dinner/picnic - Lousada

22:30 – Bus to the Hotel

FRIDAY 17TH JUNE

8:30 - Shuttle to the Conference Room

9:00 – 9:20 "The business model of the firefly restoration in Taiwan" Chiahsiung Wu *et al.*, Tree-garden Co. Ltd. (Taiwan)

9:20 – 9:40 "Colonization of Fireflies in Artificially Modified Habitats" Vor Yiu, Hong Kong Entomological Society (Hong Kong)

9:40 – 10:00 "Placing Indiana's state insect on the map: Records of Say's firefly, *Pyroctomena angulata*, in Indiana (Lampyridae, Coleoptera) and the bordering states of Michigan, Ohio, Kentucky and Illinois" Sergio Henriques, Global Center for Species Survival, Indianapolis Zoo (USA/Switzerland)

10:00 – 10:20 "Coexisting *Pteroptyx* species, friends or enemies?" Anchana Thancharoen *et al.*, Kasetsart University (Thailand)

10:20 – 10:40 "Evaluating Firefly Extinction Risk: A Key Step to Species Conservation" Anna Walker, New Mexico BioPark Society (USA)

10:45 – 11:15 - Coffee break with Poster Session V & VI

SESSION VI. CITIZEN SCIENCE

11:15 – 12:00 PLENARY TALK: "Network of volunteers to monitor the Lampyridae of France: between constraints and opportunities" Fabien Verfaillie, Group Associatif Estuaire (France)

12:00 – 12:20 "Fireflies in olive groves: searching a beloved and desired insect" José Ramón Guzmán Álvarez *et al.*, Citizen science web project "Has visto una luciérnaga?" www.gusanosdeluz.com (Spain)

12:20 – 12:40 "Citizen Science Campaign in Search of a Forgotten Insect" Helena VirićGašparić *et al.*, University of Zagreb (Croatia)

12:40 – 13:00 "Quick spreading of populations of an exotic firefly throughout Spain and their recent arrival in the French Pyrenees" Marcel Koken *et al.*, LABOCEA (R&D unit) - CNRS (France)

13:00 – 14:30 – Lunch

14:30 – 14:50 "ATLANTA FIREFLY PROJECT: A community-science exploration of the effects of land management on the local abundance of the big dipper firefly (*Photinus pyralis*) in city parks and residential landscapes and guidance for future community science efforts" Kelly Ridenhour *et al.*, University of Georgia (USA)

14:50 – 15:20 - Firefly International Network (FIN) General meeting (open to all participants): activity & financial reports, announcement of 2022-2025 steering committee

15:20 – 15:50 - Conclusions and Closing ceremony

16:00 – 20:00 - Vila Nova de Gaia guided city tour with visit to the Port Wine Cellars and Douro Estuary Local Nature Reserve

20:00 – Symposium Dinner

23:30 - Bus to hotel

SATURDAY 18TH JUNE

Post-symposium tour – Train/Boat Cruise on the Douro River (all day excursion)

POSTERS

SESSION I: ECOLOGY AND BEHAVIOUR

"Through a dog's nose: can sniffer dogs become a new tool for glow-worm surveying?" Mira Van den Broeck *et al.*, University of Antwerp (Belgium)

"Feeding habits of Lampyrid species in Spain: catalogue of preys from biodiversity citizen science data" José Ramón Guzmán Álvarez *et al.*, Citizen Science web project "Has visto una luciérnaga?" www.gusanosdeluz.com (Spain)

"Femmes fatales (*Photuris lugubris*) feeding on a tourist attraction (*Photinus palaciosi*)" Yara