Annual Newsletter and Bibliography of the International Society of Plecopterologists

***Megaleuctra williamsae* Hanson, 1941 (larva)**
Smokies Needlefly
USA, Virginia, Grayson County, Whitetop Creek, Mud Creek Lane, 36.63930, -81.59629, 1 March 2025
(Credit – Chris Verdone)

PERLA – Volume 43

11 December 2025

Published at the University of Illinois, Illinois Natural History Survey, Champaign, Illinois, USA, 61820

Managing Editor: Scott A. Grubbs

TABLE OF CONTENTS

PERLA 43 EDITORIAL COMMITTEE

Acknowledgements

We are profoundly appreciative of Manuel Tierno de Figueroa (Granada, Spain) for supplying an extensive 2024–2025 bibliography. Society members continue to kindly contribute updates on research activities (see "Member News"). Finally, several members contributed images for consideration to represent the cover page of this volume. All other submitted images are provided at the end of this issue with full information as supplied by each individual.

International Society of Plecopterologists Policy

The International Society of Plecopterologists (ISP) no longer (since 2021) requires dues for receiving *Perla* nor for membership. *Perla* is presently completely electronic. Due to the size of the issue, Society members will be given notice when and where the issue is ready to be downloaded.

Membership is maintained by the Managing Editor as a Google Sheet and new names are added when they appear in articles added to Plecoptera Species File. Others may request addition to the list of members by sending an email request to the Managing Editor at scott.grubbs@wku.edu. The list is private but may be shared with those who have direct business with the Society (e.g., hosting the joint mayfly and stonefly meetings).

International Society of Plecopterologists Funds

R. Edward DeWalt continues as Treasurer for the International Society of Plecopterologists. Funds are managed by the University of Illinois. DeWalt will provide reports of income and expenditures annually or as requested from the Chair of the Standing Committee. Requests for disbursements may be sent by email to Dr. DeWalt (dewalt@illinois.edu). Please provide at least

one month to arrange for payment to recipients. A brief Treasurer's report will be provided to Society members with each *Perla* issue. Accounting of the funds beginning January 1 2024.

Date	Income	Expenditure	Balance	Notes
2024-01-01			15500.00	Initial balance transferred from CSU. Noted in Perla 41.
2024-03-01		9226.20	6273.80	Four student airline tickets purchased for 2024 MF/SF Joint Meeting attendance
2024-05-01	10088.59		16362.39	RED personal donation and stonefly book sales.
2024-08-01	1000.00		17362.39	Donations from individuals and silent auction proceeds from 2024 MF/SF Joint Meeting.
2024-09-18	28.00		17390.39	Stonefly book sales.
2025-01-28	2531.10		19921.49	Revenue from 2024 Joint Mtg.
2025-02-28	59.60		19981.09	Stonefly book sales.

Given rules at the University of Illinois for managing our "Custodial Funds", the University accepts donations to support the fund in the form of a check made payable to the "University of Illinois" with "Perla Fund" written in the memo line or as cash provided to the Treasurer in person. A receipt will be provided. The checks can be sent directly to the Treasurer at the following address. The funds will be delivered to fiscal personnel for deposit.

R. Edward DeWalt, Illinois Natural History Survey, University of Illinois, 1816 S Oak St., Champaign, Illinois, USA

Reminder - Plecoptera Species File moved to TaxonWorks

From R. Edward DeWalt – December 2024

Please remember to send new or missed stonefly papers as pdf for inclusion in Plecoptera Species File (PlecSF). If you notice omissions or errors in PlecSF, please let me know and I will fix them. Cite PlecSF in your papers where it makes sense. Citations help me to justify to supervisors my continued work on the file. PlecSF is sent to the Catalogue of Life which passes it to the Global Biodiversity Information Facility (GBIF). Because of this data sharing, all 1 million stonefly occurrence records in the GBIF use PlecSF as its taxonomic backbone for stoneflies.

Obituary – Dr. Ulrike Neu-Becker

14 April 1950 – 6 March 2025

Dr. Ulrike Neu-Becker
(21 May 2016)

We lost Dr. Ulrike Neu-Becker who must be known to every stonefly student as co-author of the Plecoptera Species File. However, Ulrike spent her professional life in entirely different fields. She had a doctorate in chemistry and contributed sections on tungsten, gold, and rare earths to the *Gmelin Handbook of Inorganic Chemistry*. This standard work had been published for a century, first as printed books, later in digital format. When the chemical industry dropped the *Handbook,* the Max-Planck-Society for the Advancement of Science (MPG) stepped in and offered alternative jobs in various MPG-institutes to the employees. Ulrike chose the *Limnologische Flussstation der MPG at Schlitz*, at that time a center of Plecoptera research with a near-complete collection of Plecoptera and the global stonefly literature on which Ulrike worked as long as her health permitted.

Mainly, however, Ulrike was an artist (with a love for owls !) drawing, painting, silk painting and artistic processing wood, marble, red sandstone and mainly carving soapstone sculptures. She was also a dedicated botanist and plant photographer. Unfortunately, unclear health problems that had started to show during her activity at Schlitz aggravated much, and rapidly. Despite all efforts, despite intense medical treatment and much time spent in hospitals and university clinics an efficient cure for her disease was not found.

Ulrike never gave up during the years of severe illness and much suffering. She leaves her husband, Dr. Werner Becker, who lovingly cared for her all the time.

Summary

2024 Joint Meeting of the XVII International Conference on Ephemeroptera and XXI International Symposium on Plecoptera

*Un Tempo Meraviglioso in Torino!**

Peter M. Grant
Southwestern Oklahoma State University, Weatherford, Oklahoma, USA
peter7grant@gmail.com

Note – this article first appeared in the December 2024 issue of *The Mayfly Newsletter*

The month of July 2024 will forever be remembered in Turin for two amazing events. The first was that stage 3 of the Tour de France finished in Turin on 1 July. The second, and certainly an even more memorable event, was that the city hosted the XVII International Conference on Ephemeroptera and the XXI International Symposium on Plecoptera, 21–26 July (Fig. 1)!

Summary – day-by-day

Sunday, 21 July

The conference was held in the Department of Life Sciences and Systems Biology of the University of Turin, located in the *centro città*. During that evening, participants who arrived early could obtain registration materials and set up posters.

Monday, 22 July

The registration desk was open early for attendees before the presentations began. This marked a time of six years since we had the opportunity to meet in person at one of our international conferences. Several accompanying persons found mornings to be a good time to gather and plan their own activities in Turin.

The meeting officially began in the *Aula Magna* at 9:00 with a welcome by the convenors: Manuel Jesús López Rodríguez and José Manuel Tierno de Figueroa (University of Granada), Romolo Fochetti (University of Tuscia), and Stefano Fenoglio (University of Turin) (Fig. 2). They reported that 95 people from 28 countries were in attendance. We were also welcomed by Prof. Consolata Siniscalco, Dean of the Faculty of Sciences, University of Turin, and Prof. Cristina Giacoma, President of the Italian Society of Zoology.

Next, John Brittain (Chair of the Standing Committee of the International Society of Plecopterologists), also welcomed the participants and thanked the organizing committee. One of the traditions at our meetings is to report on the passing of colleagues. John reported on the passing of Claudio Froehlich (Brazil), Rainer Rupprecht and Beate Wolf (Germany), Pierre-Paul (Peter) Harper (Canada), Il'ja Krno (Slovakia), and from the USA – Boris Kondratieff, Richard Bottorff, Larry Serpa, Oliver Flint, Donald Tarter, and Howard Rhodes.

Michel Sartori, Chair of the Permanent Committee for the International Conferences on Ephemeroptera, followed John. He also welcomed the participants and thanked the organizing committee. He announced that Helen Barber-James is a new member of the committee. Michel also announced that he will be resigning from the mayfly committee after serving on it for more than 30 years, and almost 20 years as chair. Since we were in Italy, Michel paid tribute to three Italian women who contributed significantly to the study of mayflies – Marta Grandi, Elvira Biancheri, and Elda Gaino. He also noted that one of our colleagues, Alexander Martynov, was absent because he is currently serving in the Ukrainian army. Michel reported on the passing of Tomáš Soldán (Czech Republic), Hugh Clifford (Canada), Terry Hitchings (New Zealand), and Edwin Masteller (USA).

The first invited lecture was presented by Núria Bonada from the University of Barcelona. She explained that Mediterranean regions are global hotspots of freshwater biodiversity that have been negatively impacted by human activities, sometimes over millennia. Unfortunately, current measures to protect this diversity have not been effective. Measures of protection that are more focused on Mediterranean rivers are needed, especially those rivers likely to be impacted by climate change.

A coffee break followed. These were held between sessions in the morning and afternoon on the second floor (Fig. 3). Attendees were served espresso, water, and several types of delicious baked goods. The cabinets along the hallway displayed a variety of zoological specimens, old scientific equipment, and biology books, which made for entertaining viewing. Breaks were also a great time to view posters, chat with colleagues, and view the silent auction items which were on display near the entrance to the *Aula Magna*.

Two of the oral sessions held on Monday dealt with the topics of biology, behavior, and reproduction. As this was a joint conference, each session included papers on mayflies and stoneflies. Topics in these morning sessions covered subimaginal wings and flight, metamorphosis, and even mayflies in literature and fine arts.

Lunches were provided for participants each day. We were offered a variety of delicious sandwiches, desserts, and drinks. These also took place on the second floor.

Taxonomy, systematics, and phylogeny were the themes for the afternoon session. Posters (Fig. 4) covered a variety of subjects and were available for viewing throughout the entire conference. There were 29 posters that dealt with mayflies and 13 with stoneflies. One poster, by John Brittain, reviewed the history of our societies' international conferences, including their proceedings, awards, and newsletters.

At the end of the day's presentations, we were treated to a musical welcome by the Polimnia Vocal Ensemble (Fig. 5). These women presented 18 opera songs from the works of such composers as Verdi, Mozart, Puccini, and Debussy. After this wonderful presentation, the participants were treated to a nice array of *pasticcini* along with champagne and wine.

Tuesday, 23 July

Today's events began with an impressive video about the importance of streams and rivers and how those have contributed to human cultures and our success as a species. The video included many fascinating close-ups of macroinvertebrates and their behaviors.

Today the themes for presentations were taxonomy, systematics, and phylogeny. Presentations again covered a variety of subjects including the diversity within genera (*Papuanatula*, *Centroptilum*, *Massartella*), phylogenomics, and DNA barcoding.

Craig Macadam and Astrid Schmidt-Kloiber led a workshop on the IUCN Red List. Both are co-chairs of the IUCN SSC Mayfly, Stonefly and Caddisfly Specialist Group. (Learn more about the group's work here.) Astrid provided information about infraFADA, which is a list of taxonomic experts who can confirm identifications. Next, participants were divided into two groups: Astrid and Wolfram Graf worked with the plecopterologists while Craig and Helen Barber-James with the ephemeropterists. The two groups discussed current conservation actions and future work needed on their orders.

After lunch, attendees assembled on the steps leading to the second floor to pose for the group photo (Fig. 6).

The last presentation of the day was by Chang-Fa Zhou, who proposed to host the 2027 joint conference in Nanjing, China, along with Yu-Zhou Du. He showed a video about the city of Nanjing featuring its history, culture, and tourist attractions. The meeting would follow the traditional format (e.g., mid- and post-conference tours, banquet) and be held 21–26 July.

The mayfly and stonefly committees then held their individual business meetings. Concurrently, local fly-tying experts were invited to demonstrate their techniques. There were several very nice displays of their flies. The experts also permitted attendees to try fly tying (Fig. 7). As noted in the first announcement of the conference, the oldest fly-fishing club in Italy is in Turin.

Wednesday, 24 July

We assembled for the mid-conference trip in the piazza just north of our conference site. We were distributed among five small buses, each with a distinct name. For example, bus #5 was the *Taeniopteryx* Star. The buses left promptly at 8:30 as promised (or as threatened, maybe?).

We left Turin and travelled along the plain of the Po River and then began to ascend the mountains. The drivers had to negotiate many switchbacks as they climbed to a higher altitude. The buses slowed considerably for these turns, but that allowed the passengers nice views of the abundant wildflowers growing on the sides of the mountain.

Our first destination was Monviso Natural Park, about a 2-hr ride southwest of Turin. We were given an introduction to the park by one of the staff (Fig. 8) and provided with informational brochures and a commemorative Monviso baseball cap. The streams in this area make up the headwaters of the Po River. We had the opportunity to hike around the area and collect in the nearby stream (Fig. 9).

Next, we boarded the buses and travelled to Ostana to visit the Alpine Stream Research Center, ALPSTREAM (Fig. 10). The staff at the center gave us a brief introduction to the facility, which not only operates as a research station, but also a cultural and educational center. The center treated us to antipasto, which was an unexpected but delicious surprise.

Then we boarded the buses for a short ride to the lunch site. We were served plain polenta, cheese polenta, sausage, dessert, and drinks. Nobody was complaining about being hungry on this trip!

After that delicious meal, we boarded the buses and rode to a lower elevation to view the artificial stream (Fig. 11). Stefano Fenoglio explained how the stream was constructed and how it can be used to study aquatic insects. We were encouraged to use the stream for our research. From there the group moved to the natural stream for more collecting adventures (Fig. 12) or hiked around the area and admired the vegetation and swarming mayflies. Finally, we boarded the buses one last time and returned to Turin in the early evening.

Thursday, 25 July

The next morning began with a reminder about the silent auction – today was the last day to make a bid. Next Manuela Rebora presented the second invited lecture which was entitled "Sensory Systems in Aquatic Insects". She reviewed the different sensory organs and complemented that discussion with SEM images of those organs. Sensory organs in immature and adult stages were also compared. Her presentation generated many questions and ideas for future studies.

The themes for presentations today were again taxonomy, systematics, and phylogeny and also included ecology, biomonitoring, and conservation later in the day. The silent auction officially ended in the afternoon and successful bidders picked up their prizes. This auction generated €1500 in funds for student travel scholarships! The stonefly and the mayfly committees held a joint business meeting to discuss a number of items, including the site of our next conference.

It is a tradition to hold a banquet and awards ceremony at our conferences, and this conference was no exception. Attendees gathered at the Esperia Restaurant, located on the shore of the Po River. We first enjoyed prosecco and *pasticcini* on the porch (Fig. 13) where we could watch kayakers and rowers skimming over the river. This was another opportunity to socialize with colleagues.

Next, we were invited into the dining room to take a seat (Fig. 14). The centerpiece of the room was a very large wooden model of a baleen whale suspended from the ceiling, which made for an interesting topic of conversation. Over the next two hours, we were served several courses of delicious food, which was representative of the local Regione Piemonte. Between courses, Michel Sartori and John Brittain used the time for announcements.

One of the first announcements was identifying the recipients of the student travel scholarships (Fig. 15). For the mayfly committee, the recipients were Jeniffer de Barros Cabral (Brazil) and Georgia Miles (Northern Ireland). For the stonefly committee, the recipients were Mellis Rippel (Brazil), Tácio Duarte (Argentina), and Abigail Kirkaldy (South Africa). Michel and John then thanked the convenors for organizing the conference and presented certificates of appreciation to the convenors and their staff.

Next, the site of the 2027 conference was announced: Nanjing, China! It was then time to announce the awards for student presentations (Fig. 16). The best mayfly presentations went to Jan Martini (Austria) for oral presentation and Takumi Yoshida (Japan) for poster presentation. The best stonefly presentations went to Anna Eichert (USA) for oral presentation and David Garoffolo Betschmann (Switzerland) for poster presentation.

Changes are taking place in both committees. In the mayfly committee, Koji Tojo was welcomed as a new member and will represent interests in the Asian region. Michel Sartori, who is the current chair of the committee, will step down at the end of the conference and Frederico Salles will take his place. In the stonefly committee, Maribet Gamboa will be a new member. John Brittain will step down as chair and Ed DeWalt will assume his duties.

The end of the dinner was near and that meant the lifetime achievement awards would be presented. For the mayfly awards (Fig. 17), Eduardo Domínguez, who received this award in 2018 at the Brazil conference, presented the first award to Javier Alba-Tercedor. Arnold Staniczek presented the second award to Nikita Kluge (*in absentia*). The third award was presented by Fred Salles to Michel Sartori. Michel noted that Jan Peters, who was a member of the very first group of recipients of this award at the 2008 Stuttgart conference, was present at this banquet. There were four recipients for the stonefly lifetime achievement awards (see *Perla* Volume 42, p. 18, for more details): Yu-Zhou Du, Ding Yang, Shigekazu Uchida, and Günther Theischinger.

With that, John Brittain bid the attendees a good night. But the entertainment was not quite over yet. As we were leaving the restaurant, we were treated to a lovely display of colorful lights on the Po River (Fig. 18).

Friday, 26 July - *Il giorno finale!*

The papers on this day dealt with quite a range of topics - ecology, biomonitoring, conservation, faunistics, and distribution. As an example of the geographic range of research presented at this meeting, the papers, in just this session, included studies conducted in 14 countries in 4 geographic regions - South America, Europe, Asia, and Oceania.

The last session of the conference had a paleontology focus. Of particular interest were the variety of techniques used in the studies including light microscopy, environmental SEM, micro-computed tomography (micro-CT), and 3D X-ray computed laminography. Some of the results presented in this session had ramifications for early Ephemeroptera evolution, and those led to some interesting exchanges.

After the last presentation, the convenors were invited to the stage and congratulated for this successful international joint conference. A slide show was then presented reviewing the events of the week, with the last slide stating, “We love stoneflies. We also love mayflies. We love all of you!”

Once again another joint conference was concluded. Research was shared. New friends were made. Old friendships renewed. And the culture of the local Regione Piemonte experienced.

Arrivederci, Italy; 你好 [hello], China!

For more information about the conference: the program, convenors, and scientific and organizing committees are reported (see **Appendix**). Photos presented below are also available for viewing on the IJMEP2024 Facebook page and at this link provided by Fred Salles.

Fig. 1. Conference banner (Credit – K. Tojo)

Fig. 2. Convenors welcome participants (IJMEP 2024)

Fig. 3. Coffee break (IJMEP 2024)

Fig. 4. Poster session (Credit – P. Grant)

Fig. 5. Polimnia Vocal Ensemble (Credit – B. Boonsoong)

Fig. 6. Group photo of conference participants (IJMEP 2024)

Fig. 7. Tying a fly (Credit – K. Tojo)

Fig. 8. Gathering at Monviso Natural Park (Credit – J. Alba-Tercedor)

Fig. 9. Collecting in Monviso Natural Park (Credit – F. Salles)

Fig. 10. Group photo at ALPSTREAM (IJMEP 2024)

Fig. 11. ALPSTREAM's artificial stream (Credit – J. Alba-Tercedor)

Fig. 12. Second collecting opportunity (Credit – J. Alba-Tercedor)

Fig. 13. Gathering on the porch before the banquet (Credit – P. Grant)

Fig. 14. Dinner at the Esperia Restaurant (Credit – P. Grant)

Fig. 15. Recipients of the student travel scholarships (from L–R): Georgia Miles, Jennifer de Barros Cabral, Michel Sartori, and John Brittain (presenters), Mellis Rippel, Tácio Duarte, and Abigail Kirkaldy (Credit – A. Staniczek)

Fig. 16. Student presentation award recipients (from L–R): David Garoffolo Betschmann, Anna Eichert, Takumi Yoshida, Jan Martini, and John Brittain and Michel Sartori (presenters) (Credit – J. Alba-Tercedor)

Fig. 17. Mayfly lifetime achievement award recipients (from L–R): Arnold Staniczek (presenter), Fred Salles (accepted the award for Nikita Kluge), Michel Sartori, Javier Alba-Tercedor, and Eduardo Domínguez (presenter) (Credit – A. Staniczek)

Appendix

2024 Joint Meeting of the XVII International Conference on Ephemeroptera and XXI International Symposium on Plecoptera: Convenors, Scientific Committee, Organizing Committee, and Programme of activities

Convenors

Stefano Fenoglio, Università di Torino (Italy)
Romolo Fochetti, Università della Tuscia (Italy)
Manuel J. López-Rodríguez, Universidad de Granada (Spain)
J. Manuel Tierno de Figueroa, Universidad de Granada (Spain)

Scientific Committee

Javier Alba-Tercedor, University of Granada (Spain)
Carlo Belfiore, Tuscia University (Italy)
John E. Brittain, Natural History Museum, University of Oslo (Norway)
Tomáš Derka, Comenius University Bratislava (Slovakia)
R. Edward DeWalt, University of Illinois, Illinois Natural History Survey (USA)
Stefano Fenoglio, University of Turin (Italy)
Romolo Fochetti, Tuscia University (Italy)
Manuel Jesús López Rodríguez, University of Granada (Spain)
Peter Manko, University of Prešov (Slovakia)
Dávid Murányi, Eszterházy Károly Catholic University (Hungary)
Michel Sartori, Museum of Zoology, Biophore University of Lausanne (Switzerland)
Arnold H. Staniczek, Stuttgart State Museum of Natural History (Germany)
J. Manuel Tierno de Figueroa, University of Granada (Spain)

Organizing Committee

Tiziano Bo, University of Turin (Italy)
Eulogio Corral Arredondo, University of Granada (Spain)
Elisa Falasco, University of Turin (Italy)
Stefano Fenoglio, University of Turin (Italy)
Romolo Fochetti, Tuscia University (Italy)
Giorgia Ercole, University of Turin (Italy)
Alex Laini, University of Turin (Italy)
Manuel Jesús López Rodríguez, University of Granada (Spain)
Anna Marino, University of Turin (Italy)
Manuel Merino Ceballos, University of Granada (Spain)
J. Manuel Tierno de Figueroa, University of Granada (Spain)

Programme of activities

Sunday 21 July

- 16:00–18:00: Registration, poster placement and welcome to the participants

Monday 22 July

- 08:00-09:00: Registration, poster placement and welcome to the participants
- 09:00–10:00: Opening ceremony
- 10:00–11:00: Plenary conference "Freshwater biodiversity in Mediterranean climate regions: current status and future trends" Prof. Nuria Bonada
- 11:00–11:30: Coffee break
- 11:30–12:30: Oral presentations, Session 1 **Biology, Behaviour, Reproduction (Chairman P. Grant)**
- 11:30–11:50: Martini, J., Schwingshackl, T., Singer, G., Vitecek, S. *Prosopistoma pennigerum* in the Albanian Vjosa River network: notes on ecology, dispersal and reproduction
- 11:50–12:10: Dominguez, E., Staniczek, A.H. Subimaginal wing morphology and instant flight capabilities after last instar moulting in mayflies
- 12:10–12:30: Monaghan, M.T. Growth rates and the evolution of insect metamorphosis
- 12:30–14:00: Lunch
- 14:00–15:30: Oral presentations, Session 2 **Biology, Behaviour, Reproduction (Chairman E. DeWalt)**
- 14:00–14:20: Vilenica, M., Tierno de Figueroa, J.M., Lopez-Rodriguez, M.J., Ivković, M. Long-term study on Plecoptera emergence from a Dinaric karst tufa barrier (Croatia)
- 14:20–14:40: Nelson, C.R., Birrell, J.H., Frandsen, P.B., Eichert, A.L. The Natural and Human history of the giant stonefly, *Pteronarcys californica* Newport, 1848 (Plecoptera: Pteronarcyidae)
- 14:40–15:00: Baricalla, A., Ferreyros, M., Bianchi-Coletta, M., Lavatti, N., PerezNieto, C., del Valle, D., San Martin, E.M., Layana, C., Bea, D., Dromaz, M., Kuhnlein, R., Pessacq, P., Jackle, H., Rivera-Pomar, R. The genome of *Andiperla morenensis* (Plecoptera, Gripopterygidae)
- 15:00–15:15: San Martin, E.M., Grimolizzi, L., Baricalla, A., Layana, C., Jackle, H., Pessacq, P., Rivera-Pomar, R. The response to temperature increase of *Andiperla*
- 15:15–15:30: Staniczek, A.H., Dominguez, E. An update on the history of mayflies (Insecta: Ephemeroptera) in literature and fine arts
- 15:30–16:00: Coffee break
- 16:00-17:00 Oral presentations, Session 3 **Taxonomy, Systematics, Phylogeny (Chairman J-L. Gattolliat)**
- 16:00–16:15: Takenaka, M., Niimi, T. Establishment of methods for developmental genetics using mayflies: Attempts from rearing systems establishment to genetic functional analysis
- 16:15–16:30: Zhou, C.F. The possible primitive venation of mayflies (Insecta: Ephemeroptera)
- 16:30–16:45: Muranyi, D., Gamboa, M., Burton, D.K., Hwang, J.M., Li, W., Mo, R., Cao, Z., Watanabe, K. Revision of the winter stonefly genus *Eucapnopsis* Okamoto, 1922 (Plecoptera, Capniidae)

Monday 22 July (cont.)

- 16:45–17:00: Kirkaldy, A.P., Villet, M.H., Barber-James, H.M. Africa gains two new families: the value of vouchered survey samples in Plecoptera systematics
- 17:00–18:00: Poster presentations
- 18:00–20:30: Musical welcome with a selection of Italian Opera Songs performed by Polimnia Chorus followed by an evening cocktail party

Tuesday 23 July

- 08:30–09:30: Registration and poster placement
- 09:30–11:10: Oral presentations, Session 4 **Taxonomy, Systematics, Phylogeny (Chairman D. Murányi)**
- 09:30–09:50: Denes, A., Denes, A-L., Keresztes, L. DNA Barcoding Initiative for Plecoptera of Romania: focusing on a biodiversity hotspot of aquatic insects, the Apuseni Mountains
- 09:50–10:10: Kaltenbach, T., Gattolliat, J-L. *Papuanatula*, another megadiverse genus from New Guinea (Ephemeroptera, Baetidae)
- 10:10–10:30: Cortes, I.C.H., Takiya, D.M., Hoehne, L., Souto, P.M., Lima, M.M., Salles, F.F. *Massartella* Lestage (Ephemeroptera, Leptophlebiidae): another mayfly genus represented by few species or a new case of cryptic diversity?
- 10:30–10:50: Eichert, A.L., Ware, J. Exploring the systematics of Plecoptera through Anchored Hybrid Enrichment
- 10:50–11:10: Ogden, H., Millar, T., Staniczek, A.H, Salles, F., Jacobus, L., Dominguez, E., Barber-James, H.M. Gattolliat, J-L., Sartori, M. Phylogenomics and evolution of Mayflies (Ephemeroptera)
- 11:10–11:30: Coffee break
- 11:30–12:30: Participating in assessment of the conservation status of mayflies and stoneflies for the IUCN Red List (Craig Macadam)
- 12:30–14:00: Lunch
- 14:00–15:00: Oral presentations, Session 5 **Taxonomy, Systematics, Phylogeny (Chairman A.H. Staniczek)**
- 14:00–14:20: Laini, A., Fenoglio, S., Bo, T. DNA barcoding reference libraries of Italian Plecoptera: a gap analysis
- 14:20–14:40: Vuataz, L., Rutschmann, S., Gattolliat, J-L., Sartori, M., Wagner, A., Monaghan, M.T. Revealing hidden diversity: establishing A DNA barcoding reference database for the Ephemeroptera of Europe
- 14:40–15:00: Gattolliat, J-L., Godunko, R., Kaltenbach, T., Martynov, A.V., Vuataz, L. *Centroptilum*: the rise and fall of a golden boy (Ephemeroptera, Baetidae)
- 15:00–15:30: Presentation of next meeting proposals
- 15:30–16:00: Coffee break
- 16:00–17:00: Poster presentations
- 17:00–18:00: Meetings of the Permanent Committee of Ephemeropterologists
- 18:00–19:00: Meetings of the Permanent Committee of Plecopterologists
- 17:00–19:00: Stands with fly tying and fly-fishing experts

Wednesday 24 July

- 08:30–18:00: Mid conference field trip to the Alps in the Monviso Natural Park area where the ALPSTREAM (Alpine Stream Research Center, Ostana) is located

Thursday 25 July

- 09:00–10:00: Plenary conference "Sensory systems in aquatic insects" Prof. Manuela Rebora
- 10:00–11:00: Oral presentations, Session 6 **Taxonomy, Systematics, Phylogeny (Chairman H. Barber-James)**
- 10:00–10:20: Almeida, L. H., Duarte, T., Pessacq, P., Bispo, P. Redefining boundaries: advances and challenges in the integrative taxonomy of Plecoptera in South America
- 10:20–10:40: Buffagni, A., Cazzola, M., Cislaghi, S., Cardoni, S., Erba, S., Belfiore, C. Approaching the Pandora box of Italian mayflies: ideas for the next future
- 10:40–11:00: Rippel, M.L.S., Almeida, L.H., Prando, J.S., Avelino-Capistrano, F., Takiya, D.M., Salles, F.F. Taxonomic review of *Guaranyperla* Froehlich (Plecoptera: Gripopterygidae): Unveiling the diversity and complexity of a unique genus
- 11:00–11:30: Coffee break
- 11:30–12:30: Oral presentations, Session 7 **Taxonomy, Systematics, Phylogeny, Ecology, Biomonitoring, Conservation (Chairman F.F. Salles)**
- 11:30–11:50: Rehman, A., Du, Y. Taxonomy and distribution of Chloroperlidae (Plecoptera) from China with COI phylogenetic analysis
- 11:50–12:10: Giusto, C., Bellati, A., Belfiore, C. Changes in the Ephemeroptera communities of the Mignone River (Central Italy) over 40 years: taxonomic and ecological implications
- 12:10–12:30: Buffagni, A., Cazzola, M., Erba, S., Demartini, D., Armanini, D.G., Cislaghi, S., Quadroni, S. Are endemic mayflies of Sardinia Island vulnerable to extinction due to habitat and climate-related changes?
- 12:30–14:00: Lunch
- 14:00–15:00: Oral presentations, Session 8 **Ecology, Biomonitoring, Conservation (Chairman J. Alba-Tercedor)**
- 14:00–14:15: Kim, W., Lim, C., Park, S.H., Bae, Y.J. Morphometric analysis of Baetidae (Ephemeroptera) in relation to habitat adaptation
- 14:15–14:30: Yanai, Z. Following the current: the tragedy of a rheophilic mayfly
- 14:30–14:45: Cabral, J., De Sa, A., Rodrigues, M., Mariano, R. The importance of Agroforestry Systems (Cabruca) in maintaining the biodiversity of Ephemeroptera
- 14:45–15:00: Piersanti, S., Rebora, M., Salerno, G., Vitecek, S., Anton, S. Antennal sensilla and brain morphology in stoneflies
- 15:00–15:30: Silent Auction
- 15:30–16:00: Coffee break
- 16:00–17:00: Poster presentations
- 17:00–17:45: Common meeting of the Permanent Committees of the Ephemeropterologists and Plecopterologists
- 20:00: Social dinner and awards banquet (https://esperiatorino.it/)

Friday 26 July

- 09:00–10:30: Oral presentations, Session 9 **Ecology, Biomonitoring, Conservation (Chairman E. Domínguez)**
- 09:00–09:20 Ozolins, D. First nationally threatened mayfly (Ephemeroptera) species in Latvia assessed according to the IUCN criteria
- 09:20–09:40 Manko, P., Macko, P., Michalkova, J., Manko, P. (junior), Derka, T. From expert guesswork to data-driven assessments: revising the IUCN status of Slovakian Ephemeroptera
- 09:40–10:00: Duarte, T., Martin, G., Pessacq, P. Contributions to the conservation of Plecoptera (Insecta) in Argentine Patagonia: taxonomy and distribution in the context of climate change
- 10:00–10:20: Drukker, D. Photo identification of mayflies (Ephemeroptera) enables citizen scientists to collect distribution data
- 10:30–11:00: Coffee break
- 11:00–12:30: Oral presentations, Session 10 **Ecology, Biomonitoring, Conservation, Faunistics, Distribution (Chairman C.R. Nelson)**
- 11:00–11:20: Brittain, J.E., Heland, N.K.S. Distribution of Plecoptera, Ephemeroptera and Trichoptera in a Norwegian mountain stream system in relation to environmental variables
- 11:20–11:40: Vallefuoco, F., Vanek, M., Schwingshackl, T., Bottarin, R. Ephemeroptera and Plecoptera diversity in alpine rivers: insights from the Biodiversity Monitoring South Tyrol program
- 11:40–12:00: Schwingshackl, T., Martini, J., Singer, G., Vitecek, S. Tiny but mighty mayfly! *Prosopistoma pennigerum* (Muller 1785) as flagship species for the Vjosa Wild River National Park
- 12:00–12:20: Sartori, M., Salles, F.F. The Leptophlebiidae of New Guinea (Ephemeroptera)
- 12:30–14:00: Lunch
- 14:00–15:00: Oral presentations, Session 11 **Faunistics, Distribution (Chairman C. Zhou)**
- 14:00–14:20: Macko, P., Šamulkova, M., Čiamporova-Zaťovičova, Z., Čiampor, Jr F., Svitok, M., Derka, T. Is there really nothing left to do? What we know and don't know about mayflies of one "well-researched" European country
- 14:20–14:40: Schletterer, M., Martynovchenko, F.A., Shapovalov, M.I., Kuzovlev, V.V., Cherchesova, S.K., Palatov, D. Recent records of the mayfly *Prosopistoma* Latreille, 1833 (Ephemeroptera, Prosopistomatidae) in Western Russia
- 14:40–15:00: Barber-James, H.M., Miles, G., Kenny, A. Diversity of Ephemeroptera and Plecoptera species in Ireland, what new discoveries await?
- 15:00–15:30: Coffee break
- 15:30–17:00: Oral presentations, Session 12 **Paleontology (Chairman P. Manko)**
- 15:30–15:50: Benhadji, N., Staniczek, A.H, Godunko, R. The heritage of Georges Demoulin: A reinvestigation of his fossil Heptageniidae (Ephemeroptera)
- 15:50–16:10: Alba-Tercedor, J. Experiences studying fossil Ephemeroptera preserved in amber by means of micro-computed tomography (micro-CT)

Friday 26 July (cont.)

- 16:10–16:30: Sroka, P., Singh, H. The fossil mayflies (Ephemeroptera) from the Indian early Eocene Cambay amber: survivors from Gondwana?
- 16:30–16:50: Staniczek, A.H., Sroka, P., Prokop, J., Hanschke, D., van de Kamp, T., Godunko, R.J. When ancient fossils meet new technology: Coxoplectoptera (Insecta: Ephemerida) studied by 3D X-ray computed laminography
- 16:50–17:10: Prokop, J., Rosova, K., Leipner, A., Sroka, P. Thoracic and abdominal outgrowths in Palaeodictyoptera: a clue to the common ancestor of winged insects?
- 17:10: Concluding remarks and closure

Fig. 18. Lights on the Po River (Credit – J. Alba-Tercedor)

Announcements

Draft agenda
14th North American Plecoptera Symposium
12–14 May 2026
Highlands Biological Station
Western Carolina University
Highlands, North Carolina, USA

The North American Plecoptera Society will host the 14th North American Plecoptera Symposium during May 12–14 2026 at the Highland Biological Station in Highlands, North Carolina (35.05389, -83.18938). We invite you to join us in scenic Highlands—one of the highest elevation towns in the Appalachians—for a gathering of stonefly researchers and enthusiasts. This meeting offers a chance to share research, spark new collaborations, reconnect with colleagues, and, of course, collect some *sweet* stoneflies!

Host: Chris Verdone, North Carolina Department of Environmental Quality, Biological Assessment Branch. *Email:* verdonec@gmail.com, *Phone*: 720-934-5187.

Day 1 – Tuesday, May 12th

- Check in at Highlands Biological Station, 10:00 a.m.–11:30 a.m.
- Lunch/meeting welcome and participant introductions, 12:00–1:00 p.m.
- History of the Highlands Biological Station, 1:00–1:30 p.m.
- NAPS 2029 proposal, 1:30–1:40 p.m.
- Stonefly presentations, 1:45–4:45 p.m.
- Dinner at Highlands Biological Station 5:00–6:00 p.m.
- Optional local collecting, 6:30 p.m. until dark

Day 2 – Wednesday, May 13th

- Breakfast and coffee at Highlands Biological Station, 8:00–9:00 a.m.
- Stonefly presentations, 9:00–11:00 a.m.
- Lunch at Highlands Biological Station, 11:00 a.m.–12:00 p.m.
- Stonefly presentations, 12:00–3:00 p.m.
- Photo editing workshop, 3:00–5:00 p.m.
- Dinner at Highlands Biological Station, 5:30–6:30 p.m.
- Stonefly trivia, 6:30 –8:30 p.m.

Day 3 – Thursday, May 14th (optional)

- Breakfast and coffee at Highlands Biological Station, 8 a.m.
- Stonefly presentations (if needed), 9:00–11:00 a.m.
- Meeting summary and business meeting, 11:00–11:30 a.m.
- Field trip (Wayah Bald) with to-go boxed lunch, 11:30–5:00 p.m.
- Dinner in town, 6:00 p.m.

Registration

The anticipated maximum cost for the meeting, including meals (except Thursday dinner), is $254/person. There is a two-night option for attendance at $200/person, which includes breakfast Thursday morning. An announcement email with a link to the registration page will be sent out on December 1, 2025, and I will be accepting registrations until March 31, 2026.

Housing

Residences are on site and have a hostel-like atmosphere with bedrooms that sleep 2–4 people. All station beds are extra-long twins. Attendees will need to provide their own sheets, pillow and towels. Each residence has access to a fully equipped kitchen, laundry, and common areas. See Highlands Biological Station - visitor guide

Meals

Meals will be provided by a catering service. However, we will be heading to town for dinner on the last night (this meal is not included in the registration cost). Please email verdonec@gmail.com if vegetarian or vegan meals are required and if you have a food allergy. I will be happy to accommodate your needs.

Submission of abstracts

Abstracts will be accepted February 1 through April 15, 2026. Please send abstracts to verdonec@gmail.com

Presentations

Options include oral and poster presentations. Oral presentations should be 15–20 minutes, but longer presentations may be given if requested. Presentations may be emailed to verdonec@gmail.com or brought to the meeting on an external drive.

Swag

A meeting themed T-shirt ($20) and hat ($15) will be available for purchase. Orders may be made at registration. Payment for the shirt or hat will be accepted at the meeting by cash or check. Additional swag items will be available through a silent auction. Proceeds from the auction will go towards funding student scholarships for the next NAPS meeting.

Travel

Highland Biological Station in Highlands, North Carolina (35.05389, -83.18938).

- Greenville-Spartanburg International Airport – 2 hours drive time
- Hartsfield-Jackson Atlanta International Airport – 2.5 hours drive time
- Charlotte Douglas International Airport – 3.25 hours drive time

Final note

We can accommodate up to 30 people at the Highlands Biological Station. We encourage recipients of PERLA to forward this invitation to fellow workers that are involved in any aspect of stonefly biology. There is always room for one more!

Member News

John E. Brittain – Natural History Museum, University of Oslo, P.O. Box 1172, Blindern, N-0318 Oslo, Norway, j.e.brittain@nhm.uio.no

A brief history of the development of the International Symposia on Plecoptera, Lifetime Achievement Awards, and Newsletters

As an active participant of stonefly symposia since the 1970s, I thought it appropriate to sketch the history of the International Symposia on Plecoptera and related themes. Already in 1956, the first Symposium on Plecoptera was held in Lausanne, Switzerland. convened by Jaques Aubert (Fig. 1). This was purely a European affair. However, subsequent symposia were more international, and the second symposium was organised in 1960 by Ernst Pomeisl within the International Congress of Entomology in Vienna Thereafter followed international symposia in Germany, Sweden, USA, Germany, Japan, France, and USA (Table 1).

Table 1. The International Symposia on Plecoptera

Year	Location	Convenors
1956	Lausanne, Switzerland	Jaques Aubert
1960	Vienna, Austria	Ernst Pomeisl
1963	Plön, Germany	Joachim Illies
1968	Abisko, Sweden	Per Brinck & Staffan Ulfstand
1974	Washington, D.C., USA	Richard W. Baumann
1977	Schlitz, Germany	Joachim Illies & Peter Zwick
1980	Nara, Japan	Teizi Kawai
1983	Toulouse, France	Claude Berthélemy
1992	Wisconsin, USA	Stanley W. Szczytko

In 1987, scientists studying mayflies and stoneflies were invited to a joint conference in Marysville, Victoria, Australia by the convenor Ian Campbell. This was the first conference "down under" and was held in February to be closely linked to the Limnology (SIL) conference in New Zealand. In addition, a joint mayfly stonefly conference maximized the number of attendees, which for many was a long journey. This conference paved the way for the many future Joint Conferences. Initially, there were separate sessions for mayflies and stoneflies, but the Joint Conferences became more and more integrated as time went on and the two Permanent Committees have cooperated extensively on the Joint Conferences, travel scholarships, and other matters of mutual interest.

Conferences were subsequently held in Switzerland, Argentina, Italy, USA, Germany, Japan, UK, and Brazil (Table 2; Fig. 2). The next Joint Meeting after Brazil was scheduled for 2021 in Colorado, USA. However, the problems with travel during the COVID-19 pandemic meant that a decision was made to postpone until 2022. However, in 2022 there were still difficulties with the aftermath of the pandemic, so it was decided to hold an online conference in July 2022, streamed from Illinois, USA. This Joint Conference was joined by many scientists, notably by students unable to finance intercontinental travel. Nevertheless, it was good to get back to a person-to-

person conference at the 2024 Joint Meeting of the 17th International Conference on Ephemeroptera and the 21st International Symposium on Plecoptera in Turin, Italy.

Table 2. The Joint Plecoptera and Ephemeroptera Conferences

Year	Location	Convenors
1987	Marysville, Australia	Ian Campbell
1995	Lausanne, Switzerland	Michel Sartori & Peter Landolt
1998	Tucumán, Argentina	Eduardo Dominguez
2001	Perugia, Italy	Elda Gaino
2004	Polson, Montana, USA	Jack Stanford & Rick Hauer
2008	Stuttgart, Germany	Arnold H. Staniczek
2012	Wakayama, Japan	Yasuhiro Takemon
2015	Aberdeen, UK	Craig Macadam and Jenni Stockan
2018	Aracruz, Brazil	Frederico F. Salles
2022	Remote-Online	R. Edward DeWalt & Boris C. Kondratieff
2024	Turin, Italy	Stefano Fenoglio, Romolo Fochetti, Manuel J. López-Rodríguez & J. Manuel Tierno de Figueroa

During the 4th International Symposium in Sweden in 1968 it was agreed to form an organisation, the International Society of Plecopterologists. Publication of a newsletter, *Perla*, was suggested and the editors were Richard Baumann and Peter Zwick. The first issue came out in 1974 (Fig. 3), and subsequent issues were published every two years or so. In 1992, participants of the International Symposium in Wisconsin, USA elected Ken Stewart as Managing Editor and from that point onward *Perla* was published on an annual basis. Earlier *Perla* was gratis, but in 1994, a change in subscription policy was announced on account of the many subscribers at the same time as the costs of printing *Perla* had escalated. Subscribers were asked to make a US$5 or US$10 per year contribution to help defray the costs of publishing and mailing of *Perla* or request a waiver if sufficient institutional or personal funds were not available. Ken Stewart was managing editor of *Perla* from 1993 to 2004, then Boris Kondratieff took over until 2020. In 2021, Ed DeWalt took over as managing editor and the decision was made to go digital in response to increasing publication costs. From 2024 and onwards Scott Grubbs agreed to become the next Managing Editor of Perla.

In Perla 12 (1994), Peter Zwick made a request on behalf of the Standing Committee for the International Symposium on Plecoptera for donations to support attendance and participation of international colleagues at the Symposium in Lausanne, Switzerland. These funds, and together with contributions from the organizers of the Lausanne Symposium, made possible the participation of several colleagues that would otherwise not have been able to attend. In subsequent years *Perla* dues and donations were used not only to help pay the costs of publishing and mailing Perla and for Lifetime Achievement Award plaques, but used under the direction of the Standing Committee for the International Symposium on Plecoptera to help early career students attend international symposia. These funds were formalized into the *Perla* Fund. The Fund still receives donations from the stonefly community, and in recent years a major

contribution to the fund has been made from the silent auctions at the Joint Conferences. The *Perla* fund is now placed with the University of Illinois under the treasureship of Ed DeWalt.

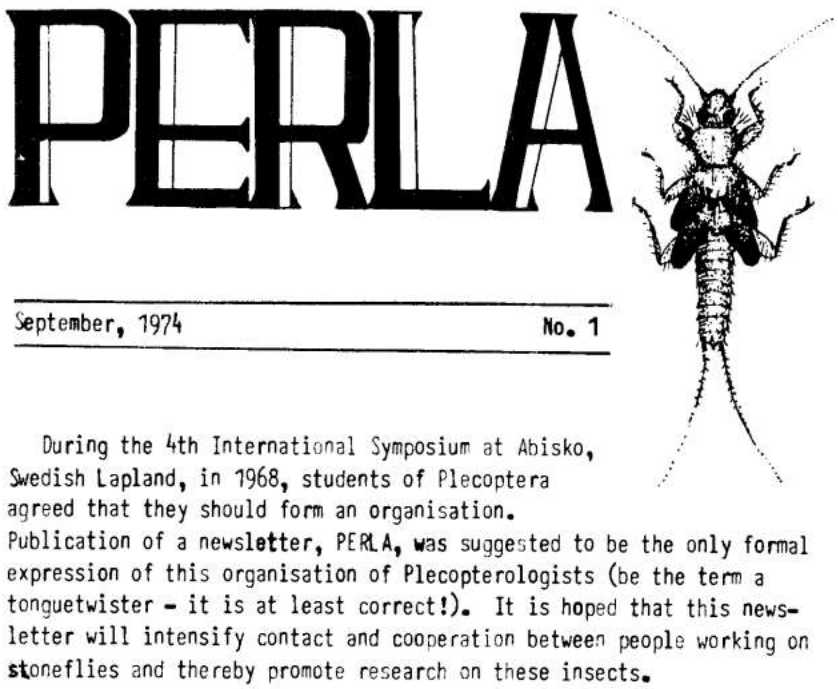
In the early 1990s it was decided to instigate an award to mark the achievements of foremost plecopterologists by presenting the Lifetime Achievement Award in recognition of "outstanding lifelong work and contributions to Plecopterology" (Table 3; Fig. 4).

Table 3. Plecoptera Lifetime Achievement Award recipients throughout the years

Year	**Recipients**
1992	William (Bill) E. Ricker, H. B. N. (Noel) Hynes
1995	Jaques Aubert, Teizi Kawai, Ian McLellan
1998	Claudio Froelich, Lidija Zhiltzova, Peter Zwick
2001	Kenneth W. Stewart, Carlalberto Ravizza, Elisabetta Ravizza Dematteis
2005	Richard W. Bauman, William (Bill) P. Stark
2008	Peter P. Harper, Ignac Sivec
2012	John F. Hanson, Ju Isobe, John E. Brittain
2015	Boris C. Kondratieff, Stanley W. Szczytko
2018	Romolo Fochetti, Charles Nelson, Rainer Rupprecht
2024	Yu-Zhou Du, Shigekazu Uchida, Ding Yang, Günther Theischinger

Fig. 1. Participants of the First Symposium om Plecoptera in Lausanne. J. Illies, J. Rauser, N. Hynes, C. Consiglio, P. Brinck, J. Aubert, and E. Pomeisl (from L–R)

Fig. 2. Plecopterologists at the Joint Conference in Brazil.



PERLA

September, 1974 No. 1

During the 4th International Symposium at Abisko, Swedish Lapland, in 1968, students of Plecoptera agreed that they should form an organisation. Publication of a newsletter, PERLA, was suggested to be the only formal expression of this organisation of Plecopterologists (be the term a tonguetwister – it is at least correct!). It is hoped that this newsletter will intensify contact and cooperation between people working on stoneflies and thereby promote research on these insects.

Fig. 3. The first issue of Perla from 1974.

Fig. 4. Four recipients of the Lifetime Achievement Award – Bill Stark, Richard Baumann, Carlalberto Ravizza, and Elisabetta Dematteis Ravizza (from L–R)

– – – – – –

Theodore Z. Cook, University of Illinois, Department of Entomology. tcook10@illinois.edu,

The stoneflies of West Virginia, USA

This year I completed my remaining fieldwork in West Virginia as part of the project to create a new distributional atlas of Plecoptera in the state. I have assembled a dataset comprising over 6,000 stonefly records from 1,205 unique locations. In the process I also digitized the contents of approximately 200 vials from the C. P. Gillette Museum of Arthropod Diversity, Colorado State University, Fort Collins, CO, USA and 300 vials from the National Museum of Natural History, Washington D.C., USA during 2025. These records, as well as the rest of the dataset, will be made publicly available through GBIF after the completion of my master's thesis.

I used this dataset to generate distribution maps for most previously reported species and several new state records. I am in the process of conducting diversity analyses for West Virginia and its watersheds according to different variables. I hope to publish the dataset with appropriate tables and figures at the end of 2025. Lastly, I am beginning a project to describe in greater detail the eastern Nearctic genus Malirekus, including more extensive descriptions of adults and nymphs and COI sequences from both species.

– – – – – –

Anna Dénes, Hungarian Department of Biology and Ecology, Faculty of Biology and Geology, Babeş-Bolyai University, Clinicilor 5-7, Cluj-Napoca, 400006, Romania

Report on the European Plecoptera Workshop 2025

The workshop was held between 23–28 June 2025 at the Babeș-Bolyai University research station, the Apáthy István Education and Research Center, in Senetea, Harghita County, at the foothills of the Eastern Carpathians, Romania. With a total of 16 participants, including experienced taxonomists and students from Babeș-Bolyai University and Eszterházy Károly Catholic University, we enjoyed a meaningful and friendly event.

Our daily schedule consisted of field collection trips during the first part of the day, followed by shared dinners—thanks to our talented "cook", Simon Ferenc—and evening lectures on various topics related to stonefly research. According to the workshop program, our activities unfolded as follows:

Day 1 (Monday): Participants arrived in Senetea and explored nearby freshwater habitats, including the upper section of the Mureș River and several small brooks at around 780 m elevation. During the first two days, we also hosted an exhibition on the Tisza mayfly (*Palingenia longicauda*) at the research center, which opened on Monday.

Day 2 (Tuesday): In the morning, Anna Dénes and Lujza Keresztes officially opened the workshop. We then headed to a valley near Remetea in the direction of Lăpușna, where we collected numerous stoneflies from brooks and springs between 930–1150 m elevation. Back at the center, Sándor Egri inaugurated the exhibition with a talk on the status of the Tisza mayfly in Hungary, followed by A. Dénes's presentation, "Updated Romanian Plecoptera Checklist – Recently discovered new *Zwicknia* and *Nemoura* species from the Carpathians."

Day 3 (Wednesday): We traveled to Piatra Singuratică, near Bălan, in Cheile Bicazului–Hășmaș National Park. There we hiked and collected specimens from a unique cold spring at 1400 m and from brooks at the mountain's foothills. In the late afternoon, Dávid Murányi gave a lecture

on the revision of the Capniidae family, followed in the evening by a presentation on his experiences in Japan.

Day 4 (Thursday): Our field trip led us to the spectacular rocky valley of Cheile Bicazului, Kupás Brook, and the brooks around Roșu Lake, all within Cheile Bicazului–Hășmaș National Park. We conducted intensive collecting from both brooks and springs. In the afternoon, Alexandre Ruffoni presented "Larvae of French Plecoptera (Book Presentation) and *Isoperla* of the Pyrenees." The day concluded with a grilled trout dinner from a local fishery and lively conversations around a campfire, while some participants began identifying collected material.

Day 5 (Friday): On our final field trip, we visited the Sugó Cave near Voșlăbeni, close to our base, where we collected from brooks and the cave's spring. We also explored the accessible part of the cave. In the evening, after enjoying a delicious truffle dinner prepared by Ferenc, we listened to Gilles Vinçon's detailed and captivating presentation on exploring the Plecoptera fauna of the Caucasus.

Day 6 (Saturday): We closed the workshop in the morning, reflecting on a week rich with scientific discovery, stonefly collections, and shared memories. A small group then continued with a post-workshop field trip to the Făgăraș Mountains along the famous Transfăgărășan Road in the Southern Carpathians. Despite heavy rain, we hiked up to Capra Lake at 2250 m, collecting from its springs and brooks, as well as from lower brooks along the road until sunset.

Thanks to the diligence of A. Ruffoni, G. Vinçon, D. Murányi and K. Földi, we are able to present the species list from the different collection sites (Table 1 – see next page).

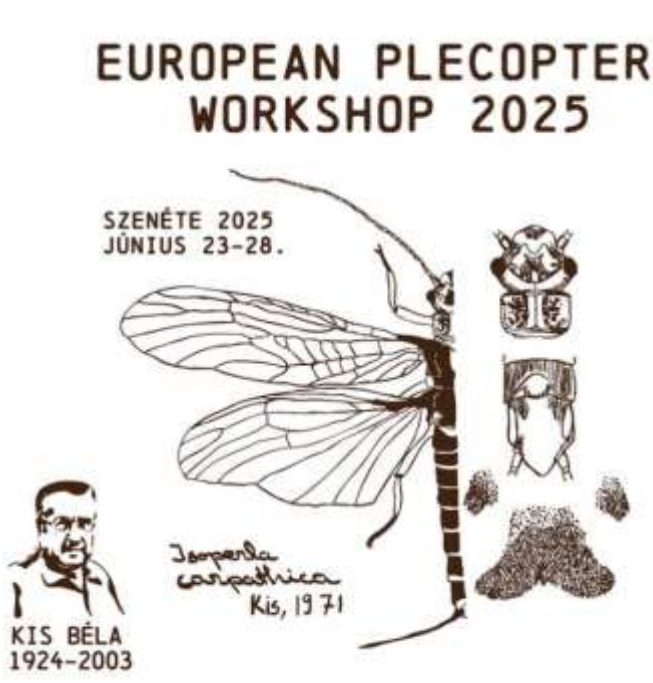


Table 1. Species distribution by localation. Specimen abundance: ! = 1 ; + = 2–5 ; x >5. Identification by: black = G. Vinçon, red = A. Ruffoni, blue = D. Murányi and K. Földi.

	Day 0	**Day 1**	**Day 2**	**Day 3**	**Day 4**	**Day 5**		
Nearest locality	S. Senetea	W. Remetea	NE. Balan	NE. Gheorgheni	NE. Voslabeni	S. Cartisoara		
Altitude range (m a.s.l.)	780	930–1150	970–980	980–1060	900–1200	1280	1720 – 1740	2240–2250
Species								
Arcynopteryx								
dichroa						+	+ x x	+ x +
Perlodes								
microcephalus		+						
Isoperla								
oxylepis		+		x x x	+ +			
pusilla						x x	x x !	
sudetica		? ! +	! !					
grammatica				?				
sp.		+		+		!		
Perla								
marginata	!	+		+ x	!			
dacica		! +			+			
Dinocras								
cephalotes?		? !		? !	? !			
Chloroperla								
kisi						x +	x x	
tripunctata				+				
Siphonoperla								
transsylvanica		? !						
neglecta		+ !	!	!				
Brachyptera								
risi				+ +				
seticornis		x !		+ + +	+ !			
Protonemura								
aestiva		x x	+ x	+	x x x			
auberti						!	+	
brevistyla							! + +	
intricata	! !	+ x x	+ +	x x x	+ +			
pseudonimborum							! +	
Amphinemura								
standfussi	!	+	!	+ + x				
triangularis			! !	x ! +				
Nemoura								
banatica		!						
carpathica (sp 2)			+					
cinerea ssp ?		+ + +		! + x	+ + +			
fusca			x x +					x !
cambrica			+					
kozari			!					
ovoidalis		! +	+					x
transsylvanica						+	+	!
Nemurella								
pictetii		+		x + +	!	+	x !	+ x x
Leuctra								
dalmoni			+ +					
nigra		x x x	+ +	x	x !		x ! !	
quadrimaculata			+ + +	+ + !				
rauscheri			+ !			+ !	x x x	
rosinae			! +				! +	!

Group photo: Kristóf Földi, Levente Nagy, Gitta Tikovits, Álmos-Dániel Gál, Darwin (the dog), Boróka-Zsuzsánna Jancsó, Gilles Vinçon; second row left to right: Anna Dénes, Csaba Kiss, Lujza Keresztes, Ferenc Simon, Alexandra Pincze, Dávid Murányi, Tímea Mészáros, Ibolya Kertész, Alexandre Ruffoni (from L–R)

Workshop activities: collection, presentation, identification, some more collection and nice memories.

***Isoperla pusilla* (Klapálek, 1923)** (Credit – Alexandre Ruffoni)

– – – – – –

Jane Earle, Research Associate, Academy of Natural Sciences of Philadelphia

Plecoptera Activities
Continuing analysis of my Plecoptera collection records. Ongoing project with The Nature Conservancy: updated conservation status of Pennsylvania Plecoptera species of special concern. Led a stonefly nymph identification workshop for regional biologists at the annual Association of Mid-Atlantic Aquatic Biologists meeting at Cacapon State Park in Berkley Springs, West Virginia, USA. I also updated my stonefly nymph ID workbook used at the workshop.

– – – – – –

Scott Grubbs, Department of Biological Sciences and Center for Biodiversity Studies, Western Kentucky University (WKU), Bowling Green, Kentucky, USA. scott.grubbs@wku.edu

USA Northeast Regional Species of Greatest Conservation Need (RSGCN)
Species of Greatest Conservation Need (SGCN) are listed in individual USA State Wildlife Action Plans as the taxa that are likely in need of conservation practices and protection. The USFWS has provided $300,000 to fund formal conservation status assessments of 33 regional SGCNs in the 13 northeastern state region from Virginia north to Maine. This is a collaborative project together with R. Edward DeWalt, Luke Myers, and Chris Verdone. Our objectives include (a) accumulation of museum specimen and literature data, (b) development of standard operating protocols for field and museum work, (c) training of graduate students, state biologists,

and regional conservation staff, (d) incorporating volunteers to help with data collection, and (e) formal conservation assessments. Current WKU M.S. student Josie Griffith is currently working in my lab to develop objective protocols for how to prioritize species for study. We welcome collaborations and help with our work, including fieldwork, access to collections that may harbor our species of interest, advice on where to collect, and insights on potentially important contacts, both personal and professional. Please feel free to contact me – I look forward to talking with everybody interested.

– – – – – –

Lily V. Hart, Insect Collection Assistant, Entomology Graduate Research Assistant, R.E. DeWalt Lab, University of Illinois, Urbana-Champaign, lvhart2@illinois.edu

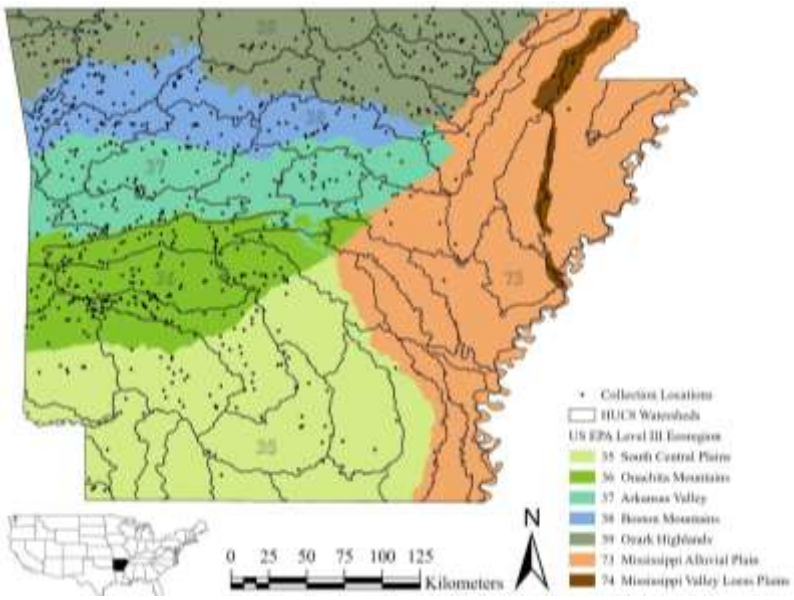
Stoneflies of Arkansas, USA

Background

Stoneflies are well known as indicators of water quality. Their presence in running waters, glacial meltwaters, and large oligotrophic lakes is rapidly declining the world over. In the USA, states partner with the U.S. Fish and Wildlife Service to protect habitat and wildlife through the development of State Wildlife Action Plans (SWAPs). Plants and wildlife species often enter these SWAPs as Species in Greatest Conservation Need (SGCN). Arkansas currently lists nine stonefly species as SGCNs and has funded research on them through SWAP grants. However, these nine species were initially chosen based on the small amount of data from a few papers. A more comprehensive assessment using museum specimen data is necessary to assess completeness of sampling, the relative rarity and endemicity of species, temporal changes in distribution, and the conservation status of species in Arkansas. Herein, we publish a data paper and preliminary dataset comprised of specimen data primarily from the Illinois Natural History Survey Insect Collection, Canadian National Collection, Western Kentucky University, P. N. Hogan Personal Collection, and from existing literature sources. These data are made publicly available by the Global Biodiversity Information Facility (GBIF) to allow for comprehensive assessment of the Arkansas Plecoptera assemblage. More recent occurrence data are needed to accurately assess imperilment of Arkansas stonefly species; these data will be provided through targeted collecting, collaboration with others in Arkansas, and through investigation of additional museum collections.

New information

This dataset includes > 3,500 specimen records (ethanol vials or pins with or without catalog numbers) and accounts for 84 stonefly species in Arkansas, six more species than indicated in published records. Perlidae contributed 29 of these species followed distantly by Perlodidae (15), Capniidae (14), Taeniopterygidae (9), Leuctridae (7), Chloroperlidae (5), Nemouridae (4), and Pteronarcyidae (1). A species accumulation curve predicts that sampling of species is nearly complete with a Chao1 estimate of 88.0 ± 3.7 species. Our data demonstrate that 25 species are known from ≤ 5 records, suggesting that many more than the nine recognized stonefly SGCNs in Arkansas may meet standards for inclusion.



Map. Stonefly collection locations within Arkansas with USGS HUC8 watersheds and US EPA Level III Ecoregions overlaid.

Citations

Hart L, DeWalt R, Hogan PN, Grubbs SA, Burton DK (2025) The stoneflies (Plecoptera) of Arkansas: a checklist compiled from museum specimen data. Biodiversity Data Journal 13: e145637. https://doi.org/10.3897/BDJ.13.e145637

Hart L, DeWalt R E, Hogan P, Grubbs S, Burton D (2025). Arkansas Plecoptera V1 data set. Biodiversity Data Journal. Occurrence dataset https://doi.org/10.15468/yx25ze, accessed via GBIF.org on 2025-09-15.

Updates

Since this data paper and its accompanying dataset have been published, work has continued on in this project. In June 2025, Hart and DeWalt hosted a specimen vouchering workshop for our collaborators at the University of Arkansas, Fayetteville, Arkansas, USA, to teach and encourage proper specimen storage and data management that will allow us to publish a more complete Version 2 of the Arkansas Plecoptera dataset. Using the Arkansas Plecoptera Version 1 dataset we published, the Arkansas Game and Fish Commission are currently updating their Arkansas Wildlife Action Plan, and the first revisions of their List of Species of Greatest Conservation Need show that five more stoneflies have been added to the SGCN list (for a total of 14 stonefly species), with the following 9 species ranked as Highest Conservation Concern:

- Bowed Snowfly | *Allocapnia oribata*
- Ozark Snowfly | *Allocapnia ozarkana*
- Caddo Sallfly | *Alloperla caddo*
- Ouachita Sallfly | *Alloperla ouachita*
- Arkansas Needlefly | *Leuctra paleo→ Leuctra szczytkoi*
- Ouachita Needlefly | *Zealeuctra wachita*
- Ozark Stone | *Acroneuria ozarkensis*
- Darkwing Stone | *Perlesta baumanni*
- Magazine Stripetail | *Isoperla szczytko*

_ _ _ _ _

Jean-Paul G. Reding

A stonefly, *Dictyogenus nadigi* (Plecoptera, Perlodidae), elected species of the year 2025 in Switzerland

Dictyogenus nadigi – Rhaetian Alps. (Credit – Carlalberto Ravizza)

The alpine fauna still reveals new taxa, as evidenced by a species of aquatic insect chosen as the "New Species of the Year 2025" by the Swiss Systematics Society. *Dictyogenus nadigi*, described in 2024 (https://doi.org/10.11646/zootaxa.5397.2.1), belongs to the genus *Dictyogenus*, distributed only in Alpine regions. The species lives in high altitude biotopes, up to 2700 m, and is found mainly in glacier-fed springs and torrents. Its presently known distribution spans over the Rhaetian Alps of Switzerland, Italy and Austria. This is the first time that a member of the «minor orders» is elected species of the year by the Swiss Systematics Society. The new species, *D. nadigi*, is dedicated to the Swiss entomologist Adolf Nadig (1910–2003) for his pioneering work on the fauna of the springs of the Swiss National Park, from where the holotype is also designated. Despite their widespread distribution, stoneflies are experiencing an alarming decline in many regions, including Switzerland, where around 40% of the species are now on the country's red list. We hope that this, rather unexpected choice, may draw more attention to the fate of stoneflies.

– – – – – –

Manuel J. López Rodríguez and J. Manuel Tierno de Figueroa, University of Granada, Departments of Ecology and Zoology, Granada, Spain, manujlr@ugr.edu, jmtdef@ugr.es

Currently, we are starting a new project sampling on several sites from two streams in Sierra de Almijara (Granada, Spain; Fig. 1) for studying the effects of dispersion on the taxonomical and functional structure of macroinvertebrate communities, and the life histories of some species of Plecoptera and Ephemeroptera.

We carry on supervising the Ph.D. Thesis of Alejandra Tierno-Cinque entitled "Cross-sectional study of the metacommunity of aquatic organisms of the Guadiana River basin (Iberian Peninsula) in the framework of Global Change" that will be defended in 2026. As part of that research, the biology and demography of particular species of stoneflies is being studied, in order to discuss if they may be used as "sentinel species" of climate change, as well as the genetic structure of several populations of Plecoptera to detect if they behave as a metapopulation and their conservation status.

We are also involved in the project entitled "Advanced tools for the assessment of the ecological status of Mediterranean temporary rivers during the dry phase", compiling information on traits of Mediterranean stoneflies and other macroinvertebrates to build a database that will be useful for further functional diversity studies.

On the other hand, we have finished our contribution to the occurrence data base of Plecoptera, and other Iberian Arthropod orders, within the project "Towards the conservation of Iberian Arthropods using digital tools", already published. We are collaborating with our colleagues C. Sánchez-Campaña and D. Fernández in the elaboration of some papers related to this data base.

We carry on maintaining collaborations with some colleagues for particular studies, such as nymphal biology of Chilean Plecoptera and Ephemeroptera (with P. Fierro and D. Barrientos), drumming on French stonefly species (with A. Ruffoni), long-term population dynamics and biocoenosis diversity of Croatian Plecoptera (with M. Vilenica and M. Ivković) and biology of Italian stoneflies (with T. Bo, S. Fenoglio, M. Moriondo and A. Marino).

Fig. 1. *Isoperla nevada* Aubert, 1952 (left) and Cacín stream (Sierra de Almijara, Granada, Spain) (right).

Alexandre Ruffoni

As part of the work we are carrying out in France in collaboration with Opie-benthos, we have completed a Red List of the Plecoptera species of metropolitan France (https://uicn.fr/liste-rouge-chilopodes-et-plecopteres/). Of the 198 species assessed, the results show that 31% (62 species) are threatened. This figure rises to 42% when near-threatened species are included. We will continue the dissemination of knowledge through a synthesis document (a distribution atlas), which will be less ambitious than initially planned, but will present the current state of knowledge on the species. Publication is scheduled for 2026. We would like to once again express our gratitude to all individuals and institutions who contributed data to these projects.

In June 2025, as every year, we also organized a weekend of exchange focused on aquatic insects with the Opie-benthos group. The event took place near Samoëns (Haute-Savoie) and brought together 22 participants. It was also an opportunity to engage in discussions with our Swiss neighbors. It included one day of conferences and one day of field trips. In 2026, the event will be held in the southern Alps, in the Verdon region.

For the mayflies and stoneflies of France, Inrae, in collaboration with Opie, has begun working on a barcoding project.

Active projects

- I continue to work on the identification of stonefly larvae from metropolitan France, including new species for a distant future revision.
- I am working on the revision of the *Isoperla* species of France, starting with those from the Pyrenees, with the initial focus on species closely related to *Isoperla moselyi* (a présentation was done at European Plecoptera Workshop Kis Béla România – June 2025),.
- Together with Manuel Tierno de Figueroa, we continue to study acoustic signals of French stoneflies.
- With Bertrand Launay, Gilles Vinçon, and Jean-Paul Reding, we have also begun working on the cryptic species of *Perlodes intricatus* from France.

An Opie-benthos weekend

– – – – – –

John B. Sandberg, Aquatic Bioassessment Lab, CDFW and CSUE, Chico, California USA
jsandberg@csuchico.edu

Continuing research on the stonefly behavior – vibrational communication (drumming)
I plan to present a preliminary new drumming method description at the NAPS 2026 meeting in North Carolina, USA (outlined above). Hopefully I can re-record the new behavior on video to obtain better resolution.

– – – – – –

Chris Verdone, North Carolina Department of Environmental Quality, Division of Water Resources, Water Sciences Section, Biological Assessment Branch, Raleigh, NC, 27607, USA,
chris.verdone@deq.nc.gov

Revision of the "Larvae of the Southeastern USA Mayfly, Stonefly, and Caddisfly Species" – Editors John C. Morse, Luke M. Jacobus, and Chris J. Verdone.
Work on the revision is ongoing. New keys have been completed for the genera and species of **Taeniopterygidae** Klapálek, 1905, ***Pteronarcys*** Newman, 1838, and ***Haploperla*** Navás, 1934. This year's efforts have focused primarily on ***Perlesta*** Banks, 1906, with larval associations now established for *P. bjostadi* Kondratieff & Lenat, 2006, *P. durfeei* Kondratieff, Zuellig & Kirchner, *P. frisoni* Banks, 1948, *P. leathermani* Kondratieff & Zuellig, 2006, *P. mihucorum* Kondratieff & Myers, 2011, *P. nelsoni* Stark, 1989, *P. placida* (Hagen, 1861), *P. shawnee* Grubbs, 2005, and *P. teaysia* Kondratieff & Kirchner, 1997.

Much additional work remains, but since this research is being conducted entirely without funding, assistance is needed to develop a more comprehensive key to the known ***Perlesta*** species. Any larvae and associated adults people are willing to loan would be helpful in achieving this goal. Please feel free to email me with any questions—I'd be happy to share my findings so far.

Integrated taxonomy of the *Capnia californica* Claassen, 1924 species group Nelson & Baumann, 1989 (Plecoptera: Capniidae) – Chris Verdone & C. Riley Nelson
Earlier this year we applied and were approved for research grants through the Redd Center at Brigham Young University to investigate the *Capnia californica* Claassen, 1924 species group Nelson & Baumann, 1989. The objectives of this study are to resolve lingering taxonomic uncertainties in the *C. californica* group (Plecoptera: Capniidae) by addressing the following shortcomings and questions: 1. Are populations of *C. californica* from California and those from Arizona, New Mexico, and Mexico, one species or two? 2. Diagnoses to separate females of this group are currently lacking; 3. *Capnia regilla* Nelson & Baumann, 1987 is known only from the type locality and has not been seen since 1975, is *C. regilla* extant, and is it placed in the correct subgroup, or it is possibly a hybrid? 4. Are there additional species in this group that have not yet been discovered, as hypothesized by Nelson & Baumann (2009)? 5. Are the distributions of these species correlated to specific geographic ecoregions? 6. Is the morphological based cladogram presented in Nelson & Baumann (2009) supported using genomic based methods?

Dr. C. Riley Nelson, myself, and BYU students will collect adult and larval winter stoneflies in locations in Arizona, California, and possibly New Mexico during// February – March 2026.

We are grateful for the opportunity to work on this interesting group of stoneflies and being able to spend time in the beautiful places where they reside.

R. Edward DeWalt, University of Illinois. Illinois Natural History Survey, Champaign, Illinois. dewalt@illinois.edu

My lab is very busy with three graduate students working on big projects, all to be wrapped up within a year or so. PhD candidate Phillip Hogan just started a graduate fellowship at the Smithsonian Institution, Entomology Department of the National Museum of Natural History (USNM). He is finishing modeling papers for Midwest USA stoneflies and a revision, phylogeny, and phylogeographic studies of the winter stoneflies *Allocapnia*. For the latter he is conducting RadSeq procedures and turned in all the DNA to our genomic center just before leaving for Washington, D.C. Theodore Cook is just about ready to submit a data paper on stoneflies of West Virginia, the data to be used on a massive distributional atlas of over 150 species. Lily Hart is conducting a similar study in Arkansas where we have recovered the occurrence data supporting Poulton & Stewart (1991). Additional collection, a phylogenetic project on the *Acroneuria evoluta* group, museum visits, and collaboration with others in Arkansas will expand the specimen data set so state and non-profit organizations can have a solid data set for conservation purposes. Scott has already told you about a big project in the northeastern USA states. It is a race for me to "retire" in March 2028.

– – – – – –

2024–2025 *PERLA* 43 Bibliography

Abbà M, Fenoglio S & Bo T (2025) What can I eat before being eaten? Notes about the diet of *Phoxinus* spp. in a high mountain lake (Monviso group, NW Italy). Arxius de Miscel·lània Zoològica, 23: 95–102. https://doi.org/10.32800/amz.2025.23.0095

Akamagwuna FC, Odume ON & Richoux NB (2024) Impact of agricultural land-use on functional feeding groups of Afrotropical Ephemeroptera, Plecoptera and Trichoptera in the Kat River, Eastern Cape, South Africa. African Journal of Aquatic Science, 49 (4): 298–311. https://doi.org/10.2989/16085914.2024.2394208

Ali S, Gao J, Hussain A, Rasool A, Abdullah S & Ali A (2025) Ecological integrity assessment of alpine lotic ecosystems: a case study of a high-altitude national park in Northern Pakistan. Water, 17 (13), 1948. https://doi.org/10.3390/w17131948

Anderson AM, Foutz M, Lieser CM & Vierstraete JJ (2025) Effect of temperature on adult longevity of winter stoneflies (Plecoptera: Capniidae) from two Minnesota spring-fed streams. Journal of the Kansas Entomological Society, 98 (2): 75–90. https://doi.org/10.2317/0022-8567-98.2.75

Athulya P, Sajeevan A, Prasad PV, Sivalingam R & Sajeev TV (2025) Diversity and distribution of aquatic insects and their relation to water quality parameters at the selected stations of the Chalakudy River, Kerala, India. Aquatic Ecology**,** 59: 487–499. https://doi.org/10.1007/s10452-025-10175-0

Babu R, Dej Vignesh K & Subramanian KA (2024) Fauna of India Checklist: Arthropoda: Insecta: Plecoptera. Version 1.0. Zoological Survey India. https://doi.org/10.26515/Fauna/1/2023/Arthropoda: Insecta:Plecoptera

Bah AL, Barry I, Bah TB & Barry A (2025) Biological quality of the water of the Niger River for agriculture, Faranah, Guinea. International Journal of Agriculture and Environmental Research, 11 (2): 660–677. http://dx.doi.org/10.22004/ag.econ.356881

Bai X, Li ZF, Liu Y, Zhang JQ, Zhang DP, Luo X, Yang JL, Du LN, Jiang XK, Wu RW & Xie ZC (2024) 西江流域大型底栖无脊椎动物物种多样性及维持机制. [Species diversity and maintenance mechanisms of benthic macroinvertebrate assemblages in the Xijiang River]. Biodiversity Science, 32, 23499. https://doi.org/10.17520/biods.2023499

Barasa CN, Simiyu Muse G & Khazenzi JA (2025) Human activities influence on distribution of Ephemeroptera, Plecoptera, and Trichoptera (EPT) in a tropical riverine ecosystem in Kenya. Journal of Freshwater Ecology, 40 (1), 2539125. https://doi.org/10.1080/02705060.2025.2539125

Battle JM, Sweeney BW, Currinder B, Aufdenkampe A, Fisher B & Islam N (2024) Watershed survey of streams in western Bhutan with macroinvertebrates, water chemistry, bacteria and DNA barcodes. Journal of Threatened Taxa, 16 (11): 26089–26103. https://doi.org/10.11609/jott.8954.16.11.26089-26103

Blanke A, Sander S & Rühr PT (2025) Ecomorphology of the insect head with a focus on the mouthparts of adults. Pp. 59–92. In: Betz O (ed), Insect Ecomorphology. Linking Functional Insect Morphology to Ecology and Evolution. Elsevier, London, UK. https://doi.org/10.1016/B978-0-443-18544-1.00004-1

Birrell JH, Verberk WC & Woods HA (2024) Consistent differences in tissue oxygen levels across 15 insect species reflect a balance between oxygen supply and demand and highlight a hitherto unknown adaptation for extracting sufficient oxygen from water. Current Research in Insect Science, 6, 100095. https://doi.org/10.1016/j.cris.2024.100095

Bo T, Caneparo M, Gruppuso L & Fenoglio S (2025) Growing up in the cold: notes about winter diet of *Perla grandis* Rambur, 1842 (Plecoptera, Perlidae) in a glacial stream (Aosta Valley – NW Italy). Entomological News, 132 (4): 521-528. https://doi.org/10.3157/021.132.0407

Boderau M, Ngo-Muller V & Nel A (2024) First representatives of the stonefly genus *Perlomyia* and the beaded lacewing genus *Isoscelipteron* from the Upper Miocene of France (Plecoptera: Leuctridae and Neuroptera: Berothidae), with biogeographical considerations. Zootaxa, 5481 (1): 131–140. https://doi.org/10.11646/zootaxa.5481.1.8

Bourne K, Calder RS, Zuidema S, Chen CY & Borsuk ME (2025) Local land-use decisions drive losses in river biological integrity to 2099: Using machine learning to disentangle interacting drivers of ecological change in policy forecasts. Meteorological Applications, 32 (1), e70024. https://doi.org/10.1002/met.70024

Brkić M, Bajrić A, Skenderović I, Hajdarević E & Adrović A (2025) Assessment of Water Quality of the Gostelja River Based on the Composition of Macrozoobenthos Communities. Croatian Journal of Fisheries, 83 (2): 93–98. https://doi.org/10.2478/cjf-2025-0010

Brown EA, Hellenthal RA, Mahon MB, Rumschlag SL & Rohr JR (2024) Range maps and waterbody occupancy data for 1158 freshwater macroinvertebrate genera in the contiguous USA. Scientific Data, 11 (1), 993. https://doi.org/10.1038/s41597-024-03845-5

Cao Z, Murányi D, Yang D & Li W (2025) A new combination and a new record of Capniidae (Plecoptera) from northeast China. Zootaxa, 5636 (2): 389–394. https://doi.org/10.11646/zootaxa.5636.2.11

Castillo-Velásquez RM, Gonçalves MC & Salles FF (2024) Diversity and ecological distribution of Plecoptera of Minas Gerais, Brazil. Neotropical Entomology, 53 (4), 746–758. https://doi.org/10.1007/s13744-024-01177-y

Chagas FS das, Omena PM de, Costa LC da, Serpa KV & Moretti M da S (2025) Size-mass relationships of aquatic insects in forest streams: addressing a knowledge gap in Neotropical communities. Revista Brasileira De Ciências Ambientais, 60, e2253. https://doi.org/10.5327/Z2176-94782253

Chang C, Ren M, Wang H, Ye S, Tang X, He D, Hu E, Li M & Pan B (2025) Riverine network size determined major driving factors of the composition and diversity of aquatic invertebrate communities in a multi-tributary mountain river basin. Water Research, 276, 123257. https://doi.org/10.1016/j.watres.2025.123257

Chen Y, Li W & Wang Y, Li W. (2024) Additional records of *Neoperla* (Plecoptera: Perlidae) from Yunnan Province of China, with description of a new species. Zootaxa, 5410 (3) 392–399. https://doi.org/10.11646/zootaxa.5410.3.6

Chen, Y., Wang, B., Li, W., & Li, W. (2024). New data on two Southeast Asian species of the genus *Chinoperla* Zwick, 1980 (Plecoptera: Perlidae), with a description of *Chinoperla zwicki* sp. n. Aquatic Insects, 45 (4): 433–441. https://doi.org/10.1080/01650424.2024.2329549

Chen ZT (2024) The structure of a gilled stonefly larva from the mid-Cretaceous Kachin amber. Arthropod Structure & Development, 82, 101380. https://doi.org/10.1016/j.asd.2024.101380

Chen ZT (2025) An Eocene larva of Leuctridae (Insecta: Plecoptera) questions the larval classification of the family and its palaeobiological implications. Annales de la Société entomologique de France (N.S.), 61 (3): 167–178. https://doi.org/10.1080/00379271.2025.2503904

Chen ZT (2025) First record of *Mesyatsia makartchenkoi* Teslenko & Zhiltzova, 1992 (Plecoptera: Taeniopterygidae) from China. The Indochina Entomologist, 1 (40): 399–408. https://doi.org/10.70590/ice.2025.01.40
Chen ZT (2025) Taxonomy and evolutionary implications of a new fossil stonefly family (Insecta, Plecoptera) from Middle Cretaceous Kachin amber of northern Myanmar. Palaeoworld, 34 (1), 100854. https://doi.org/10.1016/j.palwor.2024.06.002
Chen ZT (2025) The first fossil record of male *Brachyptera* (Plecoptera, Taeniopterygidae) with the description of a new species in Eocene Baltic amber. Historical Biology, 1-7. https://doi.org/10.1080/08912963.2025.2501331
Chen ZT, Sroka P, van de Kamp T & Staniczek AH (2025) Revision of mid-Cretaceous Peltoperlidae (Insecta: Plecoptera) from Burmese amber, with description of two new species in a new genus. Cretaceous Research, 177, 106206. https://doi.org/10.1016/j.cretres.2025.106206
Chen ZT & Tierno de Figueroa JM (2025) Female-above copulation in Cretaceous stoneflies: Early mating strategies of Plecoptera. Annales Zoologici (Warszawa), 75 (2): 475–488. https://doi.org/10.3161/00034541ANZ2025.75.2.005
Cochran JK, Orr SE, Funk DH, Figurskey AC, Reiskind MH & Buchwalter DB (2024) Variation in freshwater insect osmoregulatory traits: a comparative approach. Ecological and Evolutionary Physiology, 97 (3): 164–179. https://doi.org/10.1086/730689
Cowell A, Leathers K, de Mendoza G, Dwyer G, Herbst D & Ruhí A (2025) Experimentally induced low flows indicate climate change may shrink trophic niches of mountain-stream predators. Freshwater Science, 44 (3), 330–347. https://doi.org/10.1086/737386
de Almeida LH & Bispo PDC (2025) Identifiable or not? Assessing the holotypes of problematic *Kempnyia* species (Plecoptera: Perlidae). Zootaxa, 5636 (1): 198–200. https://doi.org/10.11646/zootaxa.5636.1.12
de Almeida LH & Bispo PDC (2025) Neotype designation for *Anacroneuria jaciara* Bispo & Neves, 2005 (Plecoptera: Perlidae). Zootaxa, 5633 (2): 398–400. https://doi.org/10.11646/zootaxa.5633.2.12
de Almeida LH, Gastaldo RB, Salles FF & Bispo PC (2025) New species and old semaphoronts: updating taxonomic knowledge of *Kempnyia* Klapálek, 1914 (Plecoptera: Perlidae) with an integrative approach. Diversity, 17, 416. https://doi.org/10.3390/d17060416
de Almeida LH, Duarte T & Bispo PC (2024) Complementary studies of the Perlidae (Insecta: Plecoptera) fauna from the Paranapiacaba Mountains using DNA barcode data. Zootaxa, 5496 (4), 500–508. https://doi.org/10.11646/zootaxa.5496.4.2
de Almeida LH, Gonçalves MC & Bispo PC (2024) An integrative approach to the study of *Kempnyia* Klapálek, 1914 (Plecoptera: Perlidae) from Brazil: support for the description of four new species and a basis for future studies. Plos one, 19(7), e0305824. https://doi.org/10.1371/journal.pone.0305824
de Almeida LH, Gonçalves MC & Bispo PC (2025) Reducing the Linnean and Wallacean shortfalls to *Anacroneuria* Klapálek, 1909 (Plecoptera: Perlidae) from Brazil: two new species and several new distributional records. Biologia, 80: 597–614. https://doi.org/10.1007/s11756-024-01858-4
de Araujo Barbosa V, Graham SE, Hogg ID, Smith BJ & McGaughran A (2025) A landscape genetics approach reveals species-specific connectivity patterns for stream insects in fragmented habitats. Ecology and Evolution, 15 (3), e71084. https://doi.org/10.1002/ece3.71084

Dénes A, Dénes AL & Keresztes L (2025) DNA barcode data for the Carpathian headwaters: species-level identification of stonefly (Insecta, Plecoptera) larvae in a biodiversity hotspot of the Apuseni Mountains. North-Western Journal of Zoology, 21 (1), 20–30.
Deprá V, de Almeida LH, Batista JD & Bispo PC (2024) *Anacroneuria* (Plecoptera: Perlidae) from Roncador Mountains, eastern of Mato Grosso state, Brazil. Studies on Neotropical Fauna and Environment, 59 (3): 664–672. https://doi.org/10.1080/01650521.2023.2232177
Dewenter BS, Hughes J, Shah AA, Bristow S, Poff NL, Thompson R & Kefford BJ (2025) Spatial scale influences relationships between indices of organisms' thermal tolerance. Journal of Thermal Biology, 132, 104226. https://doi.org/10.1016/j.jtherbio.2025.104226
Dia A (2024) Diversité et répartition des Plécoptères des rivières du Liban (Plecoptera). [Diversity and distribution of the Plecoptera from the rivers of Lebanon (Plecoptera)]. Bulletin de la Société Linnéenne de Lyon, 93 (7-8): 154–162.
Dias-Oliveira TM, Silva Vilela D, de Carvalho Chaves Júnior LE, de Castro Jacques G & Magalhães de Souza M (2025) Predation of *Gripopteryx* sp. (Plecoptera: Gripopterygidae) by *Argia claussenii* Selys, 1865 (Odonata: Coenagrionidae) in Campo Rupestre, Minas Gerais. Food Webs, 42, e00387. https://doi.org/10.1016/j.fooweb.2025.e00387
Diesbourg EE, Kidd KA & Perrotta BG (2025) Effects of municipal wastewater effluents on the invertebrate microbiomes of an aquatic-riparian food web. Environmental Pollution, 372, 125948. https://doi.org/10.1016/j.envpol.2025.125948
Dietrich J, Rickard A, Sethi SA, Cuppett S & Sullivan P (2025) Aquatic habitat response to small dam removal demonstrates recovery in three years. Ecosphere, 16 (6), e70323. https://doi.org/10.1002/ecs2.70323
do Amaral PHM, Linares MS, de Oliveira Tourinho TC, Hughes RM & Callisto M (2025) Fine sediments produce tipping points in the taxonomic and functional structure of benthic macroinvertebrates in neotropical streams. *Aquatic Sciences* 87, 17. https://doi.org/10.1007/s00027-024-01144-0
dos Santos Catâneo DTB, Cruz PV, Juen L, de Almeida Silveira, MAP & Rodrigues da costa Doria, C (2025) Environmental degradation and its consequences for biological diversity in urban streams of the Southwestern Amazon. *Urban Ecosystems*, 28, 121. https://doi.org/10.1007/s11252-025-01733-3
Duarte T, Froehlich CG & Bispo PC (2024) Neotropical species of gripopterygid stoneflies (Plecoptera: Gripopterygidae). Anais da Academia Brasileira de Ciências, 96 (4), e20231362. https://doi.org/10.1590/0001-3765202420231362
Duarte T, Martin GM, Anjos-Santos D & Pessacq P (2025) Unraveling Plecoptera Diversity in Two Protected Areas of Argentine Patagonia. Anais da Academia Brasileira de Ciências, 97 (1), e20240085. https://doi.org/10.1590/0001-3765202520240085
Dunkle MR, Bellmore JR, Fellman JB & Caudill CC (2024) Glaciers, snow, and rain: Water source influences invertebrate community structure and secondary production across a hydrologically diverse subarctic landscape. Limnology and Oceanography, 69 (2): 232–245. https://doi.org/10.1002/lno.12451
Eich RG, Lemmen JI, Saltin B & Blanke A (2025) An overview of campaniform sensilla arrangement and location on hexapod legs. Arthropod Structure & Development, 88, 101477. https://doi.org/10.1016/j.asd.2025.101477
Eichert A, de Almeida LH, Du YZ, Duarte T, Fochetti R, Hotaling S, Huo QB, Jouault C, Kirkaldy AP, Letsch H, Li W, López-Rodríguez MJ, Machingura J, McCulloch G, Mo R, Mtow S, Pessacq P, Rippel MLS, Rivera-Pomar R, Sproul J, Sarmento F, Sroka P, Tierno de

Figueroa JM & Ware J (2025) Stonefly Systematics: Past, Present, and Future. Insect Systematics & Diversity, 9 (4), 7, ixaf026. https://doi.org/10.1093/isd/ixaf026
Eichert A, Sproul J, Tolman ER, Birrell J, Meek J, Heckenhauer J, Nelson CR, Dudchenko O, Jeong J, Weisz D, Aiden EL, Hotaling S, Ware JL & Frandsen PB (2025) An unusually large genome from an unusually large stonefly: A chromosome-length genome assembly for the giant salmonfly, *Pteronarcys californica* (Plecoptera: Pteronarcyidae). Journal of Heredity, 116 (3): 315–323. https://doi.org/10.1093/jhered/esae044
El Yaagoubi S, Edegbene AO, Errochdi S, Harrak R, Azmizem A, Ovie TTE & El Alami M (2025) Assessing the impacts of agricultural practices on Ephemeroptera, Plecoptera, and Trichoptera (EPT) seasonal distribution: A genera-level EPT trait-based study in North Africa's river ecosystems. Science of The Total Environment, 987, 179753. https://doi.org/10.1016/j.scitotenv.2025.179753
El Yaagoubi S, Errochdi S, Edegbene AO, Kassout J, Harrak R & El Alami M (2025) Distribution patterns of Ephemeroptera, Plecoptera, and Trichoptera (EPT) species in the northwestern Rif: environmental and climate change impacts. Hydrobiologia, 852 (6): 1575–1593. https://doi.org/10.1007/s10750-024-05756-3
Ergović V, Čerba D, Tubić B, Novaković B, Koh M & Mihaljević Z (2025) Seasonal Dynamics and Factors Shaping Aquatic Insect Assemblages in Mountain Streams of the Pannonian Lowland Ecoregion. Insects, 16 (4), 344. https://doi.org/10.3390/insects16040344
Eriksen TE, Brittain JE, Sandin L & Friberg N (2025) Unveiling cryptic macroinvertebrate sentinels to enhance biomonitoring in tropical rivers: Bridging traditional approaches with DNA barcoding in the Indo-Burma biodiversity hotspot. Science of the Total Environment, 958, 178064. https://doi.org/10.1016/j.scitotenv.2024.178064
Espinar-Herranz S, Velázquez J, Pérez-Andueza G, Çiçek K, Rincón V (2025) Aquatic Macroinvertebrates as Indicators of Climate Change in the Riparian Environments of the Mediterranean Region. Land, 14, 521. https://doi.org/10.3390/land14030521
Fan A, McCulloch GA & Waters JM (2025) Do freshwater insect assemblages in exotic plantations resemble those from native forest? Evidence from environmental DNA. Restoration ecology, e70091. https://doi.org/10.1111/rec.70091
Fan A, Ni S, McCulloch GA & Waters JM (2025) Disturbance drives concordant functional biodiversity shifts across regions: new evidence from river eDNA. Ecography, 2025 (4), e07264. https://doi.org/10.1111/ecog.07264
Feeley HB & Baars JR (2024) New records of the stonefly *Protonemura praecox* (Morton) (Plecoptera, Nemouridae) from the southwest and east of Ireland. The Irish Naturalists' Journal, 41: 114–116.
Feeley HB, Barber-James HM, Kennedy B, Kenny A, McGrath D, Miles G, Mitchell K & Baars JR (2024) Stonefly (Plecoptera) records from Ireland in 2023, with additional records from 2009 to 2022. Bulletin of the Irish Biogeographical Society, 47: 163–184.
Feeley HB & Macadam CR (2024) Variation in post-mating behaviour in *Capnia atra* Morton, 1896 (Plecoptera: Capniidae) observed in British and Irish populations. Entomologist's Record & Journal of Variation, 136 (3): 145–149.
Fierro P, López-Rodríguez MJ, Tierno de Figueroa JM & Barrientos D (2025) Nymphal biology of *Antarctoperla michaelseni* (Klapálek, 1904) and *Klapopteryx armillata* (Navás, 1928) in an Andean stream (southern Chile). Aquatic Insects, 1–12. https://doi.org/10.1080/01650424.2025.2498113

França MV, Shimabukuro EM, Smith WS, Morilla M, Taniwaki RH (2025) Impact of Sugarcane Cultivation on Benthic Macroinvertebrate Communities in Tropical Streams. Limnological review, 25, 13. https://doi.org/10.3390/limnolrev25020013
Gamboa M, Gotoh Y, Doloiras-Laraño A & Watanabe K (2024) Response of wild aquatic insect communities to thermal variation through comparative landscape transcriptomics. Archives of Insect Biochemistry and Physiology, 116 (4), e22137. https://doi.org/10.1002/arch.22137
Gastaldo RB, de Almeida LH & Salles FF (2025) On Anacroneuriini (Plecoptera: Perlidae) morphology: Standardizing vocabulary and a morphological atlas. Arthropod Structure & Development, 86, 101427. https://doi.org/10.1016/j.asd.2025.101427
Gastaldo RB, Fernandes de Azevedo Cunha de Moura W, da Silva dos Passos MI, Avelino-Capistrano F & Sartori RA (2024). Substrate influence on Perlidae (Plecoptera) nymph morphometrics in Parque Nacional da Serra dos Órgãos, Teresópolis, Rio de Janeiro, Brazil. Acta Limnologica Brasiliensia, 36, e43. https://doi.org/10.1590/S2179-975X4924
Gastaldo RB, Salles FF & de Almeida LH (2025) Taxonomic notes on *Anacroneuria* Klapálek, 1909 (Plecoptera: Perlidae) types of the Museum of Natural History of Berlin—Museum für Naturkunde des Humboldt-Universität zu Berlin, Germany. Zootaxa, 5659 (3), 444–448. https://doi.org/10.11646/zootaxa.5659.3.9
Graf W, Leitner P & Schmidt-Kloiber A (2024) Wirbellose Fließgewässer-Organismen im Wandelunter besonderer Berücksichtigung der Insektenfauna. [Invertebrate organisms in rivers and streams in transition – with special emphasis on insect fauna]. Acta ZooBot Austria, 160: 37–53.
Griffith RM, Reece P & Richardson JS (2025) Short-term forest harvesting effects on emergence rates of aquatic insects from small streams treated with different riparian management. Journal of Applied Ecology, First published: 08 August 2025. https://doi.org/10.1111/1365-2664.70136
Grubbs SA, Hogan PN, Myers LW & DeWalt RE (2025) Taxonomic evaluation of *Leuctra laura* Hitchcock (Plecoptera: Leuctridae) negates the need for a conservation assessment. Journal of Natural History, 59 (29-32): 2007–2022. https://doi.org/10.1080/00222933.2025.2514891
Grubbs SA, Verdone CJ, Myers LW & DeWalt RE (2025) New stonefly synonymy changes conservation outlook: 100-year-old specimens and integrated taxonomy clarify species concepts and distributions of several eastern Nearctic stripetails (Perlodidae: *Isoperla* Banks, 1905). Diversity, 17 (9), 633. https://doi.org/10.3390/d17090633
Hamilton V, Stepenuck KF, Zinna II RA, Traylor AM, Penrose D & Sigler WA (2024) Volunteer Accuracy in a Benthic Macroinvertebrate Participatory Science Project. Citizen Science: Theory and Practice, 9 (1). https://doi.org/10.5334/cstp.756
Hanada S (2025) A new species of the genus *Ostrovus* Ricker, 1952 (Plecoptera: Perlodidae) from northern Kyushu, Japan, with notes on the male drumming signal. Zootaxa, 5653 (3): 324–342. https://doi.org/10.11646/zootaxa.5653.3.2
Hart LV, DeWalt RE, Hogan PN, Grubbs SA & Burton DK (2025) The stoneflies (Plecoptera) of Arkansas: a checklist compiled from museum specimen data. Biodiversity Data Journal, 13, e145637. https://doi.org/10.3897/BDJ.13.e145637
Helland NKS & Brittain JE (2025) The distribution of Ephemeroptera, Plecoptera and Trichoptera in a Norwegian alpine catchment in relation to environmental gradients. Aquatic Insects, 1–20. https://doi.org/10.1080/01650424.2025.2510702
Hiermann U (2025) Notizen zur Entomofauna Liechtensteins (Insecta: Archaeognatha, Plecoptera, Blattodea, Orthoptera, Heteroptera, Hymenoptera). [Notes on the entomofauna of

Liechtenstein (Insecta: Archaeognatha, Plecoptera, Blattodea, Orthoptera, Heteroptera, Hymenoptera)]. inatura – Forschung online, 132: 7 S. http://www.inatura.at/forschung-online/ForschOn_2025_132_0001-0007.pdf
Hogan PN, Dewalt RE & Grubbs SA (2024) The female and emended male description of the USA Interior Highlands endemic *Allocapnia oribata* Poulton & Stewart, 1987 (Plecoptera: Capniidae). Journal of Insect Biodiversity, 56(2): 32–49. https://doi.org/10.12976/jib/2024.56.2.1
Horsák M, Janáč M, Zhai M & Bojková J (2025) Temporal niche dynamics of spreading native invertebrates underlie doubling of richness in pristine temperate streams. Journal of Animal Ecology, 94 (4): 693–705. https://doi.org/10.1111/1365-2656.70005
Horváth G (2024) Polarized light pollution and ecological/evolutionary traps induced by it for polarotactic aquatic insects. pp 477–560. In: Horváth G (eds), Polarization Vision and Environmental Polarized Light. Springer Series in Vision Research. Springer, Cham. https://doi.org/10.1007/978-3-031-62863-4_25
Huo QB, Fan SX, Zhu YF & Du YZ (2025) Diversity and the origin of *Perlodinella* Klapálek 1912 (Plecoptera: Perlodidae) in Qinghai Province, China. Insects, 16 (5), 520. https://doi.org/10.3390/insects16050520
Huo QB, Yang YB, Eichert A & Du YZ (2025) Gone with water or mountain: the population genetic diversity of *Rhopalopsole sinensis* Yang and Yang, 1993 in China. Insects, 16, 244. https://doi.org/10.3390/insects16030244
Huo QB, Zeng LL & Du YZ (2025) New synonym and holomorphology of *Kamimuria tienmushanensis* Wu, 1938 (Plecoptera: Perlidae). Zootaxa, 5633 (1): 151–162. https://doi.org/10.11646/zootaxa.5633.1.8
Huo QB, Zeng LL & Du YZ (2025) Taxonomic notes on the stonefly genus *Neoperlops* Banks, 1939 (Plecoptera: Perlidae). Psyche: A Journal of Entomology, 2025 (1), 9960942. https://doi.org/10.1155/psyc/9960942
Hurtado-Borrero Y, Tamaris-Turizo CE & Zúñiga MC (2024) Spatial and temporal distribution of two *Anacroneuria* species (Plecoptera: Perlidae) in a Neotropical river of Colombia. Acta Biológica Colombiana, 29 (3): 59–66. https://doi.org/10.15446/abc.v29n3.101093
Hwang DS, Kim J, Chung J & Lee J (2024) Refinement and validation of the species at risk index for metals (SPEAR metal Index) for assessing ecological impacts of metal contamination in the Nakdong River, South Korea. Water, 16 (22), 3308. https://doi.org/10.3390/w16223308
Ju KS, Kidd KA, Stastny M, Gray MA, Venier L & Emilson EJ (2024) Effects of spruce budworm defoliation on in-stream algal production and carbon use by food webs. Canadian Journal of Fisheries and Aquatic Sciences, 81 (6): 731–746. https://doi.org/10.1139/cjfas-2023-0261
Kang JH, Hur JM, Bae YJ & Hwang JM (2025) First novel microsatellite marker sets developed for Korean Plecoptera: development and characterization for *Nemoura geei* (Nemouridae) in South Korea. Journal of Species Research, 14 (2): 140–145. https://doi.org/10.12651/JSR.2025.14.2.140
Kang N, Bozdoğan H & Li W (2025) On the identity of some poorly known species of *Kamimuria* (Plecoptera, Perlidae) from southeastern China. Zootaxa, 5584 (2): 295–300. https://doi.org/10.11646/zootaxa.5584.2.10
Kılçık F & Özan ST (2024) Macrozoobenthic Fauna of Demre Stream (Antalya, Türkiye). Acta Aquatica Turcica, 20 (1): 33–47. https://doi.org/10.22392/actaquatr.1295334

Kokotović I, Kolar V, Rožman M, Bočkor L, Vitecek S & Previšić A (2024) Wastewater and warming effects on aquatic invertebrates: experimental insights into multi-level biodiversity consequences. Water Research, 267, 122496. https://doi.org/10.1016/j.watres.2024.122496
Kong X, Lin A, Bozdoğan H, Yang D & Li W (2025) Two new species of the *Amphinemura luteipes* species group (Plecoptera: Nemouridae) from Xizang, China. Zootaxa, 5566 (1): 185–192. https://doi.org/10.11646/zootaxa.5566.1.9
Kopij G (2024) Orthopteroidea fauna of Lesotho. Acta Entomologica Serbica, 29 (1): 1–31. https://doi.org/10.5281/zenodo.10708111
Küttner R (2024) *Taeniopteryx schoenemundi* (Mertens, 1923) (Plecoptera) erreicht Sachsen. [*Taeniopteryx schoenemundi* (Mertens, 1923) (Plecoptera) reaches Saxony]. Entomologische Nachrichten und Berichte, 68 (2): 215–216.
Langheinrich U, Smith KEC, Arevalo JR, Schwarz F & Lüderitz V (2025) Recovery of Streams in the Harz National Park (Germany)—The Attenuation of Acidification. Ecologies, 6, 13. https://doi.org/10.3390/ecologies6010013
Le Guellec G & Clévenot P (2025) Les Éphémères, Plécoptères et Trichoptères du cours aval du Torrent de Pra Reboul (Hautes-Alpes, France). [Ephemeroptera, Plecoptera and Trichoptera of the lower course of the Torrent de Pra Reboul (Hautes-Alpes, France)]. Ephemera, 26: 74–84. https://doi.org/10.71868/6p5t-3h16
Lecci LS, Sarmento FRP & Bispo PDC (2025) *Tupiperla tessellata* (Brauer, 1866) (Plecoptera: Gripopterygidae): description of the nymph with morphological and distributional notes. Zootaxa, 5642 (6): 551–561. https://doi.org/10.11646/zootaxa.5642.6.3
Lee JW, Lee SW, Lee H, Park SR (2025) Impact of environmental factors of stream ecosystems on aquatic invertebrate communities. Sustainability, 17, 1252. https://doi.org/10.3390/su17031252
Leraut PJ (2025). Brève communication–*Xanthoperla apicalis* (Newman, 1836) en Ile-de-France (Plecoptera, Chloroperlidae). [Short note–*Xanthoperla apicalis* (Newman, 1836) in in the Paris basin (Plecoptera, Chloroperlidae)]. Revue Française d'Entomologie Général, 7 (1): 9–11.
Leraut PJ (2025) Plécoptères d'Autun et de ses environs (Plecoptera). [Stoneflies of Autun and its surroundings (Plecoptera)]. Revue Française d'Entomologie Général, 6 (8): 199–216.
Li HY & Li WH (2025) A new combination of *Styloperla obtusispina* (Wu, 1973) (Plecoptera: Styloperlidae). Aquatic Insects, 1–6. https://doi.org/10.1080/01650424.2025.2522216
Li H & Li W (2025) A new species and new record of *Cryptoperla* Needham, 1980 (Plecoptera: Peltoperlidae) from China. Zootaxa, 5660 (2): 273–278. https://doi.org/10.11646/zootaxa.5660.2.8
Li H, Li W, Kong F & Teslenko VA (2025) A new synonym of *Paragnetina flavotincta* (McLachlan, 1872) (Plecoptera: Perlidae) with notes on *Paragnetina lacrimosa* Klapálek, 1921. Zootaxa, 5661 (1): 137–141. https://doi.org/10.11646/zootaxa.5661.1.9
Li M, Bakumenko O, Yang D & Li W (2024). The genus *Nemoura* (Plecoptera: Nemouridae) from Shennongjia National Park of Hubei, China. Zootaxa, 5493 (2): 175–185. https://doi.org/10.11646/zootaxa.5493.2.6
Li MY, Murányi D, Yang D & Li WH (2024) A new species and new records of *Sphaeronemoura* Shimizu and Sivec, 2001 (Plecoptera: Nemouridae) from China. Aquatic Insects, 46 (1): 1–7. https://doi.org/10.1080/01650424.2024.2393906

Li M, Yang D & Li W (2024) New species and new records of *Mesonemoura* (Plecoptera: Nemouridae) from China. Zootaxa, 5501 (2): 391-400. https://doi.org/10.11646/zootaxa.5501.2.11
Li MY, Yang D & Li WH (2024) Two new species of *Amphinemura* (Plecoptera: Nemouridae) from south-western China. Journal of Natural History, 58 (17-20): 645–655. https://doi.org/10.1080/00222933.2024.2354960
Li MY, Yang D & Li WH (2025) Two new species of *Indonemoura* Baumann, 1975 (Plecoptera: Nemouridae) from southwestern China. Aquatic Insects, 46 (1): 8–17. https://doi.org/10.1080/01650424.2024.2398797
Li M, Yang D, Li W & Mo R (2024) A new species and new record of Nemourinae (Plecoptera: Nemouridae) from China. Zootaxa, 5523 (5): 584–592. https://doi.org/10.11646/zootaxa.5523.5.8
Liu RJ, Cao ZS & Li WH (2025) Two new species of *Sinacroneuria* Yang & Yang, 1995 (Plecoptera: Perlidae) from China. European Journal of Taxonomy, 1004, 81–91. https://doi.org/10.5852/ejt.2025.1004.2963
Liu D, Yang D & Li W (2024). New species and new records of *Indonemoura* (Plecoptera: Nemouridae) from Xizang of southwestern China. Zootaxa, 5512 (4): 590–596. https://doi.org/10.11646/zootaxa.5512.4.8
Liu G, Lin Z, Soininen J, Dalu T, Juvigny-Khenafou NP, Khan S, Mu H, Oduro C, Qi X, Qu X, Riis T, Wijewardene L. Zhang M, Li J, Wu Y & Wu N (2025) Standardized diversity estimation uncovers global distribution patterns and drivers of stream insects. Biodiversity, 4 (1), 27. https://doi.org/10.1038/s44185-025-00098-2
Liu RJ & Li WH (2025) New species and record of the genus *Acroneuria* Pictet, 1841 (Plecoptera: perlidae) from China. Journal of Natural History, 59 (25-28): 1743–1755. https://doi.org/10.1080/00222933.2025.2498042
López-Rodríguez MJ, Ros-Candeira A, Fajardo Merlo MC, Sáinz Bariáin M, Sainz-Cantero Caparrós CE, Tierno de Figueroa JM & Zamora-Muñoz C (2024) Distribution and habitat database of fluvial Plecoptera, Trichoptera and Coleoptera from Sierra Nevada, Spain. Scientific Data, 11(1), 817. https://doi.org/10.1038/s41597-024-03652-y
Lorenz AW, Enss J, Hörren TP & Enting K (2025) The stonefly *Taeniopteryx schoenemundi* (Mertens, 1923) (Insecta: Plecoptera) conquers Europe's busiest waterway the Lower River Rhine. Zootaxa, 5618 (1): 97–105. https://doi.org/10.11646/zootaxa.5618.1.6
Macadam CR (2024) The drumming signals of the British endemic stonefly *Brachyptera putata* (Newman) (Plecoptera: Taeniopterygidae). Entomologist's Monthly Magazine, 160 (3): 195–200. https://doi.org/10.31184/M00138908.1603.4232
Mañas-Jordá S, Acosta R, Ariño A, Baquero E, Bonada N, Galicia D, García-Barros E, García-Meseguer AJ, García-Roselló E, González M, Lobo JM, López-Rodríguez MJ, Martínez J, Millán A, Monserrat VJ, Munguira ML, Prieto C, Romo H, Sánchez-Campaña C, Tierno de Figueroa JM, Yela JL & Sánchez-Fernández D (2025) IberArthro: A free online database compiling taxonomic and distributional data on Ibero-Balearic arthropods. Ecosistemas, 34(2), 2955. https://doi.org/10.7818/ECOS.2955
Marden J (2025). Archive of digital videos showing insect surface skimming behavior. The Pennsylvania State University. ScholarSphere. https://doi.org/10.26207/2xvh-jj02
McCabe DJ, Burnham AL, Sánchez IO & Roberge JJ (2025) Bridges and duckweed have large effects on aquatic communities: better data interpretation using standardized effect size. BIOS, 96 (1): 32–39. https://doi.org/10.1893/BIOS-D-24-00002

McCulloch GA, Foster BJ, Ingram T & Waters JM (2024) Do it well or not at all: alternative flight solutions for alpine insects. Ecology and Evolution, 14 (12), e70673. https://doi.org/10.1002/ece3.70673
McCulloch GA, Foster BJ, Kroos GC, Foster Y, Ni S, Vogel MF & Waters JM (2025) Dispersal-fecundity trade-offs in wild insect populations. Journal of Evolutionary Biology, 38 (3): 430–436. https://doi.org/10.1093/jeb/voae155
McCulloch GA, Pohe SR, Wilkinson SP, Drinan TJ & Waters JM (2025) Targeted eDNA metabarcoding reveals new populations of a range-limited stonefly. Ecology and Evolution, 15 (4), e71244. https://doi.org/10.1002/ece3.71244
Mo R, Li W & Muranyi D (2024) One new species and one new provincial record of *Neoperla* (Plecoptera: Perlidae) from Yunnan, China. Zootaxa, 5543 (2): 211–224. https://doi.org/10.11646/zootaxa.5543.2.3
Mo R, Li W & Muranyi D (2025) *Protarcys* Klapálek, 1912, the senior synonym of *Neofilchneria* Zwick, 1973 (Plecoptera: Perlodidae). Zootaxa, 5618 (1): 68–78. https://doi.org/10.11646/zootaxa.5618.1.4
Mo R, Lin A & Li W (2025) Comprehensive review of the genus *Neoperla* (Plecoptera: Perlidae) from Guangdong, China: unveiling two new species and a new record. Zootaxa, 5659 (2): 240–256. https://doi.org/10.11646/zootaxa.5659.2.6
Mo R, Wang GQ & Li WH (2024) A new species of the genus *Neoperla* Needham, 1905 from China and redescription of *Paragnetina insignis* Banks, 1939 (Plecoptera: Perlidae). Aquatic Insects, 45 (4): 423–432. https://doi.org/10.1080/01650424.2024.2370862
Moriondo M, Bona F, Bo T, Piovano S, Laini A & Guareschi S (2025) Patterns and surrogates of EPT taxa (Ephemeroptera, Plecoptera, Trichoptera) in glacier-fed streams: insights from Western Italian Alps. Aquatic Insects, 1–20. https://doi.org/10.1080/01650424.2025.2525220
Mtow S (2024) ミナミカワゲラ亜目 5 種のカワゲラ類の卵構造 (昆虫綱・カワゲラ目・ミナミカワゲラ亜目) [Comparative egg morphology of five antarctoperlarian stonetlies (Insecta: Plecoptera, Antarctoperlaria)]. Scientific Reports of the Faculty of Agriculture, 60: 53–63.
Mundahl ND (2025) Characterizing stream condition with benthic macroinvertebrates in southeastern Minnesota, USA: agriculture, channelization, and karst geology impact lotic habitats and communities. Insects, 16 (1), 59. https://doi.org/10.3390/insects16010059
Murail C, Baude M, Bergerot B, Geslin B, Legay N, Villalta I & Greulich S (2024) From stream to bloom: exploring the potential role of aquatic insects for pollination in wetland environments. Journal of Applied Entomology, 149 (5): 711–724. https://doi.org/10.1111/jen.13359
Murányi D & Kovács T (2024) Contribution to the Plecoptera fauna of Serbia. Folia Historico Naturalia Musei Matraensis, 48: 21–35. https://doi.org/10.69595/FoliaNatMatra.2024.48.03
Murányi D & Kovács T (2024) Four new species of *Leuctra* Stephens, 1836 from the Balkans (Plecoptera, Leuctridae). ZooKeys, 1218, 49. https://doi.org/10.3897/zookeys.1218.120744
Múrria C, Wangensteen OS, Somma S, Väisänen L, Fortuño P, Arnedo MA & Prat N (2024) Taxonomic accuracy and complementarity between bulk and eDNA metabarcoding provides an alternative to morphology for biological assessment of freshwater macroinvertebrates. Science of the Total Environment, 935, 173243. https://doi.org/10.1016/j.scitotenv.2024.173243

Myers LW, Kondratieff BC, Grubbs SA, Pett LA, DeWalt RE, Mihuc TB & Hart LV (2025) Distributional and species richness patterns of the stoneflies (Insecta, Plecoptera) in New York State. Biodiversity Data Journal, 13, e158952. https://doi.org/10.3897/BDJ.13.e158952
Negi P & Singh D (2025) Bioassessment of water quality in the upland streams of lesser Himalaya, Uttarakhand, India. Environment Conservation Journal, 26 (1): 194–202. https://doi.org/10.36953/ECJ.29182912
Ni S, McCulloch GA, Kroos GC, King TM, Dutoit L, Foster BJ, Hema K, Jandt JM, Peng M, Dearden PK & Waters JM (2024). Human-driven evolution of color in a stonefly mimic. Science, 386 (6720): 453–458. https://doi.org/10.1126/science.ado5331
New TR (2025) Regulation, Understanding and Policy. pp 119–135. In: Insect Conservation: Developing a Practical Perspective. Springer, Cham. https://doi.org/10.1007/978-3-031-97833-3_6
Noone WN, Edwards PM, Pan Y & Thorne C (2025) Floodplain restoration and its effects on summer water temperature and macroinvertebrates in Whychus Creek, Oregon (USA). River Research and Applications, 41 (1): 37–55. https://doi.org/10.1002/rra.4383
Numanović M, Živković M, Stefanović M, Veličković N, Matić I & Miljanović B (2025) DNA barcoding and new record of *Arcynopteryx dichroa* (McLachlan, 1872) (Plecoptera: Perlodidae) from Serbia. Aquatic Insects, 46 (1): 71–79. https://doi.org/10.1080/01650424.2024.2400196
Ohler K, Schreiner VC, Reinhard L, Link M, Liess M, Brack W & Schäfer RB (2024) Land use alters cross-ecosystem transfer of high value fatty acids by aquatic insects. Environmental Sciences Europa, 36, 10. https://doi.org/10.1186/s12302-023-00831-3
Özbek M, Taşdemir A, Yildiz S, Topkara ET & Çil EA (2025) Diversity and spatio-temporal distribution of benthic macroinvertebrate communities in a transboundary river basin in the Caucasus region (Aras river, NE Türkiye). BMC Ecology and Evolution, 25, 77. https://doi.org/10.1186/s12862-025-02428-1
Pelingen AL (2025) Dr. Wolfram Mey's Stonefly (Insecta: Plecoptera) Collection from Luzon, Philippines: Part II. Leuctridae. Zootaxa, 5604 (1): 52–60. https://doi.org/10.11646/zootaxa.5604.1.5
Pereira FS, Santos TAP, dos Santos Catâneo DTB, Cruz PV, da Costa Doria CR & de Almeida Silveira MÁP (2025) EPT distribution pattern in relation to environmental variables of urban streams in Western Amazonia. Revista Brasileira de Ciências da Amazônia/Brazilian Journal of Science of the Amazon, 14 (1): 27–38.
Plesk B & Küttner R (2024). Die Eintags-, Stein- und Köcherfliegen (Ephemeroptera, Plecoptera, Trichoptera) sowie Wasserwanzen (Heteroptera) des Naturschutzgebietes “Tiefental bei Königsbrück” (Sachsen). [The mayflies, stoneflies, and caddisflies (Ephemeroptera, Plecoptera, Trichoptera) as well as water bugs (Heteroptera) of the nature reserve "Tiefental near Königsbrück" (Saxony)]. Veröffentlichungen des Museums der Westlausitz, 38: 69–82.
Preston DL, Hotaling S, Errigo IM, Frandsen PB, Price TL, Hamilton TL, Anderson KE, Yevak SE & Morse JF (2025) Influence of water source on alpine stream community structure: linking morphological and metabarcoding approaches. Aquatic Sciences, 87, 13. https://doi.org/10.1007/s00027-024-01134-2
Puchi J, Barrientos D & Fierro P (2024) Secado de macroinvertebrados acuáticos par cálculo de biomasa [Drying of aquatic macroinvertebrates for biomass calculation]. Boletín de la Sociedad Zoológica del Uruguay, 33 (2), p. e33.2.6. https://doi.org/10.26462/33.2.6

Qu Y, Hutchins M, Fitch A & Johnson AC (2025) River invertebrate biodiversity benefits from upstream urban woodland. Landscape and Urban Planning, 254, 105251. https://doi.org/10.1016/j.landurbplan.2024.105251
Quiñones-Alarcón J (2024) Nuevas localizaciones de *Leuctra bidula* Aubert, 1962 (Plecoptera: Leuctridae) en sierra Bermeja (Málaga, España). [New locations of *Leuctra bidula* Aubert, 1962 (Plecoptera: Leuctridae) in Sierra Bermeja (Málaga, Spain)]. Boletín de la Sociedad Andaluza de Entomología, 34: 97–101.
Ramos T, De Lima ES, Dias-Silva K & Juen L (2025) Between mosquitoes and stoneflies: Observation of Plecoptera nymphs preying on chironomid larvae (Diptera). Food Webs, 42, e00389. https://doi.org/10.1016/j.fooweb.2025.e00389
Ray AM, Yoder AM, Ertel BD, Henderson TH & Mebane CA (2025) Leveraging historical datasets to quantify the recovery of an impaired stream entering Yellowstone National Park. Discover Conservation, 2, 9. https://doi.org/10.1007/s44353-025-00028-0
Reding J-PG (2024) Les Plécoptères du Massif du Jura et du Nord des Alpes Occidentales. Guide d'identification au genre et à l'espèce des larves. Vol. I: Introduction. Taxonomie. Clés d'identification. Ecologie. Vol. II: Figures Perloidea. Nemouroidea. [Plecoptera of the Jura Massif and the Northern Western Alps. Guide to the identification of larvae by genus and species. Vol. I: Introduction. Taxonomy. Identification keys. Ecology. Vol. II: Figures Perloidea. Nemouroidea]. Chez l'auteur, Neuchâtel, Switzerland. 256 + 412 pp.
Rehman A, Huo QB & Du YZ (2025) Synopsis of Chinese *Alloperla* Banks, 1906 (Plecoptera, Chloroperlidae), with description of a new species. ZooKeys, 1243: 365–375. https://doi.org/10.3897/zookeys.1243.139128
Rehman A, Huo QB & Du YZ (2025) Two new species of *Haploperla* Navás, 1934 (Plecoptera: Chloroperlidae) from Sichuan Province, China. Annales de la Société entomologique de France (NS), 61 (4): 335–344. https://doi.org/10.1080/00379271.2025.2513609
Rippel ML, de Almeida LH, Prando JS, Avelino-Capistrano F, Takiya DM & Salles FF (2025) Taxonomic revision of *Guaranyperla* Froehlich (Plecoptera: Gripopterygidae): unveiling the diversity and complexity of a unique genus. Insect Systematics & Evolution, 1(aop), 1–54. https://doi.org/10.1163/1876312x-bja10077
Rivera-Pérez JM, Pérez J, Shimano Y, Firmino VC, Lima AC, Silva-Pereira JL, Boyero L & Juen L (2025) Industrial impacts on eastern Amazon streams assessment with benthic EPT community, leaf litter decomposition and associated fauna. Environmental Research, 283, 122128. https://doi.org/10.1016/j.envres.2025.122128
Rendoll-Cárcamo J, Gañán M, Convey P & Contador TM (2024) Length-mass relationships for aquatic insects of Navarino Island, extreme southern Chile. Anales del Instituto de la Patagonia, 52: 1–12. https://doi.org/10.22352/AIP202452012
Ross AJ (2024) Complete checklist of Burmese (Myanmar) amber taxa 2023. Mesosoic 1 (1): 21–57. https://doi.org/10.11646/mesozoic.1.1.4
Ruffoni A (2024) Les larves de Plécoptères de France métropolitaine – identification, biologie et ecologie [The larvae of Plecoptera from metropolitan France – identification, biology and ecology]. Office pour les insectes et leur environment, La Minière, Guyancourt, France. 557 pp.
Ruffoni A, Kovács T & Le Doaré J (2024) Discovery of *Besdolus bicolor* (Navás, 1909) in France, and complements to the description of its vibrational duet (Plecoptera, Perlodidae). Bulletin de la Société entomologique de France, 129 (2): 119–129. https://doi.org/10.32475/bsef_2319

Ruffoni A & Launay B (2024) Ouvrages recommandés pour la détermination morphologique des imagos de Plécoptères de France métropolitaine en 2024. [Recommended works for the morphological determination of Plecoptera imagoes in metropolitan France in 2024]. Ephemera 25: 52–82. https://doi.org/10.71868/qgkq-jq10
Ruffoni A & Launay B (2025) Observation d'*Isoperla ambigua* (Despax, 1936) dans les Pyrénées (Plecoptera, Perlodidae). [Observation of *Isoperla ambigua* (Despax, 1936) in the Pyrenees (Plecoptera, Perlodidae)]. Ephemera 26: 10–18. https://doi.org/10.71868/rwsq-7d46
Ruffoni A & Tierno de Figueroa JM (2024) Second contribution to the knowledge of drumming signals of stoneflies from Corsica (Plecoptera: Nemouridae, Leuctridae and Perlodidae). Aquatic Insects, 45 (4): 456–472. https://doi.org/10.1080/01650424.2024.2330648
Rušiti-Dauti A, Slavevska-Stamenković V, Sivec I, Ibrahimi H, Iseni G, Bilalli A, Cvetkovska-Gjorgjievska A & Hinić-Jordanovska J (2024) New Records of Stoneflies (Insecta: Plecoptera) in National Park Shar Mountain (R. North Macedonia). Ecologica Montenegrina, 75, 190–199. https://dx.doi.org/10.37828/em.2024.75.18
Šamulková M, Čiamporová-Zaťovičová Z, Čiampor F, Tuhrinová K & Macko P (2025) Is the DNA barcode database fit for purpose? Assessing the feasibility of reverse taxonomy in five key aquatic insect orders relevant to freshwater biomonitoring under the Water Framework Directive. Biologia, 1-10. (2025). https://doi.org/10.1007/s11756-025-01999-0
Sandberg JB & Kondratieff BC (2024) New stonefly (Plecoptera) drumming signal descriptions for *Kogotus nonus* (Perlodidae) and *Yoraperla mariana* (Peltoperlidae). Western North American Naturalist, 84 (1): 35–51. https://doi.org/10.3398/064.084.0104
Santos JSD, Oliveira RCD, Duarte T & Peres CK (2025) Beta diversity of aquatic insects (Ephemeroptera, Plecoptera and Trichoptera) across stream microhabitats. Acta Limnologica Brasiliensia, 37, e10. https://doi.org/10.1590/S2179-975X7524
Shi K, He Y, Yu J, Zhao Y, Wang H & Cui Y (2025) Combined water and detritus sampling is the most effective strategy to detect environmental DNA of macroinvertebrates in rivers. Ecological Indicators, 177, 113782. https://doi.org/10.1016/j.ecolind.2025.113782
Simeone D & Fernandes MEB (2025) Linking riparian forest to the functional diversity of Ephemeroptera, Plecoptera, and Trichoptera in first-order tropical streams. Diversity, 17, 438. https://doi.org/10.3390/d17070438
Simović P, Milosavljević A, Stojanović K, Radenković M, Savić-Zdravković D, Predić B, Petrović A, Božanić M & Milošević D (2024) Automated identification of aquatic insects: A case study using deep learning and computer vision techniques. Science of The Total Environment, 935, 172877. https://doi.org/10.1016/j.scitotenv.2024.172877
Sinitshenkova N & Yan E (2024) The most ancient roachfly (Insecta: Plecoptera, Peltoperlidae) from the Lower Cretaceous of the West Transbaikalia, Russia. Zootaxa, 5523 (2): 284–290. https://doi.org/10.11646/zootaxa.5523.2.9
Sivec I, Krpač V & Kučinić M (2024) Stoneflies (Insecta: Plecoptera) in the Sharr Mountains in the Republic of North Macedonia. ECOTEC International Journal of Sciences, Environment and Technology, 4 (7-8), 39–70. https://doi.org/10.62792/ut.ecotec.v4.i7-8.p2852
Solár J, Haas M, Pánik P, Oxikbayev B & Abduakassov A (2024) Variability of trace elements in bodies of scrapers (Ephemeroptera) and predators (Plecoptera) from mountain rivers of Dzungarian Alatau (Kazakhstan) and Western Carpathians (Slovakia). Environmental Science and Pollution Research, 31 (55): 64199–64209. https://doi.org/10.1007/s11356-024-35527-5

Souza NF, Leal JS, Tourinho L, Farjalla VF, Rocha DS & Vale MM (2024) Bioindicator aquatic insects at risk from climate change in a biodiversity hotspot. Science of The Total Environment, 948, 174824. https://doi.org/10.1016/j.scitotenv.2024.174824
Stewart RD, van der Bank M & Davies TJ (2024) Unveiling South African insect diversity: DNA barcoding's contribution to biodiversity data. South African Journal of Science, 120 (5/6). https://doi.org/10.17159/sajs.2024/16448
Teslenko VA (2024) Eggs of Perlidae (Insecta, Plecoptera) of the Russian Far East. Zootaxa, 5551 (1): 91–115. https://doi.org/10.11646/zootaxa.5551.1.3
Teslenko VA (2025) Eggs of twelve Siberian and Far Eastern Isoperlinae (Plecoptera: Perlodidae). Zootaxa, 5642 (3): 201–224. https://doi.org/10.11646/zootaxa.5642.3.1
Teslenko VA, Palatov DM & Semenchenko AA (2024) Overview of the Caucasian *Perla* Geoffroy, 1762 (Plecoptera: Perlidae) based on morphological and molecular data with description of two new species. Zootaxa, 5507 (1): 1–56. https://doi.org/10.11646/zootaxa.5507.1.1
Teufl P & Graf W (2024) A new species of *Protonemura* Kempny, 1898 (Plecoptera, Nemouridae) from Albania. Biodiversity Data Journal, 12, e129725. https://doi.org/10.3897/BDJ.12.e129725
Tomingas P, Kont R, Lõhmus A & Vaikre M (2025) Diversity of small waterbodies sustains aquatic biodiversity in drained forest landscapes. Hydrobiologia**.** 852: 1677–1692. https://doi.org/10.1007/s10750-024-05770-5
Toups MA & Vicoso B (2025) Insect sex chromosome evolution: conservation, turnover, and mechanisms of dosage compensation. Current Opinion in Insect Science, 101411. https://doi.org/10.1016/j.cois.2025.101411
Tozer, W. (2024). Field and laboratory life cycle studies of *Malenka depressa* (Banks, 1898) (Plecoptera: Nemouridae). Aquatic Insects, 45 (4): 442–455. https://doi.org/10.1080/01650424.2024.2339384
Tronstad LM & Tronstad BP (2024) Assessing Methods to Monitor Aquatic Invertebrates in a Large River: Comparing Rock Baskets and Hess Samplers in the Snake River, Wyoming, USA. Hydrobiology, 3 (3): 209–223. https://doi.org/10.3390/hydrobiology3030014
Tubić B, Andjus S, Zorić K, Vasiljević B, Jovičić K, Čanak Atlagić J & Paunović M (2024) Aquatic Insects (Ephemeroptera, Plecoptera and Trichoptera) Metric as an Important Tool in Water Quality Assessment in Hilly and Mountain Streams. Water, 16 (6), 849. https://doi.org/10.3390/w16060849
van Kouwen LA, van der Lee GH, Kraak MH & Verdonschot PF (2025) An empirically derived riparian forest preference index for lowland stream macroinvertebrates. Ecological Indicators, 175, 113547. https://doi.org/10.1016/j.ecolind.2025.113547
van Leeuwen CH, Csabai Z, Szloboda A, Móra A & Declerck SA (2025) Length–Dry Mass Relationships of Aquatic Insects: Geographic and Taxonomic Variation in a Digital Database. Freshwater Biology, 70 (7), e70056. https://doi.org/10.1111/fwb.70056
Verdone CJ, Williams BW, Beaty SR, Holland VB, Grubbs SA & Dewalt RE (2025) The adults, larvae, and systematics of the Nearctic *Oemopteryx* Klapálek, 1902 (Plecoptera: Taeniopterygidae). Zootaxa, 5595 (1): 1–94. https://doi.org/10.11646/zootaxa.5595.1.1
Verhille CE, MacDonald M, Noble B, Demorest G, Roche A, Frazier K & Albertson LK (2024) Thermal tolerance of giant salmonfly nymphs (*Pteronarcys californica*) varies across populations in a regulated river. Conservation Physiology, 12 (1), coae043. https://doi.org/10.1093/conphys/coae043

Vinçon G & Ruffoni A (2014) Découverte de *Nemoura cinerea selene* Consiglio, 1959 dans le sud des Alpes françaises (Plecoptera, Nemouridae). [Discovery of Nemoura cinerea selene Consiglio, 1959 from French South-East Alps (Plecoptera, Nemouridae)]. Ephemera, 25: 25–28. https://doi.org/10.71868/BVMR-8W92
Wang B, Li X & Kong F (2025) Female association of seven species of the genus *Amphinemura* Ris, 1902 (Nemouridae: Amphinemurinae) in China based on morphological and molecular data. Zootaxa, 5631 (1): 137–152. https://doi.org/10.11646/zootaxa.5631.1.6
Wang Y, Wang G & Li W (2024) A new species of *Etrocorema* from Yunnan, China, with a redescription of the male of *E. hochii* (Wu, 1938) (Plecoptera: Perlidae). Zootaxa, 5492 (1): 129–134. https://doi.org/10.11646/zootaxa.5492.1.7
Wang Y, Wang G & Li W (2024) New Species and Records of *Phanoperla* (Plecoptera: Perlidae) from Laos. Annales Zoologici, 74 (4): 573–581. https://doi.org/10.3161/00034541ANZ2024.74.4.003
Wozniak MM, Lehman RW, Martin J, Adams SR, Adams GL & Halvorson HM (2025) Stream macroinvertebrate associations with water chemistry and habitat in low-gradient basins with minimal anthropogenic land use. Hydrobiologia, Published on line 05 May 2025. https://doi.org/10.1007/s10750-025-05880-8
Yang X & Du YZ (2024) A new species of *Isocapnia* (Plecoptera: Capniidae) from China, with notes on *I. apicispina* Chen & Du, 2017 and *I. arcuata* Zhiltzova, 1975. Zootaxa, 5471 (3): 374–382. https://doi.org/10.11646/zootaxa.5471.3.7
Yang X & Du YZ (2024). A new species of *Rhopalopsole* (Plecoptera, Leuctridae) from Yunnan Province, China. Biodiversity Data Journal, 12, e134258. https://doi.org/10.3897/BDJ.12.e134258
Yang X & Du YZ (2025) A new species of *Rhopalopsole* (Insecta, Plecoptera, Leuctridae) from the Anhui Province of China and phylogeny of Leuctridae based on mitochondrial genomes. ZooKeys, 1244, 147. https://doi.org/10.3897/zookeys.1244.137740
Yang X & Du YZ (2025) A new species of *Rhopalopsole* (Plecoptera, Leuctridae) from Hubei Province, China, based on morphological and molecular data. Psyche: A Journal of Entomology, 2025 (1), 9910259. https://doi.org/10.1155/psyc/9910259
Yang X & Du YZ (2025) A new synonym of *Capnia oblata* Chen & Du, 2017 (Plecoptera: Capniidae) based on morphological and molecular data. Zootaxa, 5683 (1), 137–141. https://doi.org/10.11646/zootaxa.5683.1.8
Yang X & Du YZ (2025) Further studies on the morphology of three species of *Rhopalopsole* (Plecoptera, Leuctridae). Biodiversity Data Journal, 13, e154980. https://doi.org/10.3897/BDJ.13.e154980
Yang X & Du YZ (2025) The restoration of the taxonomic status of *Rhopalopsole trichotoma* Yang & Du, 2021. Zootaxa, 5613 (1): 196–200. https://doi.org/10.11646/zootaxa.5613.1.12
Yang X, Huo QB, Rehman A, Zhu YF & Du YZ (2025) Conservation and variability in mitochondrial genomes of Perlodidae: insights from comparative mitogenomics. Insects, 6 (3), 245. https://doi.org/10.3390/insects16030245
Yoshinari G, Inada K, Takenaka M, Tojo K & Negishi JN (2025) Redescription of *Utaperla orientalis* (Plecoptera, Chloroperlidae) from Hokkaido: the first record of a *Utaperla* stonefly in Japan. Limnology, 26 (1): 235–245. https://doi.org/10.1007/s10201-024-00752-x
Yoshinari G, Inada K, Takenaka M, Tojo K & Negishi JN (2025) Correction: redescription of *Utaperla orientalis* (Plecoptera, Chloroperlidae) from Hokkaido: the first record of a

Utaperla stonefly in Japan. Limnology, 26 (1): 247–251. https://doi.org/10.1007/s10201-024-00752-x
Zeng LL, Huo QB & Du YZ (2024) A new species and a new record of *Kamimuria* Klapálek (Plecoptera: Perlidae) from western China. Zootaxa, 5543 (3): 433–439. https://doi.org/10.11646/zootaxa.5543.3.8
Zeng LL, Huo QB & Du YZ (2024) A new species of the genus *Kamimuria* (Plecoptera, Perlidae) from Jiangsu, China with re-description of *K. microda* Du, 2002. Biodiversity Data Journal, 12, e137424. https://doi.org/10.3897/BDJ.12.e137424
Zeng LL, Huo QB & Du YZ (2024) Revision of *Neoperla minor* Chu with a new synonym and a new species of Neoperla Needham (Plecoptera: Perlidae). Zootaxa, 5493 (1): 79–90. https://doi.org/10.11646/zootaxa.5493.1.5
Zeng LL, Huo QB & Du YZ (2025) A new species and a new record of *Neoperla* Needham (Plecoptera: Perlidae) from Yunnan, China. Zootaxa, 5618 (3): 446–450. https://doi.org/10.11646/zootaxa.5618.3.10
Zeng LL, Huo QB & Du YZ (2025) A new species and a new record of *Phanoperla* (Plecoptera: Perlidae) from Yunnan, China. Zootaxa, 5637 (1): 185–189. https://doi.org/10.11646/zootaxa.5637.1.11
Zeng LL, Huo QB & Du YZ (2025) A new species of the genus *Neoperla* (Plecoptera: Perlidae) from Guizhou, China with redescription of *N. latamaculata* Du, 2005. Zootaxa, 5618 (3): 433–438. https://doi.org/10.11646/zootaxa.5618.3.8
Zeng LL, Huo QB & Du YZ (2025) A new species of the genus *Kamimuria* (Plecoptera: Perlidae) from China with redescription of *K. miaolingensis* Du & Wang, 2007. Zootaxa, 5661 (3): 445–450. https://doi.org/10.11646/zootaxa.5661.3.11
Zeng LL, Huo QB & Du YZ (2025) A new species of *Tyloperla* (Plecoptera: Perlidae) from China, with a supplementary description of *T. bimaculata* Li & Kong, 2020. Zootaxa, 5661 (4): 567–572. https://doi.org/10.11646/zootaxa.5661.4.7
Zeng LL, Huo QB & Du YZ (2025) Three new synonyms of the genus *Kamimuria* (Plecoptera, Perlidae). Biodiversity Data Journal, 13, e153697. https://doi.org/10.3897/BDJ.13.e153697
Zhang R, Dong M, Bozdoğan H & Li W (2025) New synonyms of *Kamimuria* Klapálek, 1907 (Plecoptera, Perlidae) from Yunnan Province, China. Zootaxa, 5661 (1): 125–131. https://doi.org/10.11646/zootaxa.5661.1.7
Zhang Y, Li WL & Li WH (2025) Two new species of *Skwala* (Plecoptera: Perlodidae) from China. Journal of Natural History, 59 (33-36): 2127–2132. https://doi.org/10.1080/00222933.2025.2536602
Zhang Y, Wang B, Yao G & Li W (2024) A new species and three records of Chloroperlidae (Plecoptera) from China. Zootaxa, 5406 (2): 373–382. https://doi.org/10.11646/zootaxa.5406.2.9
Zhu YF & Du YZ (2024) A new species of *Sphaeronemoura* (Plecoptera: Nemouridae) from Guizhou, China with a revised key to males of this genus. Zootaxa, 5529 (2): 373–380. https://doi.org/10.11646/zootaxa.5529.2.8
Zhu YF, Huo QB & Du YZ (2025) A new species of *Nemoura*, with the redescription and a new synonym of *N. sichuanensis* Li &Yang, 2006 (Plecoptera: Nemouridae). Zootaxa, 5632 (3): 565–579. https://doi.org/10.11646/zootaxa.5632.3.9
Zhu YF, Rehman A, Yang X, Huo QB, Zeng LL, Teslenko VA & Du YZ (2025) New records of stoneflies (Insecta, Plecoptera) from the Greater Khingan Mountains, China. Biodiversity Data Journal, 13, e151489. https://doi.org/10.3897/BDJ.13.e151489

Standing Committee of the International Society of Plecopterologists

John Brittain
Natural History Museum
University of Oslo
P.O. Box 1172 Blindern
NO-0318 Oslo, NORWAY
j.e.brittain@nhm.uio.no

R. Edward DeWalt
Chair & Treasurer
University of Illinois,
Prairie Research Institute,
Illinois Natural History Survey,
1816 S Oak St.,
Champaign, IL, USA 61820
dewalt@illinois.edu

Romolo Fochetti
Department for Innovation in Biological,
Agro-food and Forest Systems
Tuscia University
Largo dell'Università s/n,
01100 Viterbo, ITALY
fochetti@unitus.it

Maribet Gamboa
Department of Ecology
Universidad Católica de La Santísima
Concepción
Concepción, CHILE
gamboa@ucsc.cl

Scott A. Grubbs
Managing Editor - Perla
Department of Biology and Center for
Biodiversity Studies
Western Kentucky University
Bowling Green, KY, USA 42101
scott.grubbs@wku.edu

Dávid Murányi
Department of Zoology, Eszterházy Károly
University, Eger, Hungary, Department of
Zoology, Hungarian Natural History Museum
Budapest, HUNGARY
d.muranyi@gmail.com

Pablo Pessaq
CONICET, CIEMEP-LIESA
Universidad Nacional de la Patagonia Roca
780, CP 9200
Esquel Chubut, ARGENTINA
pablopessacq@yahoo.com.ar

J. Manuel Tierno de Figueroa
Dpto. de Zoología
Facultad de Ciencias
Universidad de Granada
18071 Granada, SPAIN
jmtdef@ugr.es

Mayumi Yoshimura
Forestry and Forest Products Research
Institute Kansai Research Center
Nagai Kyutaro 68
Momoyama
Fushimi, Kyoto
612-0855 JAPAN
yoshi887@ffpri.affrc.go.jp

Additional digital images that were submitted for the cover page

***Taeniopteryx* pr. *maura* (Pictet, 1841)**
Adult – USA, West Virginia, Greenbrier River at Marlinton, 2 March 2025 (Credit – Theodore Cook)

***Allocapnia harperi* Kirchner, 1980**
Adult male – USA, Virginia, Wythe County, UT East Fork Stony Fork, 28 February 2025, 37.01397, -81.15308, (Credit – Chris Verdone)

***Taeniopteryx robinae* Kondratieff & Kirchner, 1984**
Adult – USA, North Carolina, Montgomery County, UT Drowning Creek, 35.20777, -79.66416, 23 November 2024 (Credit – Chris Verdone)

***Taeniopteryx ugola* Ricker & Ross 1968**
Adult male – USA, Tennessee, Morgan County, Green Branch of White Creek, 36.14807, -84.77806, 15 February 2024 (Credit – Chris Verdone)