# PERLA

## Annual Newsletter and Bibliography of The International Society of Plecopterologists

***Sierraperla cora*** **(Needham & Smith, 1916). Sierra County, California, Big Springs, near Bassetts, 26 May 2014. B. P. Stark. Photograph by Bill P. Stark**


## PERLA NO. 36, 2018

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# PERLA
# Annual Newsletter and Bibliography of the International Society of Plecopterologists Available on Request to the Managing Editor

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# PERLA SUBSCRIPTION POLICY

**Dues for membership in the International Society of Plecopterologists are $15 U.S. per year. Members will automatically receive PERLA. Libraries or other institutions may receive PERLA by making a $10 annual donation, or through an exchange of publications agreement approved by the Managing Editor and Editorial Board. Five dollars ($5) of the dues will become part of the Scholarship Fund of the Society, to be used for helping active and deserving workers or students participate in future symposia.**

**Persons or institutions who have no support or are financially unable to pay dues may continue to receive PERLA by writing a brief note to the Managing Editor requesting a waiver of dues and to be retained on the mailing list.**

**It is therefore important that you respond to this receipt of PERLA 36 (2018) in one of the following ways, in order to be kept on the mailing list for PERLA 37 (2019): (1) pay your annual dues, (2) make a $10 donation (institutions), or (3) request a waiver. A form and self-addressed envelope are included with this issue, (PERLA 36) for your convenience in responding.**

**You may send your dues or donation in the form of a personal check, bank note, cashier's check, or postal money order designated in U.S. funds to the Managing Editor. Because of high bank costs for exchange in some countries, you may send cash, in which case the Managing Editor will respond with a personal acknowledgment when received. NO CREDIT CARD CHARGES CAN BE ACCEPTED.**

**Dues and donations are used to help pay the costs of publishing and mailing PERLA, for Lifetime Achievement Award plaques presented by the Society at International Symposia and for the Scholarship Fund. The Managing Editor will make a financial report to the International Committee at each International Symposium Business Meeting or at any other time when requested.**

**Members or institutions whose dues remain unpaid for two consecutive years, or have not been granted exchange, waiver or emeritus status, will be dropped from the PERLA mailing list.**

ILLIESIA
INTERNATIONAL JOURNAL OF STONEFLY RESEARCH

## *Illiesia*: A Summary

**R. Edward DeWalt, B. P. Stark, I. Sivec.**

*Illiesia* (http://illiesia.speciesfile.org/index.html) had a good year in 2017. Authors published 16 papers with us, an increase of three over 2016. More significantly, the number of pages grew tremendously to 223, a 162% increase over 2016. Summary statistics for articles appearing in the journal are presented in Table 1. Our major competitor, *Zootaxa* (subject editor B. C. Kondratieff) published 27 stonefly articles. *Aquatic Insects* published only two stonefly articles, while there were no Pensoft related articles on stoneflies in 2017.

Table 1. Summary data for *Illiesia* articles printed in 2017. Number of pages printed, number of species covered in each article, number of new species described, article type, family, and region where study was based is presented.

| Micro-citation | # pp. | # spp. | # new sp. | Article Type | Family | Region |
|---|---|---|---|---|---|---|
| Baumann & Stark (2017) | 21 | 2 | 0 | Biogeography | Capniidae | USA |
| Mayorga & Contreras-Ramos (2017) | 7 | 6 | 1 | Description | Perlidae | Mexico |
| Verdone et al. (2017) | 20 | 100 | 1 | Checklist | Nemouridae | USA |
| Fairchild et al. (2017) | 9 | 12 | 0 | Biogeography | Capniidae | USA |
| Grubbs & Wei (2017) | 11 | 2 | 0 | Revision | Leuctridae | USA |
| DeWalt & Snyder (2017) | 12 | 41 | 0 | Checklist | Plecoptera | USA |
| Stark et al. (2017) | 12 | 3 | 0 | Biogeography | Peltoperlidae | USA |
| Grubbs (2017) | 2 | 1 | 0 | Nomenclatural | Perlidae | USA |
| Li & Muranyi (2017) | 2 | 1 | 0 | Nomenclatural | Nemouridae | China |
| Chen & Du (2017) | 6 | 2 | 0 | Morphology | Nemouridae | China |
| Harrison & DeWalt (2017) | 7 | 1 | 0 | Biogeography | Perlodidae | USA |
| Verdone & Kondratieff (2017) | 16 | 4 | 1 | Description | Perlodidae | USA |
| Kondratieff & Verdone (2017 | 13 | 2 | 1 | Description | Perlodidae | USA |
| Beaty et al. (2017) | 27 | 3 | 2 | Description | Perlodidae | USA |

| | | | | | | |
|---|---|---|---|---|---|---|
| Baumann et al. (2017) | 25 | 1 | 0 | Biogeography, Biology, Morphology, | Perlodidae | USA |
| Myers & Kondratieff (2017) | 33 | 8 | 0 | Nymphal Description | Pteronarcyidae | USA |

At least 189 species were treated with varying levels of scrutiny, including six species new to science. Several types of articles were printed, including a few nomenclatural papers [one replacement name *Neowuia* for *Wuia* (conflict with a fish genus) and correction of type locality information for *Acroneuria covelli* Grubbs & Stark, 2004 (Perlidae]. Checklists, revisions, biogeographical studies, and descriptions of new species round out the type of papers published.

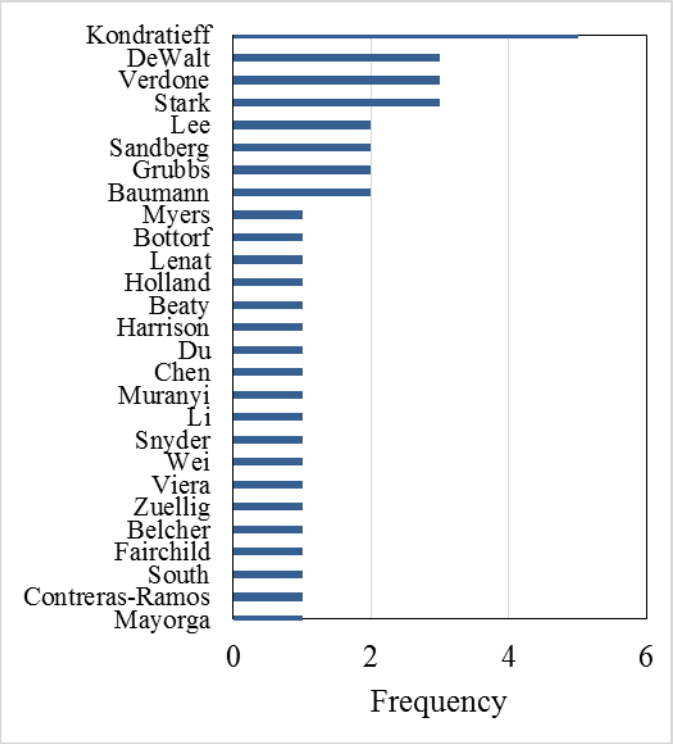



Fig. 1. Frequency of authorship.

**Improvements to the journal**

We have begun working with Crossref (http://www.crossref.org), registering articles with this service and obtaining a DOI for each article published by *Illiesia*. Most importantly, this will allow tracking of usage of the article. This year we will upload all references from each paper to Crossref, helping the Crossref community to monitor usage. We will have more to say about usage statistics next year.

We continue to register journal articles with ZooBank (http://zoobank.org) and have archived papers in CLOCKSS (https://www.clockss.org). If you have other ideas on how to improve the journal, please send them by email to dewalt@illinois.edu.

## ANNOUNCEMENTS


*International Conference on Ephemeroptera and Plecoptera*

The 2018 Joint Meeting of the XV International Conference on Ephemeroptera and XIX International Symposium on Plecoptera will take place in **Aracruz, Brazil**, from **03 - 08 June 2018**. The conference will be held at the SESC Praia Formosa, located less than one hour (or 45 km) from the airport of Vitória, capital of Espírito Santo. With more than 200 rooms, conference halls, exposition areas, restaurants, and a huge area in front of the beach, SESC Praia Formosa is the perfect place for hosting the conference in Brazil.

Please check the following link http://ephemeroptera.com.br/jointmeeting/ for all information including registration, preparation of abstracts, etc..

Facebook (International Conference on Mayflies and Stoneflies, BRAZIL, 2018 )

Contact e-mail ffsalles@gmail.com.

# Registration fees and important dates

Registration for the Ephemeroptera and Plecoptera Joint Meeting 2018 includes:

- lodging for 6 nights (June 3-9);
- all meals (including a barbecue on Wednesday and a conference dinner on Friday);
- and a day trip to Vargem Alta.

We will also provide transfer from the airport in Vitória to SESC Praia Formosa at three specific times on Sunday.

**Early bird rates (January 31, 2018)**

- Shared room: R$ 2.300,00 (US$~700)

- Private room: R$ 2.600,00 (US$~780)
- Post-conference trip: R$ 350,00 (US$~107)

**Between February 1 and June 3, 2018**

- Shared room: R$ 2.700,00 (US$~820)
- Private room: R$ 3.000,00 (US~911)
- Post-conference trip: R$ 400,00 (US$~122)

## The deadline for abstract submission is April 03, 2018.

Check our website for more information: http://ephemeroptera.com.br/jointmeeting/

**Organizing committee**

**Dr. Frederico Falcão Salles**
Universidade Federal do Espírito Santo

**Dr. Rodolfo Mariano**
Universidade Estadual de Santa Cruz

**Dra. Roberta Paresque**
Universidade Federal do Espírito Santo

**Do you have items to donate for the auction in support of Ephemeroptera and Plecoptera meeting scholarships at the next International Joint Meeting?**

If you are attending the meeting in Aracruz, Brazil, and can take your auction items with you to the meeting, just look for any of the organizers once you are there, to pass the items along for the auction. If you can't attend the meeting, but would like to donate an item, please send it to Frederico Salles at the address below:

**Prof. Frederico Salles**
UFES / CEUNES / DCAB
Rodovia BR 101 Norte, Km. 60, Bairro Litorâneo
CEP 29932-900, São Mateus – ES, BRAZIL

The International Society of Plecopterologists awarded $3,616 travel funds to three attendees to the 2018 Joint Meeting of the XV International Conference on Ephemeroptera and XIX International Symposium on Plecoptera, Aracruz, Brazil. Awardees were Eric J. South, University of Illinois, Evan A. Newman, University of Illinois, and Christopher J. Verdone, Colorado State University.

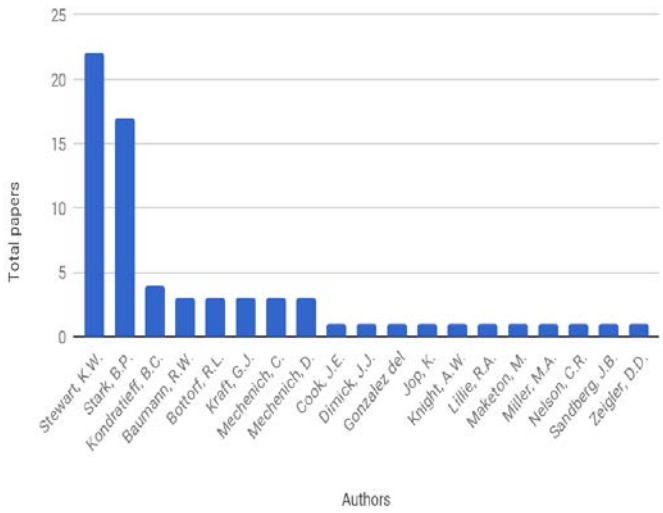
## OBITUARIES

### A FAREWELL TO STANLEY (STAN) WESLEY SZCZYTKO

**R. Edward DeWalt** and **Boris C. Kondratieff**

It is with great sadness that we share with you the death of our longtime friend and colleague Dr. Stanley (Stan) Wesley Szczytko, age 68, of Marshfield, Wisconsin. Stan was taken from us on August 30, 2017 while he was enjoying one of his great passions in life, sailing his 42 foot boat on Lake Superior (see photo, credit J. B. Sandberg). A brief report of the circumstances of his death was printed in the Superior Telegram newspaper and a lovingly written and thorough obituary was provided in the Stevens Point Journal.

Stan learned plecopterology from one of the best in the business, the late Ken Stewart. He received both his master's degree (Stoneflies of Texas) and PhD (Holomorphology of Western North American *Isoperla*....) at North Texas State University (now University of North Texas) with Ken as mentor. Collection records from the time show that he was an avid collector, sharing trips with Ken and other graduate students such as Bill Stark (coming world stonefly expert), David Zeigler (early drumming researcher), Randall Fuller (up and coming aquatic ecologist), Gerald Atmar (fish ecologist), and others. Some of these relationships lasted his entire career, especially those he held with Ken and Bill, with whom he coauthored 39 of 45 papers (see below). These contributions spanned topics as diverse as faunistic surveys, species descriptions, revisions, ecology of stoneflies, and drumming behavior of stoneflies.




While Stan's taxonomic contributions covered many stonefly groups, his passion was for the subfamily Isoperlinae. His study on the western North American *Isoperla* (Szczytko & Stewart 1979) was a breakthrough that allowed many stonefly taxonomists and ecologists to successfully identify both larvae and adults of this difficult genus. Stan was part of a team of ambitious

researchers who proposed to produce keys to all the adult stoneflies of the eastern Nearctic. To date, portions of six families have been completed in two compilations that group Peltoperlidae, Pteronarcyidae, Taeniopterygidae (Stark & Armitage 2000), and Chloroperlidae, Perlidae, and Perlodinae (Stark & Armitage 2004). Leuctridae, Nemouridae, Capniidae and Isoperlinae have taken considerably longer to complete. Stan's commitments at University of Wisconsin at Stevens Point (UWSP) were weighty, but he continued work on the Isoperlinae all along. In 2015, the wait was over. With the publication of Szczytko & Kondratieff (2015a, b), a new standard was set for work in the Isoperlinae: 22 new species described, 61 species exquisitely illustrated, supporting light and scanning imagery provided, and a host of distribution data released for the subfamily. These works allow the identification of many species that were hopeless to work with prior to this time. Like all good revisions they stand the test of time and allow others to more efficiently find new species, associate life stages, and improve distributional information (Beaty et al. 2017, Verdone & Kondratieff 2016, Verdone & Kondratieff 2017)!

By 2013, Stan had retired with emeritus status from the University of Wisconsin, Stevens Point, College of Natural Resources where he worked for 33 years running a large aquatic laboratory, teaching undergraduates, mentoring graduate students, and managing many large grants from the state's Department of Natural Resources. In that time, he had received National Science Foundation funding for relating phylogeny of Plecoptera with drumming signals (DEB-8505881), amassed over 2000 vials of completely curated stonefly specimens, and accumulated thousands of live, still, and scanning electron images of stoneflies. Always planning ahead, Stan donated his specimens to Brigham Young University and the Illinois Natural History Survey in April 2013 and his reprints and photographs to the Illinois Natural History Survey in April 2017 for safe keeping. We should all be grateful for the forethought he gave to protecting his legacy. Stan's early demise is tragic, but let us focus on the look of his beaming face that night in 2015 in Aberdeen, Scotland, when he received the Lifetime Achievement Award. We could all sense that he felt greatly appreciated by his peers.

Stan's UWSP family, persons who loved and respected him very much, have created a memorial scholarship in his honor. If you wish to donate in his name you may mail a check to UWSP Foundation, 2100 Main Street, Stevens Point, WI 54481. Alternatively, donations are accepted online at https://give.uwsp.edu/give-now. For both, stipulate "Other Specific Fund" and "**Stan Szczytko Memorial Scholarship**".

Photographs were provided by Dr. C. Riley Nelson and Dr. Bill Stark.

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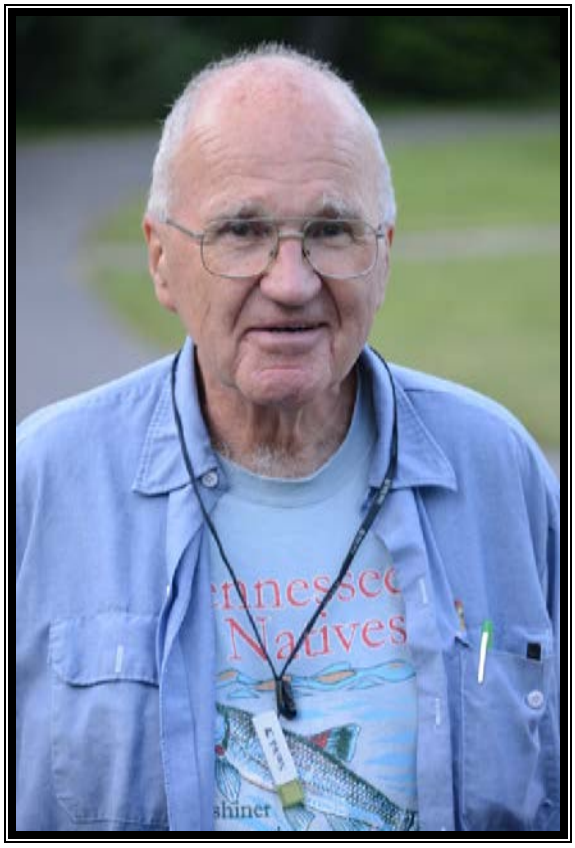
**Dr. Stanley W. Szczytko with Dr. Ignac Sivec to the left and on the right Dr. C. Riley Nelson and Dr. Bill P. Stark.**

*Isoperla stewarti* Szczytko & Kondratieff, 2015, Smyth Co., Virginia, U.S.A. Photo: Dr. Bill P. Stark


**Dr. Stan Szczytko receiving a plaque of appreciation for 15 years of service to the North American Benthological Society (Society of Freshwater Science) from his mentor Dr. Ken Stewart in 2003.**



**Andrew L. Sheldon**
**(**21 April 1938-25 November 2017)

**Scott A. Grubbs**

**Andrew "Andy" Lee Sheldon** passed away on 25 November, 2017 in Tallahassee, Florida of complications from surgery. Born in Northfield, Massachusetts on 21 April, 1938, he was the second child of Elinor and Lee Sheldon. He graduated from Colby College and completed his post-graduate studies in Zoology at Cornell University where he met his first wife, Susan Elaine York. They were married in 1963. They divorced in 1985. He worked as the resident biologist at the University of California's research facility at Sagehen Creek Field Station where he completed his doctoral thesis. He then worked as a Research Associate at Resources for the Future, Inc. in Washington, D.C. for a couple of years where his son Gregory was born. The family moved to Florence, Montana in 1968 when he accepted a position in the Zoology department at The University of Montana. Following the birth of his second son, Matthew, the family moved to Missoula. Andy was a dedicated instructor and researcher specializing in fresh water insects, stream ecology, and fisheries. He particularly enjoyed teaching summer session courses at the Flathead Lake Biological Station at Yellow Bay where he shared

his passion for science and nature with numerous students. In 2003, he received the University of Montana Distinguished Teaching Award. His sabbatical studies took him to Oakridge, Tennessee; Suriname, Australia; Oxford, Mississippi; and Borneo. In 1990 he married Linda McCron Stover after they met through their mutual interest in cross country skiing, and they enjoyed 29 years together. Andy retired in 2003 and moved to the Florida Gulf coast where he continued his research on stoneflies in the mountains of the eastern seaboard, Nevada, and Montana. He was a skilled hunter and fisherman, and enjoyed paddling his solo canoe – most recently while visiting the lakes and ponds of central Maine. Shortly before his untimely passing, he and his collaborators published a comprehensive monograph encompassing more than 40 years of his stonefly studies in the Great Basin. His efforts to identify, map, and understand this important group of organisms led to the discovery of new species, of which six bear his name. Andy is survived by his wife Linda, sons Matt (Elizabeth) of Missoula and Greg of Emigrant, Montana; stepdaughters Merida Stover and Amanda Stover Savage (Jason), grandchildren Owen and Maelle Savage; sister Sally and brother Chris of Cherry Valley, Ohio. He was preceded in death by his parents and first wife.

Andy was remarkably active during his retirement years. I had the privilege of working with him on a 10-year study of the Plecoptera of the Talladega Mountain region of Alabama, a collaborative project on eastern Nearctic *Zapada* together with Richard W. Baumann. Most recently, we were only a few years in on a quantitative study on the fauna of the Black Mountains in western North Carolina. It soon became obvious that Andy had a passion for collecting and doing fieldwork in montane landscapes. He made special efforts to collect upstream off established trails, usually up steep slopes, to better assess elevation and stream size gradients. This behavior helped to set him apart from the modern cohort of North American stonefly workers, leading to collections of valuable material (e.g. *Zapada fumosa* Baumann & Grubbs, 2015 from Mount Rogers, Virginia) for biogeographic and systematic research with colleagues.

Below is a list of his scientific contributions on stoneflies and other aquatic insects. Andy had several manuscripts in various stages of development, including one on stonefly assemblages in drying streams of the Ouachita Mountains with Mel Warren Jr., three additional papers from our work in the Talladega Mountain region, and one on Montana *Zapada*. Andy was actively collaborating with Richard Bottorff and Richard Baumann on additional manuscripts on Nevada and Great Basin stoneflies. He was also writing and analyzing data on a collaborative long-term study of the fishes of Oswego Creek in upstate New York with Donald Stewart of SUNY-Syracuse.

**Andy Sheldon's publications on Plecoptera and other aquatic insects**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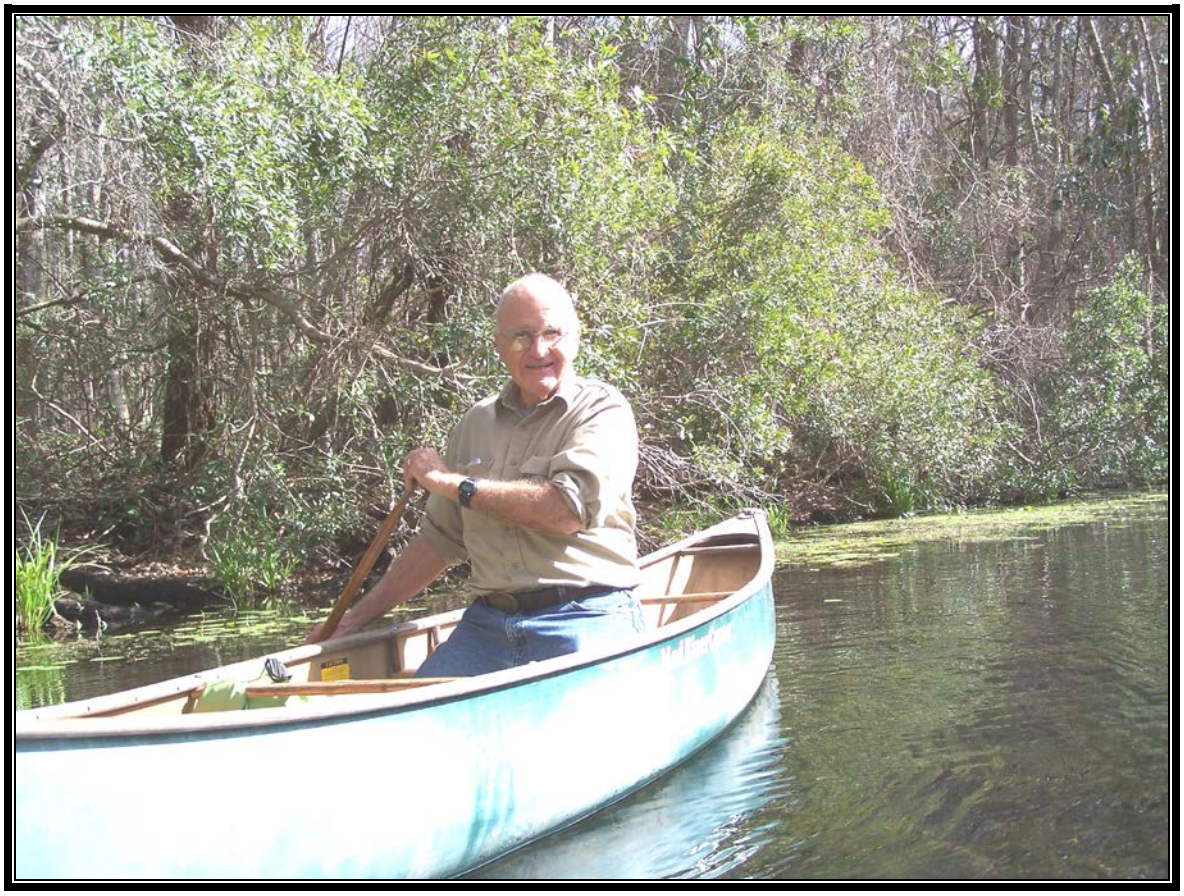

**Dr. Andy Sheldon doing what he liked best, enjoying nature.**

**ENDOWMENT IN HONOR OF DR. ANDREW L. SHELDON**

The **Society for Freshwater Science** has established an Endowment called the **Andy Sheldon Fund for Field Ecology in Streams.** This fund will support students doing field based research in stream or community ecology and to attend Society of Freshwater Science meetings. Donations can be made directly https://freshwater-science.org/news/in-drift-issue-30-winter-2018#Andy-Sheldon or calling Society of Freshwater Services at 435-797-0421.

## MEMBER NEWS

### CALL FOR MATERIAL

Dear Colleagues, during my continuing revision of the African *Neoperla* (Perlidae) all surviving types of the 30 nominal species named between 1839 and 1936 plus collections in major museums in Europe and North America have by now been studied. More than 50 species are presently known to me. However, because the Ethiopian Region is large and incompletely sampled, even small additional collections may add significantly to present knowledge.

Identification of *Neoperla* species requires dissection and study of inner genitalia and eggs. Both pinned material and specimens in fluid preservatives are suitable for study. Larvae can presently not be identified.

Should you have adults of African *Neoperla* and be willing to let me study your material, please contact me at *pleco-p.zwick@t-online.de*, to discuss details and arrange a loan.

Thank you in advance!

**Peter Zwick**

### The Plecoptera Collection of Dietrich Braasch (1931-2016) transferred to the Museum für Naturkunde, Berlin

**Peter Zwick**

The Plecoptera were one of several orders of aquatic insects that interested Dietrich Braasch. His work in eastern and central Germany was initiated before pollution-sensitive water insects had been largely wiped out. Several species that once occurred in Germany – Dietrich Braasch had still seen some of them. The faunistic work of Dietrich Braasch in East Germany, mainly in Brandenburg and Saxony, is important today, e.g. the article by Küttner et al. (2017, see the reference section of PERLA above). D. Braasch worked in a

state institution for plant protection and plant quarantine, his work on aquatic fauna was largely private. However, political restraints in the German Democratic Republic (DDR) permitted no open contacts with colleagues in countries of the *Klassenfeind;* field work was possible only in socialistic brother states. Among other activities, Dietrich Braasch and his friend, the late Dr. Wolfgang Joost, collected repeatedly in Bulgaria and published a series of faunistic and taxonomic studies on the stoneflies of the country, including descriptions of several new species.

The collections of D. Braasch and W. Joost include important stonefly material. The material of Wolfgang Joost is deposited in the Museum der Natur, Gotha, Germany (Perla 23, 2005: 43-48), that of Dietrich Braasch is now in the Museum für Naturkunde, Berlin, Germany. I am grateful to Dr. Wolfram Mey for informing me of the recent transfer.

This transfer came to my knowledge immediately before the closing deadline of the present issue of PERLA. Therefore, I refer to published bibliographies of Dietrich Braasch. The laudation at the occasion of his 65th birthday (Joost and Klausnitzer, 1997) lists all 210 publications published at that time, numbers 211-253 are presented by Mey (2016). I have PDF files of these publications and will make them available on request.

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**RECENT PLECOPTERA LITERATURE (CALENDAR YEAR 2017 AND EARLIER)**. Papers made available after 1 February 2018 will be included in the next issue. **If papers were missed, please bring these to the attention of the Managing Editor**. Drs. Richard W. Baumann, Bill P. Stark, J. M. Tierno de Figueroa, and Peter Zwick are thanked for reviewing and providing additions to this present list.

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***Megaleuctra kincaidi*** **(Frison, 1942) female, Still Creek, Oregon, May 17 2014, B. P. Stark. Photograph by Bill P. Stark**