

For Hans, not Wilhelm frozen!

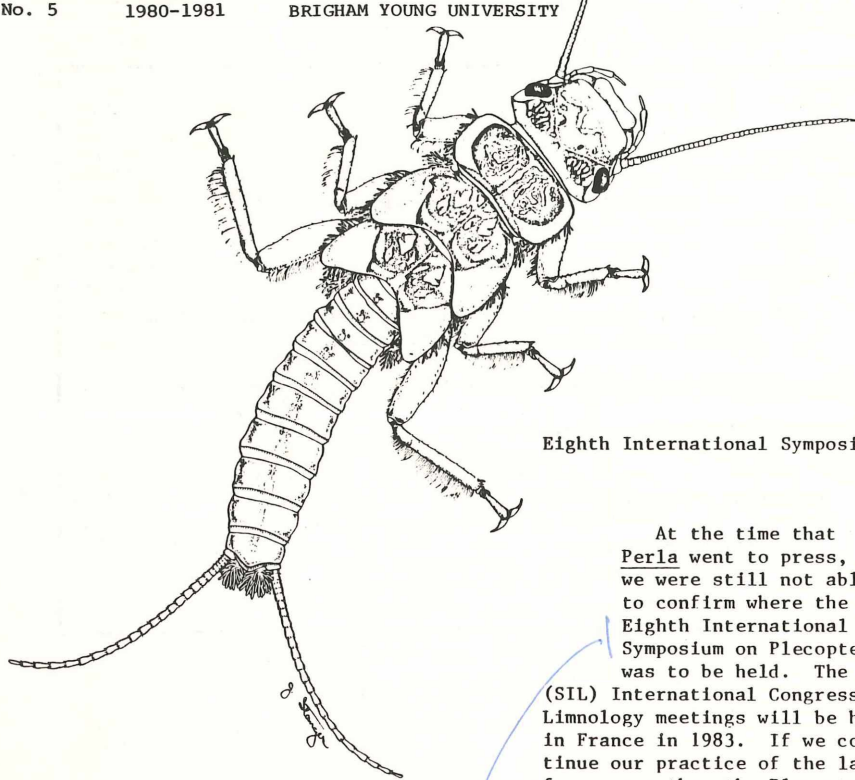
Peter

PERLA

No. 5

1980-1981

BRIGHAM YOUNG UNIVERSITY



Eighth International Symposium

At the time that Perla went to press, we were still not able to confirm where the Eighth International Symposium on Plecoptera was to be held. The (SIL) International Congress of Limnology meetings will be held in France in 1983. If we continue our practice of the last few years, then the Plecoptera symposium should be held somewhere in Europe either before or after the SIL Congress. Anyone willing to host the symposium should contact Dr. Peter Zwick with complete details.

Toulouse, 17-20.8.83!

PERLA

A Newsletter for Plecopterologists .

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Nomenclature of some species of genus Perla

The nomenclature of some species of Perla is in a confused state. Trouble possibly arising from this will certainly not affect the name of our newsletter, but the case might be of interest for many readers of PERLA.

The identity of Perla maxima (SCOPOLI, 1763) had been doubtful until KLAPALEK (1915) applied it to a particular species. Unfortunately, his interpretation was wrong and SCHOENEMUND (1914) showed that P. maxima was in fact a senior synonym of P. marginata (PANZER, 1799). The species erroneously called maxima should have taken (and is in fact now known by) the name P. grandis RAMBUR, 1842, of which KLAPALEK had examined the type. The name marginata should have been abandoned in favour of maxima. However, the incorrect use of these names continued. In the case of P. marginata strict application of the priority principle would now upset long established practice. Therefore, an application to the International Commission on Zoological Nomenclature was finally made (CONSIGLIO 1967). The commission has voted in the meantime and has given P. marginata relative precedence over P. maxima.

When Dr. MELVILLE, Secretary of ICZN, prepared an Opinion giving effect to the vote he discovered that the name marginata PANZER which had just been chosen had first been published as Semblis marginata PANZER, 1799. It is therefore a junior primary homonym of the unused Semblis marginata FABRICIUS, 1793 and as such is invalid. The type of FABRICIUS' species was studied and proved to be what is presently known as Marthamea vitripennis (BURMEISTER, 1839), type species of Marthamea. To avoid that, two well-known species will have to change their names because they are junior homonyms or synonyms of FABRICIUS' overlooked name and to maintain the long established and generally accepted nomenclature, DR. MELVILLE has now made an additional application to ICZN asking it to suppress and reject Semblis marginata FABRICIUS, 1793, and to place Marthamea KLAPALEK, 1907 (type: Perla vitripennis BURMEISTER, 1839) and Perla vitripennis BURMEISTER, 1839 on the Official List of Generic or Specific Names in Zoology, respectively. For details see Bull. Zool. Nom. 38 (3):221-224.

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BOOK REVIEWS

Since the publication of *Perla 4*, several books written for a broad audience ranging from aquatic entomologists - aquatic ecologists - fly fisherman have appeared. Although we have seldom included references to non-technical publications about stoneflies, it was felt that these would be useful because of the upsurge of interest in stoneflies in North America. Let us know what you think, so that we can decide what to include in the future.

AQUATIC ENTOMOLOGY, The Fisherman's and Ecologist's Illustrated Guide to Insects and Their Relations by W. Patrick McCafferty. 1981. Science Books International, Boston, Massachusetts, 448 pp. \$50.00.

This book is as beautiful as it is functional. It is tastefully laid out so that the excellent drawings, both black and white and color, by Arwin Provonsha, support the text very nicely.

The keys are in the form of illustrated flow diagrams which are easy to use, especially for non-specialists. Coverage is limited to the family level, with an emphasis on the aquatic stages but occasional drawings and notations for those with non-aquatic adult stage are also included. Special information for fly fishermen is easy to find because it is always delineated by a small silhouette of a "fly" at the left hand margin.

The chapter on stoneflies is based on the most up-to-date systematic classification. All North American families are included with both larval and adult diagnosis. Common names are given and notations are included for those genera and species that have been most imitated in the fly patterns of fishermen.

Useful chapters are included on non-insect arthropods. Also an appendix that provides a guide to fisherman's mayflies in North America and a large glossary, add to the value of this work.

The possibility of using the book as a textbook is apparent. However, the price might be prohibitive. Aquatic Ecology or Aquatic Entomology classes would be best served as long as there is not a need to go into more detail of the fauna in a specific geographical region.

This is easily the best book on the North American aquatic insect fauna for the serious fly fisherman, naturalist, and aquatic ecologist.

STONEFLIES by Carl Richards, Doug Swisher and Fred Arbona, Jr. 1980. Winchester Press, New York, N.Y., 192 pp. \$19.95.

Although written primarily for fisherman and naturalists, the authors of this book make a real attempt to provide correct information on stoneflies from behavior to biosystematics.

The authors begin by giving the reader a streambank introduction to stoneflies where they discuss life cycles, food habits, habitat preferences and emergence behavior. Emergence tables are given which show the peak emergence patterns of the common species in all parts of North America.

Stoneflies are divided into Winter, Spring or Summer species groups and discussed in detail. This section is well balanced with photographs and line drawings inserted to emphasize important points. Several color photographs of both actual stonefly nymphs and adults of popular fly patterns are included along with information on how to tie and fish stonefly imitations. The color photographs are excellent and are extremely useful, since a few pictures are indeed worth more than a book full of words.

An appendix on studying and collecting is useful. A second appendix which includes keys to the important species and an excellent listing of most North American stonefly species along with their emergence time and place of occurrence is very valuable to the serious student that truly gets "hooked" on stoneflies.

STONEFLIES FOR THE ANGLER, How to Know Them, Tie Them, and Fish Them by Eric Leiser and Robert H. Boyle. 1982. Alfred A. Knopf, New York, N.Y., 174 pp. \$18.50.

This is a book that grabs your interest immediately so that you do not want to put it down. It makes one excited about stoneflies and fly fishing and the mix is even more stimulating.

Although the technical parts that deal with biology and systematics are not extensive, they cover what is necessary for the fisherman-naturalist. The authors have interacted with several aquatic entomologists, that specialize in stoneflies, and have extracted important facts that seem to help one second guess the bugs and of course the fish.

Each of the stonefly families that occur in North America are discussed and shown in excellent line drawings. A sort of verbal key system helps the reader distinguish members of different families in the nymphal stage and a few drawings of adults are included.

Most of the book emphasizes how to tie and fish flies that imitate stoneflies. This is written much like an article in an outdoor magazine and would thus appeal more to such an audience, than to specialists in aquatic entomology. However, there is an appendix that contains emergence tables for most North American species that have been drawn from the professional literature. Also included is a relatively complete bibliography of literature on stoneflies (Plecoptera).

Stonefly (Plecoptera) literature
of general interest to fishermen, naturalists, and aquatic ecologists

- BASSETT, T. (1980): New bug in Toadtown.- Paradise Post, Paradise, CA., Sept. 16, 1980.
- BOYLE, R.G. (1980): Yep, another Nymphmaniac. - Sports Illustrated, Chicago, August 18, 1980:30-35.
- COLLIN, F. and A. KYTE. (1979): CK Perlid - The Rolling Stone.- "Flyfishing the West", pp.22.
- LEISER, E. and R.H. BOYLE. (1982): Stoneflies for the angler, How to know them, tie them, and fish them.- Alfred A. Knopf, New York, NY, 174 pp.
- MCCAFFERTY, W.P. (1981): Aquatic entomology, the fisherman's and ecologists illustrated guide to insects and their relations.- Science Books International, Boston, MA, 448 pp.
- RICHARDS, C., D. SWISHER, and F. ARBONA. (1980): Stoneflies, - Benn Brothers, Inc., New York, 192 pp.
- SAWYER, L. (1979): The Western Stonefly.- Fly Fisherman- New York, May, 1979.
- SCHWEIBERT, E. (1980): The salmonfly hatches.- Fly Fisherman, New York, July-September, 1980.

New Journal

A new journal entitled FRESHWATER INVERTEBRATE BIOLOGY is being published on a quarterly basis starting with volume 1 in February 1982. Jerry L. Kaster (University of Wisconsin) and Michael S. Loden (Louisiana State University) are the editors for this new periodical. This journal represents a cooperative effort of several scientists to establish in a single publication, the aquatic invertebrate sub-disciplines of ecology, morphology, physiology, and taxonomy.

Subscriptions can be obtained through Jerry L. Kaster. The price per volume (four issues) is \$10 in North America, \$20 outside North America, and \$25 for institutions. Manuscripts for publication may also be submitted to:

Freshwater Invertebrate Biology
c/o Jerry L. Kaster, Editor
Department of Zoology
University of Wisconsin-Milwaukee
P.O. Box 413
Milwaukee, Wisconsin 53201

Bulletin Board

ARDEN R. GAUFIN FUND

This is a special invitation to contribute to the ARDEN R. GAUFIN Curatorial Fund. Contributions go to the curation of the A. R. Gaufin stonefly collection and the large aquatic insect collection at the Monte L. Bean Life Science Museum, Provo, Utah.

The fund has been established by Richard W. Baumann, Curator of aquatic insects, to honor Dr. Gaufin for his many contributions to the study of stoneflies (Plecoptera).

Please send contributions and inquiries to Richard W. Baumann, Monte L. Bean Life Science Museum, Brigham Young University, Provo, Utah 84602.

Those who contribute \$5.00 (\$6.00 outside of North America) or more to the fund will receive a print of the perlid stonefly Hesperoperla hoguei suitable for framing. This original drawing by Jean A. Stanger was printed in limited numbers for the 1981 NABS Meeting. It also appears on the cover of this edition of PERLA.

Continued Research

Needed for study on North American nymphal stoneflies: Mature nymphs of Moselia, Perlomyia, Visoka, Calliperla, Rickera, Chernokrillus, Frisonia, and Hansonoperla. Send to Ken Stewart, Department of Biology, North Texas State University, Denton, TX 76203 or Bill Stark, Biology Department, Mississippi College, Clinton, MS 39058.

Needed for study on Phylogeny of Perlodinae: Gravid females of Cultus decusus, Diura nanseni, Setvena bradleyi, Setvena tibialis, Tadamus sp., Stavsolus sp., Sopkalia yamadae, Hemimelaena flaviventris, Perlodinella sp., Neofilchneria sp., Dictyogenus sp., and Besdolus imhoffi.

Send to Stan Szczytko, College of Natural Resources, University of Wisconsin, Stevens Point, WI. 54481 or Bill Stark, Biology Department, Mississippi College, Clinton, MS 39058.

Ode to an Insect Drummer

Perlid stonefly while you wait
tap a tune for future mate.
Strike your hammer to the ground,
see if anyone's around.
If young Perlina's waiting near
she'll play her tune for you to hear.
Then cast your caution to the wind
and run to find your lady friend.

Bill P. Stark
Sept. 26, 1980

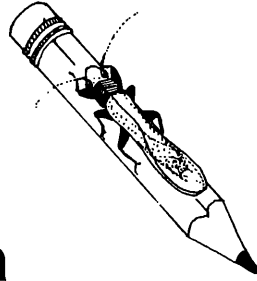
PIFON, a new Permanent International File of Naturalists

An international register of naturalists, their interests, collections, and exchange desires called PIFON, an acronym for "Permanent International File of Naturalists" now contains data on over 10,000 persons representing every country in the world. The file is housed and maintained by the Oxycopsis Pond Research Station, a new institution established in 1980 in upstate New York in a wooded area not far from the Hudson River.

In addition to the file, which is used to compile new editions of the Naturalists' Directory, a complete set of the 43 editions of the Directory and its Supplements, is available. The first edition of the Directory was published in 1877 and has been issued on the average of every two years since. Thus, the PIFON file is the world's most complete listing of naturalists, past and present. This wealth of data is available for the use of any person registered in PIFON.

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Recent Plecoptera Literature



This section includes the Plecoptera papers published since Perla 4 was mailed two years ago. Perla is published every two years and a literature section is included in every issue.

Please help us to make this section as complete and correct as possible by sending us copies of your publications and/or notes on errors found.

- ALBA TERCEDOR, J. (1979): Larvas de Plecópteros de las estribaciones de Sierra Nevada (Granada). Factores que intervienen en su distribución. -Biol. Asoc. Esp. Entomol., Salamanca, 3:193-198.
- ALBA TERCEDOR, J., and F. JIMENEZ MILLAN. (1978): Datos ecologicos de la distribución de larvas de Plecópteros. -Trab. Monogr. Dep. Zool. Univ., Granada, 2(1):1-6.
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- ANDERSEN, T. (1979): New records of Isoperla difformis (Klapalek, 1909) (Plecoptera:Perlodidae) from Western Norway. -Fauna, Oslo, 26:46.
- ANDERSEN, T. (1980): Plecoptera. --pp. 1-13 in: KAURI, H., A. LØKEN, and O.A. SAETHER (eds): Fauna of the Hardangervidda. Universitetsforlaget Bergen.
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- ARMITAGE, P.D. (1980): The effects of mine drainage and organic enrichment on benthos in the River Nent system, Northern Pennines. -Hydrobiologia, the Hague, 74:119-128.
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- BAUMANN, R.W. and K.W. STEWART. (1980): The nymph of Lednia tumana (Ricker) (Plecoptera:Nemouridae). -Proc. Entomol. Soc. Wash., Washington, D.C., 82:655-659.
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Plecopteri; Plecoptera!

(A parabolic parody of a famous Italian folk-song- for a Friend)

A lyric poet calls us Perla's daughters,
But we get by
As plain Stonefly!
You'll find us round the rocks in running waters,
If you just try;
You probe and pry.

We're Water-nymphs, addicted to ablution;
We creep and crawl,
Come spring, come fall,
In waters clean; we can't abide pollution.
We are, withal,
Not flies at all!

Chorus

Stoneflies, Stoneflies, bred in waters clear;
Stoneflies, Stoneflies, each her time of year--
Plecopteri, Plecoptera, Plecopteri, Plecoptera;
Stoneflies by the stream: Plecopteri, Plecoptera!

When we're mature we moult, emerge, and flutter
By brook and stream,
As in a dream,
Quite silently; no strident cry we utter.
There would not seem
A need to scream!
Where Stoneflies live you could be almost certain
(We knew; did you?)
That, if they grew,
Both air and water there would have no dirt in!
We give the clue
What you must do!

Chorus (Repeat)

by D. Keith McE. Kevan

