



The Mayfly Newsletter

Volume 8 | Issue 1

Article 1

12-1-1997

The Mayfly Newsletter

Peter M. Grant

Southwestern Oklahoma State University, peter7grant@gmail.com

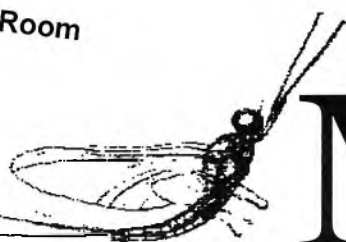
Follow this and additional works at: <https://dc.swosu.edu/mayfly>

Recommended Citation

Grant, Peter M. (1997) "The Mayfly Newsletter," *The Mayfly Newsletter*. Vol. 8 : Iss. 1 , Article 1.
Available at: <https://dc.swosu.edu/mayfly/vol8/iss1/1>

This Article is brought to you for free and open access by the Newsletters at SWOSU Digital Commons. It has been accepted for inclusion in The Mayfly Newsletter by an authorized editor of SWOSU Digital Commons. An ADA compliant document is available upon request. For more information, please contact phillip.fitzsimmons@swosu.edu.





THE MAYFLY NEWSLETTER

Vol. 8 No. 1

Southwestern Oklahoma State University, Weatherford, Oklahoma 73096-3098 USA

December 1997

ISSN: 1091-4935

Publications on Mayflies

Proceedings of the VIIIth International Conference on Ephemeroptera

The proceedings of the VIIIth International Conference on Ephemeroptera and the XIIth International Symposium on Plecoptera have been published: Landolt, P. and M. Sartori, eds. 1997. *Ephemeroptera & Plecoptera: Biology, Ecology, Systematics*. Mauron + Tinguely & Lachat SA, Moncor, Fribourg, Switzerland (ISBN 2-940187-01-0).

This book begins with a memorial to Olga Alexandrovna Tshernova and lists 73 of her publications. An obituary to Jacques Aubert follows and includes 113 of his papers.

The remaining portion of this book is divided into six sections: life histories and behaviour (18 papers); biogeography and distributional patterns (13 papers); biodiversity and environment (13 papers); ultrastructures, physiology and methods (12 papers); systematics and taxonomy (12 papers); and phylogeny and historic aspects (9 papers).

The preface was written by Dr. James V. Ward. An index, which covers taxa and subjects mentioned in titles and abstracts, is also included.

Copies of this publication may be ordered with a bank or postal check for the price of SFR 60 (US \$50) from Dr. Peter Landolt, University of Fribourg, Institute of Zoology, Pérolles, CH-1700 Fribourg, Switzerland; phone ++41 26 300 88 72; FAX ++41 26 300 97 41; or send E-mail to Landolt@ufper6.unifr.ch.

Mayfly Nymphs of Australia: A Guide to Genera

Mayfly Nymphs of Australia: A Guide to Genera, by J. C. Dean and P. J. Suter (p.suter@aw.latrobe.edu.au), has recently been published by the Co-operative Research Centre for Freshwater Ecology. This study was undertaken to "provide a generic framework for the Australian mayfly nymphs, and thus facilitate future taxonomic studies at the species level."

A short taxonomic diagnosis is given for each family (nine), along with brief comments on ecology, and a check list of described genera. Keys are provided to forty recognized genera and a short diagnosis is presented for each genus.

This identification guide can be purchased from the Co-operative Research Centre for Freshwater Ecology, Murray-Darling Freshwater Research Centre, P.O. Box 921, Albury, Victoria 2640, Australia.

The Ephemeroptera of Argentina

The Ephemeroptera of Argentina (Domínguez, E., M. D. Hubbard and M. L. Pescador. 1994. Los Ephemeroptera en Argentina. Fauna de Agua Dulce de la República Argentina, Vol. 33, Fasc. 1) consists of an overview of the status of the knowledge of the order, a list of the known species, and keys for known families and genera, including adults and nymphs. Keys for some species are also included. A discussion of all the known genera (36) and species (112), the complete synonymy of each taxon, and a complete list of references are also provided.

Copies of this publication are available from Eduardo Dominguez, Facultad de Ciencias Naturales, Universidad Nacional de Tucumán, Miguel Lillo 251, 4000 Tucumán, Argentina; phone 54-81-230056; FAX 54-81-248025; or E-mail mayfly@unt.edu.ar.

(See Publications on Mayflies, p. 2)

Inside This Issue

Publications on Mayflies	1
Announcements	2
R. K. Allen (1925-1992)	3
Research Summaries/Requests, WWW	4
1996 Mayfly Bibliography	5
Address Update, Conference Deadlines	12



Key to Freshwater Invertebrates of Russia and Adjacent Lands

A new book, *Key to Freshwater Invertebrates of Russia and Adjacent Lands* (in Russian), has been published by the Zoological Institute or Russian Academy of Science in St. Petersburg.

As Volume 3 (1997, 439 pp.), this work contains Arachnida (aquatic Acari and Aranei) and hemimetabolous insects (aquatic Collembola, Ephemeroptera, Odonata, Plecoptera and Heteroptera). The part on Ephemeroptera (pp. 176-220, pl. 8-20) was written by N. Ju. Kluge, and contains keys to mayfly larvae inhabiting the territory of the former USSR and nearby countries. Most keys are for species, but in some cases (for endemic mountain taxa of Europe, Caucasus and Middle Asia, and some others), determination is limited to higher taxa.

The previous two volumes are also available. Volume 1 (1994, 349 pp.) contains freshwater Porifera, Cnidaria, Turbellaria, Rotatoria, Gastrotricha, Nematoda, Gordiacea, Oligochaeta, Hirudinea, Bryozoa and Tardigrada. Volume 2 (1995, 627 pp.) contains freshwater Crustacea.

The price of each volume for foreign buyers is US \$33 plus US \$10 for postage. Payment should be sent to: Frankfurt/Main, Germany, Frankfurter Sparkasse, bank account BLZ 50050201, account # 0383801966, B. Gutelmacher (the same as for the journal *Zoosystematica Rossica*).

Order forms can be sent to N. Ju. Kluge, St. Petersburg State University, Biological Faculty, Department of Entomology, St. Petersburg 199034 Russia, or via E-mail to kluge@ent.bio.pu.ru.

In 1997 a new book will appear: N. Ju. Kluge, *Insect Systematics. Part 1. Apterygotous and Palaeopterous Insects* (in Russian). Preliminary orders can be sent to the Book Collector, Edition of St. Petersburg State University, Universitetskaya nab., 1, St. Petersburg 199034 Russia.

Nomina Insecta Nearctica: Volume 4

Entomological Information Services (EIS) is pleased to announce that Volume 4: *Non-Holometabolous Orders of Nomina Insecta Nearctica: A Checklist of the Insects of North America* (ISBN 1-889002-04-6) is now finished. Information on aquatic insects in this volume include Ephemeroptera compiled by W. P. McCafferty, Odonata by R. W. Garrison, and Plecoptera by B. P. Stark.

This publication may be ordered from EIS, P.O. Box 4350, Rockville, Maryland 20849-4350, USA; FAX (301) 762-2612; phone 1-800-879-4214; or send E-mail to eis@ix.netcom.com. The price is US \$89.95.

The CD ROM version of *Nomina Insecta Nearctica*, a database application for all four volumes, is scheduled for publication soon. More information may be obtained from their website: <http://www.idsonline.com/eis/>.

Request for Information (i.e., Please Help the Editor!)

One purpose of this newsletter is to keep ephemeropterists informed about their colleagues (see R. K. Allen obituary on p. 3). Often I am not aware of retirements, awards, special achievements, or, unfortunately, deaths.

If you have any information to share about our fellow ephemeropterists, please send that information to me for publication in this newsletter.

This way, we can add to their honor and further celebrate their achievements.

NABS Workshop on Mayfly Taxonomy

This is the second announcement of a special hands-on workshop on the taxonomy of Nearctic species of mayflies that is being planned for the 46th annual meeting of the North American Benthological Society to be held at the University of Prince Edward Island, P.E.I., in June 1998. This workshop will be held in addition to the regular concurrent paper sessions and is sponsored by the Technical Information Committee of NABS.

The workshop will highlight the major changes to Nearctic families, genera, and species. Practical help will be provided on the identification of genera and species and in the preparation of specimens for study (i.e., microdissection and slide making).

For additional information, contact Steve Burian, Department of Biology, Southern Connecticut State University, 501 Crescent Street, New Haven, Connecticut 06515 USA, E-mail burian@scsu.ctstateu.edu.

A Mayfly Made for May

The Entomological Society of America now has its *Insects 1998 Calendar* available. Turning to May, one will be greeted with a large color photograph of an *Ephemera simulans* adult.

This calendar costs US\$12.95 (nonmember's price) plus \$2.50 shipping (domestic, \$3.50 foreign). Check or money orders may be sent to ESA Sales Department, P.O. Box 177 Hyattsville, Maryland 20781-0177, USA. Credit card orders may be sent to ESA Sales Department, 9301 Annapolis Road, Lanham, Maryland 20706-3115 USA; phone (301) 731-4535; FAX (301) 731-4538; E-mail sales@entsoc.org.

Happy Holidays!

Richard K. Allen (1925-1992)

[Editor's note: This article was published previously in *Pan-Pacific Entomologist* 71(2):75-77 (1995) and is reprinted here with permission. The address of the authors, George Edmunds and Chad Murvosh, can be found at the end of the article.]

Richard Knapp "Dick" Allen, a leading mayfly systematist, died at his home in Lake San Marcos, California, on 7 Aug. 1992. He was born in Salt Lake City, Utah on 21 Apr. 1925, to Knapp R. and Leora Allen. After serving in the U. S. Army in the Korean War, he obtained his B. S., M.S. and Ph.D. degrees at the University of Utah (M.S. in 1955, Ph.D. 1960). He then served a National Science Foundation supported post-doctoral during which a revision of the then very large mayfly genus *Ephemerella* (over 80 species) was completed for North America. His solution of the *Drunella grandis-spinifera* complex (then in *Ephemerella*) was a major accomplishment. He taught at the University of California Los Angeles in 1963, replacing the late Dr. John N. Belkin who was on leave. In 1964, he joined the faculty of California State University at Los Angeles where he taught a variety of courses, including marine invertebrate biology from 1964 to 1976. He suffered at least 3 myocardial infarctions between 1973 and 1978 and underwent angioplasty to open up heart arteries. In 1976 he was operated on for colon cancer and, as related by Dick, "while still recovering from anesthesia the physician sat by my bedside and told me to get my affairs in order as I had about six months to live." At this time he took a medical retirement from the University and was given intense chemotherapy treatments.

Even as an undergraduate, Dick was devoted to exercise and physical fitness, going to a gymnasium almost daily. Part of his recovery from heart circulatory problems and colon surgery included increasing long rides on his bicycle, until he rode 30 miles or more each day. The doctor's predictions were obviously a misjudgment; Dick lived 16 more years during which time he produced 23 papers. Although he suffered numerous other medical problems, he did not seek sympathy. Both of his hips were replaced as a consequence of an inherited hip socket deterioration disorder. In 1991 he had coronary bypass surgery to supply blood to his heart and lengthen his useful life. He died following a relatively short illness with untreatable pre leukemia (not a precursor of leukemia).

He published a well illustrated book, *Common Intertidal Invertebrates of Southern California*, that was a guide to marine invertebrates of Southern California, and 66 papers on the systematics and distribution patterns of mayflies, principally of the southwestern United States and Mexico. His research on mayflies was supported by a series of Systematic Biology NSF grants and later by his own funds.

He was sole author of 26 papers, and published the others with ten different co-authors. These include George Edmunds (Major Professor, Univ. Utah), and colleagues, Chad Murvosh (Univ. Nevada Las Vegas), W. L. Peters (Florida A&M Univ.), Lewis Berner (Univ. of Florida), the late Selwyn Roback (Philadelphia Academy of Sciences) as well as his students at

California State University Los Angeles, Richard Brusca, Janet I. Kilgore, Esther S. M. Chao, Sandra D. Cohen and D. L. Collins.

Dick Allen was a very social man and had a host of devoted friends. He was an amiable and hard working field companion. At times, some colleagues became a target of his criticism although the cause was often trivial, perhaps a difference of taxonomic opinion or procedure. One of us (Edmunds) knew him throughout his career (although not closely since 1976) and the other (Murvosh) had a close relationship with him since 1978. We believe his occasional difficulties with colleagues related strongly to his many health problems. He was an opinionated man who worked hard and played hard, but he was normally a good and fun loving friend. His often brusque exterior kept many persons from knowing well his warmth, compassion, and generosity.

Dick traveled and collected widely in the United States and Mexico in a motor home, camping near streams or rivers. In Mexico, where he traveled by himself or with Murvosh, he carried cans of dog food which he used to enlist a wandering "perro" as a watch dog. He gave the dog a can of food and a bowl of water at night and one in the morning and thus always had a barking sentry if anyone approached his motor home.

He married Mary Anne Ruzicka in 1951. They were subsequently divorced but remained good friends and were later remarried. Richard is survived by his widow, and his daughter, Mrs. Jody Anne Varner (whom he later honored with the name *Leptohyphes jodiannae*) and two granddaughters.

Most of his studies were concentrated on the mayfly families Tricorythidae in the Americas and Ephemerellidae on a world basis but he worked widely on other North and Central American species. He concentrated on the mayfly fauna of Mexico and the southwestern United States. He was the author or co-author of 151 species, 13 genera or subgenera, and 2 subtribes. The writers have prepared a bibliography of Dick's mayfly papers and an annotated list of the taxa he named. Copies are available on request to either author*. A major concern during the last few days he was able to speak was that the specimens that he had borrowed were to be returned to the collections which owned them, and that his own specimens be given to the California Academy of Sciences in San Francisco. His wife and daughter delivered his remaining collections to Chad Murvosh at the University of Nevada Las Vegas. The authors will attempt to finish the job of distributing them, but any curator who believes Dr. Allen's specimens included borrowed material under their care, should contact one of the writers.

Dick Allen "retired" from studying mayflies several times but actually continued his studies throughout his life. Much of his collection, including the specimens collected in Mexico by Allen and Murvosh, are already deposited at the California Academy of Sciences.

*George F. Edmunds, Jr., Department of Biology, University of Utah, Salt Lake City, Utah 84112 USA; Chad Murvosh, Department of Biological Sciences, University of Nevada Las Vegas, Las Vegas, Nevada 89154 USA.

Research Summaries and Requests

James Munro, P.O. Box 214, Lake
Harmony, Pennsylvania 18624, USA,
E-mail jmunro@mail.microserve.net

My M.S. thesis research was based on the taxonomy, biology, and ecology of larval Baetidae (Ephemeroptera) collected from eight lotic systems and four lentic areas in the Pocono Region of Pennsylvania (USA). A total of 4,917 larvae were collected, representing 9 genera and 18 species. The collection of *Callibaetis pretiosus* and *Procloeon viridoculare* represented a significant northward increase in the known distribution of these two species. Populations of *Acentrella turbida* and *Acerpenna macdunnoughi* larvae were found that did not exactly match previous descriptions in terms of setation, dentition, and tergal armature. In addition, a previously undescribed species of *Acentrella* was discovered.

Male baetid larvae were determined by the presence of forming turbinate eyes. The remaining larvae were determined to be either female or immature based on head capsule width cut-off points (below which all larvae were called immature and above which all larvae not assigned male were called female) established for each species. Larval sex ratios were calculated for ten of the species collected. *Acerpenna macdunnoughi* was found to have both parthenogenetic populations and populations that contained male and female larvae.

Larval recruitment and emergence dates were determined for most of the species collected. Routinely sampled species showed little difference in recruitment and emergence dates among the sites. The data suggested that bivoltine life histories (one winter and one summer generation or two summer generations) were most common. Trivoltine life histories (one winter and two summer generations) were also suggested, while a univoltine life history was observed in only a few cases.

Measurements of head capsule width; pronotal width; body length; and pro-, meso-, and metafemoral length were recorded for 4,577 of the larvae collected. Six developmental stages, based on wing pad measurement ratios, were established.

The growth and development of *Baetis pluto* and *Baetis tricaudatus*, the two most abundant species collected, were investigated more thoroughly. While head capsule width and body length measurements for developmental stages 1 and 2 remained fairly constant throughout the sampling period, those of stages 4 through 6 were seen to decrease in early July 1993, and then increase again in early October 1993. Measurements of larval body parts were found to be indicative of growth and physiological maturation. Comparison of measurements for each developmental stage was found not

to be significantly different among sampling sites for either species. Measurements were not seen to be significantly different between male and female larvae. Coefficients of variation calculated for each of the six measurements were found to be low for each of the six developmental stages, suggesting that each stage represented a homogeneous sample. Of the six measurements taken, head capsule width was found to be the best predictor of larval age and body length was found to be the poorest predictor of larval age.

Chaodong ZHU, Institute of Zoology,
Chinese Academy of Sciences, Beijing
100080, Peoples Republic of China,
E-mail sea@panda.ioz.ac.cn

From next summer on, I will have a chance to collect and evaluate aquatic insects in the Qinglin Region. I was assigned to finish one paper evaluating the aquatic insects in this area, which is one of the most species-rich areas in China.

Also, if requested, I would like to help ephemeropterists index information on mayflies from 1935 to 1995. From 1993 to 1996, I finished establishing a database using *Zoological Record*. Except for two or three years, all biological information on mayflies is compiled into four databases: systematic, subject, geographic, and the vital one concerning authors and article titles. As time becomes available, this database will be updated.

N. Nagendran, 3, East Park Street,
Singarayar Colony, Madurai - 625 002,
Tamil Nadu, S. India

I am doing my doctoral degree on aquatic entomology. The title of my dissertation is "Diversity, Systematics and Ecology of Ephemeroptera in the Hill Streams of Southern Western Ghats." Any suggestions or guidelines that might be offered would be appreciated.

Mayfly Web Sites

MAYFLY CENTRAL

<http://www.entm.purdue.edu/entomology/mayfly/mayfly.html>

EPHEMEROPTERA GALACTICA

<http://www.famu.edu/mayfly/>

1998 INTERNATIONAL CONFERENCE

<http://www.unt.edu.ar/congresos/EPHEMERO.HTM>

1996 Mayfly Bibliography

[Editor's note: This bibliography was published as the Ephemeroptera portion of the 1996 (1997) North American Benthological Society's *Current and Selected Bibliographies on Benthic Biology*.]

The following is a list of current publications dealing with Ephemeroptera that have been published up to and during 1996 and have not appeared in previous NABS Bibliographies. To facilitate locating abstracts and addresses of authors, the name of the index (abbreviated), volume, and abstract or item number follow each reference. Abbreviations are as follows: *Biological Abstracts* (BA); *Biological Abstracts/Reports, Reviews, and Meetings* (BA/RRM); *Current Contents - Agriculture, Biology, and Environmental Sciences* (CC); *Dissertation Abstracts International* (DAI); *Entomological Abstracts* (EA); *Masters Abstracts International* (MAI); and *Zoological Record - General Insects and Small Orders* (ZR). Citations for CC, DAI, and MA include the volume, issue number in parentheses, and page number on which the reference is found. References without an abstract number were obtained from the original reprint. I would appreciate receiving a reprint of any article that deals with mayflies, especially if it includes scientific names, so that it may be included in next year's bibliography. Also, I would like to be informed of any corrections or omissions in this or past bibliographies. Suggestions are always welcome. Please send all correspondence to Peter M. Grant, Department of Biological Sciences, Southwestern Oklahoma State University, Weatherford, Oklahoma 73096-3098 USA, phone (580) 774-3294, FAX (580) 774-3795, E-mail grantp@swosu.edu.

- Anderson, T. M. 1996. Life history and larval ecology of *Arrenurus hamrumi* (Hydrachnida: Arrenuridae). Dissertation, Oregon State University. [DAI-B 57(6):3532]
- Anonymous. 1995. Detection of organic farm pollution: the use of a biological technique for the detection and monitoring of farm pollution. National Rivers Authority R&D Report 19. 6 pp. [ZR 132(13A):2381]
- Arnekleiv, J. V. 1996. Life cycle strategies and seasonal distribution of mayflies (Ephemeroptera) in a small stream in Central Norway. *Fauna Norvegica Ser. B* 43: 19-30. [BA 102:65904]
- Arnett, R. H., Jr. 1993. American insects: a handbook of the insects of America north of Mexico. Sandhill Crane Press, Inc., Gainesville. 850 pp. [ZR 132(13A):143]
- Belfiore, C. 1996. Identification and discrimination of *Electrogena* species by numerical methods (Ephemeroptera: Heptageniidae). *Syst. Entomol.* 21: 1-13. [BA 102:7265]
- Bennett, C. J. 1994. The first reported occurrence of the mayfly parasite *Spirinella adipophila* (Sporozoa) in a British river. *Freshwater Forum* 4(2): 89-96. [ZR 132(13A):283]
- Bergman, E.; Greenberg, L. A. 1994. Competition between a planktivore, a benthivore, and a species with ontogenetic diet shifts. *Ecology* 75: 1233-1245. [ZR 132(13A):300]
- Blanke, D. 1994. Zur Eintags-, Stein- und Kocherfliegenfauna (Insecta: Ephemeroptera, Plecoptera, Trichoptera) des sudniedersächsischen Baches Bremke (Norden-Hardenberg/Kreis Nörtheim). *Goettinger Naturkund. Schrift.* 3: 97-104. (In German, English summary) [ZR 132(13A):372]
- Bournaud, M.; Cellot, B.; Richoux, P.; Berrahou, A. 1996. Macroinvertebrate community structure and environmental characteristics along a large river: congruity of patterns for identification to species or family. *J. N. Amer. Benthol. Soc.* 15: 232-253. [BA 102:50278]
- Bradt, P.T. 1996. Limestone to mitigate lake acidification: macrobenthos response in treated and reference lakes. *Hydrobiologia* 317: 115-126. [BA 101:140961]
- Brady, V. J. 1993. The invertebrates of a Great Lakes coastal marsh. Thesis, Michigan State University. [MAI 31(4):1654]
- Brewin, P. A.; Newman, T. M. L.; Ormerod, S. J. 1995. Patterns of macroinvertebrate distribution in relation to altitude, habitat structure and land use in streams of the Nepalese Himalaya. *Arch. Hydrobiol.* 135: 79-100. [CC 27(3)]
- Brooke, L. T.; Ankley, G. T.; Call, D. J.; Cook, P. M. 1996. Gut content weight and clearance rate for three species of freshwater invertebrates. *Environ. Toxicol. Chem.* 15: 223-228. [BA 101:93317]
- Brown, C. A.; King, J. M. 1995. The effects of trout-farm effluents on benthic invertebrate community structure in rivers in the southwestern Cape, South Africa. *South African J. Aquat. Sci.* 21: 3-21. [BA 102:3777]
- Buffagni, A.; Gomba, T. 1996. Larval development of *Baetis liebenouae* Keffermuller (Ephemeroptera: Baetidae) in a north Italian lowland spring. *Ann. Limnol.* 32: 221-228. [CC 28(5)]
- Burian, S. K.; Blackburn, K.; Juentes-Molack, L. 1995. An update on the occurrence of three species of mayflies (Ephemeroptera) in Maine. *Maine Natur.* 3: 49-54. [ZR 132(13A):487]
- Canterbury, R. L. 1992. The effects of disturbance frequency on the community structure of macroinvertebrates inhabiting debris dams in a first order Appalachian stream. Dissertation, Clemson University. [DAI-B 54(4):1763]
- Castien, E.; Gosalbez, J. 1995. Diet of *Galemys pyrenaicus* (Geoffroy, 1811) in the north of the Iberian Peninsula. *Netherlands J. Zool.* 45: 422-430. [BA 101:109487]
- Chen, Y.; Harvey, H. H. 1995. Growth, abundance, and food supply of white sucker. *Trans. Amer. Fish. Soc.* 124: 262-271. [ZR 132(13A):576]
- Clarke, K. D. 1995. Numerical, growth and secondary production responses of the benthic macroinvertebrate community to whole-lake enrichment in insular Newfoundland. Thesis, Memorial University of Newfoundland. [MAI 34(2):659]
- Collares-Pereira, M. J.; Martins, M. J.; Pires, A. M.; Geraldes, A. M.; Coelho, M. M. 1996. Feeding behaviour of *Barbus bocagei* assessed under a spatio-temporal approach. *Folia Zool.* 45: 65-76. [BA 102:3505]
- Collier, K. J.; Smith, B. J. 1995. Sticky trapping of adult mayflies, stoneflies and caddisflies alongside three contrasting streams near Hamilton, New Zealand. *New Zealand Nat. Sci.* 22: 1-9. [BA 102:18582]
- Cooper, J. C. 1993. Life history and ecology of *Siphloplecton basale* (Walker) (Metretopodidae: Ephemeroptera) in three Michigan trout streams. Thesis, Central Michigan University. [MAI 32(3):893]
- Culp, J. M.; Podemski, C.; Cash, K. J.; Lowell, R. B. 1996. Utility

- of field-based artificial streams for assessing effluent effects on riverine ecosystems. *J. Aquat. Ecosystem Health* 5: 117-124. [BA 102:153833]
- Currie, R. S. 1993. Bioavailability of sediment-associated contaminants to aquatic invertebrates in littoral mesocosms. Thesis, The University of Manitoba. [MAI 33(3):852]
- Decanini, L. I. 1994. Aquatic insect communities and water quality in the lower Rio Grande Valley. Thesis, The University of Texas - Pan American. [MAI 32(6):1590]
- DeMoor, F. C.; McCafferty, W. P. 1996. Lectotype designation and a new synonym of *Cloeodes inzigae* (Crass, 1947) (Ephemeroptera: Baetidae). *African Entomol.* 4: 269-271. [CC 27(51)]
- Dethier, M.; de Sousa, J.; Molander, C.; Knispel, S. 1995. Spatial distribution and temporal variability of some aquatic insects in the Franco-Geneva River, Allondon. *Hydrobiologia* 300-301: 149-155. [ZR 132(13A):824]
- Dieter, C. D. 1993. Effects of phorate on ducklings, macroinvertebrates, and Microtox in northern prairie wetlands. Dissertation, South Dakota State University. [DAI-B 54(11):5459]
- Dieter, C. D.; Duffy, W. G.; Flake, L. D. 1996. The effect of phorate on wetland macroinvertebrates. *Environ. Toxicol. Chem.* 15: 308-312. [BA 101:120623]
- Dominguez, E.; Molineri, C. 1996. A new species of *Atopophlebia* (Ephemeroptera: Leptophlebiidae: Atalophlebiinae) from Bolivia and Argentina. *Aquat. Insects* 18: 55-59. [BA 101:129204]
- Drouillard, K. G.; Ciborowski, J. J. H.; Lazar, R.; Haffner, D. D. 1996. Estimation of the uptake of organochlorines by the mayfly *Hexagenia limbata* (Ephemeroptera: Ephemeridae). *J. Great Lakes Res.* 22: 26-35. [BA 101:181784]
- Dudgeon, D. 1996. The life history, secondary production and microdistribution of *Ephemera* spp. (Ephemeroptera: Ephemeridae) in a tropical forest stream. *Arch. Hydrobiol.* 135: 473-483. [BA 101:140705]
- Dudgeon, D. 1996. Life histories, secondary production, and microdistribution of heptageniid mayflies (Ephemeroptera) in a tropical forest stream. *J. Zool.* 240: 341-361. [BA 102:173738]
- Dukerschein, J. T.; Gent, R.; Sauer, J. 1996. Recovery of macroinvertebrates by screening in the field: a comparison between coarse (1.18 mm) and fine (0.60 mm) mesh sieves. *J. Freshwater Ecol.* 11: 61-65. [BA 101:125377]
- Easton, R. S.; Orth, D. J.; Voshell, J. R., Jr. 1996. Spatial and annual variation in the diets of juvenile smallmouth bass, *Micropterus dolomieu*. *Environ. Biol. Fishes* 46: 383-392. [BA 102:97027]
- Edmunds, G. F., Jr.; McCafferty, W. P. 1996. New field observations on burrowing in Ephemeroptera from around the world. *Entomol. News* 107: 68-76. [BA 101:172256]
- Edmunds, G. F., Jr.; Murvosh, C. M. 1995. Obituary: Richard K. Allen (1925-1992). *Pan-Pac. Entomol.* 71: 75-77. [ZR 132(13A):918]
- Eggleton, M. A.; Morgan, E. L.; Pennington, W. L. 1996. Effects of liming on an acid-sensitive southern Appalachian stream. *Restoration Ecol.* 4: 247-263. [BA 102:168382]
- Enders, G.; Wagner, R. 1996. Mortality of *Apatania fimbriata* (Insecta: Trichoptera) during embryonic, larval and adult life stages. *Freshwater Biol.* 36: 93-104. [CC 27(37)]
- Englund, G. V. 1992. Competition in caddis larvae. Dissertation, Umea Universitet. [DAI-C 54(1):90]
- Fausto, J. A. 1992. Seasonal migrations of the burrowing mayfly, *Hexagenia limbata* (Serville) (Ephemeroptera: Ephemeridae) in stratified lakes. Thesis, Trent University. [MAI 31(4):1666]
- Fjellheim, A. 1996. Distribution of benthic invertebrates in relation to stream flow characteristics in Norwegian River. *Reg. Riv. Res. Manage.* 12: 263-271. [BA 102:18757]
- Fjellheim, A.; Raddum, G. G. 1995. Benthic animal response after liming of three south Norwegian rivers. *Water Air Soil Pollut.* 85: 931-936. [BA 101:151623]
- Fjellheim, A.; Raddum, G. G. 1996. Weir building in a regulated west Norwegian river: long-term dynamics of invertebrates and fish. *Reg. Riv. Res. Manage.* 12: 501-508. [BA 102:160632]
- Forrester, G. E. 1992. Predator-prey interactions between fish and insects in streams. Dissertation, University of New Hampshire. [DAI-B 53(11):5524]
- Frutiger, A. 1996. Embryogenesis of *Dinocras cephalotes*, *Perla grandis* and *P. marginata* (Plecoptera: Perlidae) in different temperature regimes. *Freshwater Biol.* 36: 497-508. [CC 28(4)]
- Fry, L. L. 1994. Ecological attributes of the tadpole shrimp, *Triops longicaudatus* (Notostraca: Triopsidae), as a biological control agent of mosquitoes. Dissertation, University of California, Riverside. [DAI-B 55(8):3116]
- Gagnier, D. L. 1995. Patterns of commonness and rarity in emergent stream insect communities of Algonquin Park, Ontario (Ephemeroptera, Plecoptera, Trichoptera). Thesis, The University of Western Ontario. [MAI 34(3):1093]
- Gaino, E.; Rebora, M. 1996. Fine structure of flat-tipped antennal sensilla in three species of mayflies (Ephemeroptera). *Invert. Biol.* 115: 145-149. [BA 102:6836]
- Ghioni, C.; Bell, J. G.; Sargent, J. R. 1996. Polyunsaturated fatty acids in neutral lipids and phospholipids of some freshwater insects. *Comp. Biochem. Physiol. B* 114: 161-170. [BA 102:63444]
- Gibbs, K. E.; Siebenmann, M. 1996. Life history attributes of the rare mayfly *Siphonisca aerodromia* Needham (Ephemeroptera: Siphonuridae). *J. N. Amer. Benthol. Soc.* 15: 95-105. [BA 101:129488]
- Giberson, D. J. 1991. Fluctuations in abundance of burrowing mayflies in Southern Indian Lake, Manitoba: mechanisms and implications for environmental monitoring. Dissertation, The University of Manitoba. [DAI-B 54(3):1209]
- Gibon, F. M.; Elouard, J. M.; Sartori, M. 1996. Spatial distribution of some aquatic insects in the Reserve Naturelle Integrale d'Andringitra, Madagascar. *Fieldiana Zool.* 0(85): 109-120. [BA 102:160141]
- Giddings, J. M.; Biever, R. C.; Annuziato, M. E.; Hosmer, A. J. 1996. Effects of diazinon on large outdoor pond microcosms. *Environ. Toxicol. Chem.* 15: 618-629. [BA 102:14387]
- Gillies, M. T.; Thorpe, J. R. 1996. When is a spine not a spine? A new look at an old problem in the taxonomy of the Baetidae (Ephemeroptera). *Entomologist* 115: 86-90. [BA 102:7276]
- Gupta, A. 1996. Heavy metals in water, periphytonic algae, detritus, and insects from two streams in Shillong, northeastern India. *Environ. Monit. Assess.* 40: 215-223. [BA 102:12643]
- Hanes, E. C. 1993. Life history characteristics and size variation of the burrowing mayfly *Hexagenia* (Ephemeroptera: Ephemeridae): maternal vs. environmental constraints. Thesis, University of Windsor. [MAI 32(2):540]
- Harris, S. C.; Kondratieff, B. C.; Stark, B. P. 1996. New records of Ephemeroptera, Plecoptera and Trichoptera from Alabama. *Entomol. News* 107: 237-242. [BA 102:148180]
- Haybach, A.; Fischer, J. 1994. Zur kenntnis der Eintagsfliegenfauna (Insecta: Ephemeroptera) von Rheinland-Pfalz. *Lauterbornia* 19: 173-189. (In German, English summary) [ZR 132(13A):1356]

- Heise, B. A. 1994. Ecological and behavioural interactions among stream-dwelling mayflies. Dissertation, University of Toronto. [DAI-B 56(7):3555]
- Hendricks, A. C.; Willis, L. D.; Snyder, C. 1995. Impact of flooding on the densities of selected aquatic insects. *Hydrobiologia* 299: 241-247. [ZR 132(13A):1372]
- Hering, D. 1995. Die Wasserinsektenfauna einiger nordalpiner Flussauen (Insecta: Ephemeroptera, Plecoptera, Coleoptera, Trichoptera). *Lauterbornia* 22: 31-49. (In German, English summary) [ZR 132(13A):1385]
- Holomuzki, J. R. 1996. Effects of substrate and predator type on microdistributions and drift of a lotic mayfly. *J. N. Amer. Benthol. Soc.* 15: 520-528. [CC 28(7)]
- Hubert, W. A.; Lavoie, W. J., IV; Debray, L. D. 1996. Densities and substrate associations of macroinvertebrates in riffles of a small, high plains stream. *J. Freshwater Ecol.* 11: 21-26. [BA 101:125374]
- Hughes, J. M.; Bunn, S. E.; Hurwood, D. A.; Choy, S.; Pearson, R. G. 1996. Genetic differentiation among populations of *Caridina zebra* (Decapoda: Atyidae) in tropical rainforest streams, northern Australia. *Freshwater Biol.* 36: 289-296. [CC 27(46)]
- Hurd, M. K.; Perry, S. A.; Perry, W. B. 1996. Nontarget effects of a test application of diflubenzuron to the forest canopy on stream macroinvertebrates. *Environ. Toxicol. Chem.* 15: 1344-1351. [BA 102:136086]
- Huryn, A. D. 1996. Temperature-dependent growth and life cycle of *Deleatidium* (Ephemeroptera; Leptophlebiidae) in two high-country streams in New Zealand. *Freshwater Biol.* 36: 351-361. [BA 102:160148]
- Imbert, J. 1996. An ecological study of a regulated prairie stream in western Montana. *Reg. Riv. Res. Manage.* 12: 597-615. [CC 28(4)]
- Ishiwata, S. I. 1996. A study of the genus *Ephoron* from Japan (Ephemeroptera, Polymitarcyidae). *Can. Entomol.* 128: 551-572. [BA 102:118216]
- Jacquemin, G.; Coppa, G. 1996. Survey of the mayflies of Lorraine and Champagne-Ardenne (NE France): first results (Ephemeroptera). *Mitteil. Schweiz. Entomol. Gesell.* 69: 141-155. (In French) [BA 102:69684]
- Jensen, F.; Jespersen, J. W. 1995. Carlo F. Jensen: October 18, 1915 - January 23, 1995. *Flora Fauna* 101: 3-5. (In Danish) [BA 101:81230]
- Johansson, A.; Nilsson, A. N. 1994. Insects of a small aestival stream in northern Sweden. *Hydrobiologia* 294: 17-22. [ZR 132(13A):1601]
- Johnson, J. H. 1995. Diel feeding ecology of three species of aquatic insects. *J. Freshwater Ecol.* 10: 183-188. [ZR 132(13A):1605]
- Jorg, E.; Lampel, G. 1996. Enzyme electrophoretic study on the *Aphis fabae* group (Hem., Aphididae). *J. Appl. Entomol.* 120: 7-18. [CC 27(13)]
- Kang, S. C.; Chang, H. C.; Yang, C. T. 1994. A revision of the genus *Baetis* in Taiwan (Ephemeroptera, Baetidae). *J. Taiwan Mus.* 47(2): 9-44. [ZR 132(13A):1646]
- Kang, S. C.; Yang, C. T. 1995. Ephemerellidae of Taiwan (Insecta, Ephemeroptera). *Bull. Nat. Mus. Natur. Sci.* 5: 95-116. [ZR 132(13A):1684]
- Kerby, B. M.; Bunn, S. E.; Hughes, J. M. 1995. Factors influencing invertebrate drift in small forest streams, south-eastern Queensland. *Mar. Freshwater Res.* 46: 1101-1108. [BA 101:125384]
- Kiffney, P. M.; Clements, W. H. 1996. Size-dependent response of macroinvertebrates to metals in experimental streams. *Environ. Toxicol. Chem.* 15: 1352-1356. [BA 102:139770]
- Kirby, R. S. 1993. Effects of temperature modifications on the life histories of a midge in the laboratory and of a mayfly in an impounded river. Thesis, University of Guelph. [MAI 32(2):541]
- Kluge, N. Yu. 1995. A catalogue of the type-specimens in the collection of the Zoological Institute, Russian Academy of Sciences. Insecta, Ephemeroptera. *Zool. Inst. Sankt-Peterburg* 1995: 1-51. (In Russian) [ZR 132(13A):1745]
- Kluge, N. Yu. 1995(1996). A new suborder of Thysanura for the Carboniferous insect originally described as larva of *Bojophlebia* with comments on characters of the order Thysanura and Ephemeroptera. *Zoosyst. Rossica* 4: 71-75. [ZR 132(13A):1741]
- Kluge, N. Yu. 1995(1996). The Palaearctic Metretopodidae, with description of a new genus and species from Siberia (Ephemeroptera). *Zoosyst. Rossica* 4: 76-80. [ZR 132(13A):1742]
- Kluge, N. Yu.; Naranjo, J. C. 1994(1995). A peculiar new species of the mayfly genus *Euthyplocia* Eaton (Ephemeroptera, Ephemeridae) from Cuba. *Entomol. Obozr.* 73: 777-782. (In Russian, English summary). [ZR 132(13A):1744]
- Kluge, N. Yu.; Naranjo, J. C. 1994(1995). A peculiar new species of the mayfly genus *Euthyplocia* Eaton (Ephemeroptera, Ephemeridae) from Cuba. *Entomol. Rev.* 75: 113-118. [BA 101:175892]
- Knopp, L. 1993. Field of vision (nature essays). Dissertation, The University of Nebraska. [DAI-A 55(1):87]
- Kovats, Z. E.; Ciborowski, J. J. H.; Corkum, L. D. 1996. Inland dispersal of adult aquatic insects. *Freshwater Biol.* 36: 265-276. [BA 102:160147]
- Kraiem, M. M. 1996. The diet of *Barbus callensis* (Cyprinidae) in northern Tunisia. *Cybum* 20: 75-85. [BA 102:80289]
- Kratz, K. W. 1996. Effects of stoneflies on local prey populations: mechanisms of impact across prey density. *Ecology* 77: 1573-1585. [BA 102:80326]
- Krieger, K. A.; Schloesser, D. W.; Manny, B. A.; Trisler, C. E.; Heady, S. E.; Ciborowski, J. J. H.; Muth, K. M. 1996. Recovery of burrowing mayflies (Ephemeroptera: Ephemeridae: *Hexagenia*) in western Lake Erie. *J. Great Lakes Res.* 22: 254-263. [BA 102:113997]
- Krno, I.; Illesova, D.; Halgos, J. 1994. Temporal fauna of the Gidra Brook (Little Carpathians, Slovakia). *Acta Zool. Univ. Comenianae* 38: 35-46. [ZR 132(13A):1807]
- Kutash, T. N. 1994. Effects of body length on the swimming behaviour of *Baetis tricaudatus* Dodds (Ephemeroptera: Baetidae). Thesis, University of Alberta. [MAI 33(5):1455]
- Lamberti, G. A.; Gregory, S. V.; Ashkenas, L. R.; Li, J. L.; Steinman, A. D.; McIntire, C. D. 1995. Influence of grazer type and abundance on plant-herbivore interactions in streams. *Hydrobiologia* 306: 179-188. [ZR 132(13A):1855]
- Larsen, J.; Birks, H. J. B.; Raddum, G. G.; Fjellheim, A. 1996. Quantitative relationships of invertebrates to pH in Norwegian river systems. *Hydrobiologia* 328: 57-74. [BA 102:138276]
- Lee, S. J.; Yoon, I. B.; Bae, Y. J. 1995. Altitudinal distribution of *Ephemera strigata* Eaton and *E. orientalis* McLachlan (Ephemeroptera: Ephemeridae). *Korean J. Entomol.* 25: 201-208. (In Korean, English summary) [BA 101:129497]
- Lester, P. J.; Mitchell, S. F.; Scott, D.; Lyon, G. L. 1995. Utilisation of willow leaves, grass and periphyton by stream macroinvertebrates: a study using stable carbon isotopes. *Arch. Hydrobiol.* 133: 149-159. [ZR 132(13A):1911]

- Lichtwardt, R. W.; Arenas, M. J. 1996. Trichomycetes in aquatic insects from southern Chile. *Mycologia* 88: 844-857. [BA 102:172174]
- Lingdell, P. E.; Engblom, E. 1995. Liming restores the benthic invertebrate community to "pristine" state. *Water Air Soil Pollut.* 85: 955-960. [BA 101:150004]
- Lobinski, R. J.; Ali, A.; Stout, I. J. 1996. Life history and productivity of *Hexagenia limbata* (Ephemeroptera: Ephemeridae) and selected physico-chemical parameters in two tributaries of the Wekiva River, central Florida. *Fla. Entomol.* 79: 543-551. [CC 28(6)]
- Loneragan, S. P. 1994. Macroinvertebrate community responses to acidification: isolating the effects of pH from other water chemistry variables. Thesis, McGill University. [MAI 33(4):1176]
- Lubini, V.; Knispel, S.; Landolt, P.; Sartori, M. 1996. Geographical distribution of mayflies and stoneflies (Insecta: Ephemeroptera, Plecoptera) in Switzerland - preliminary results. *Mitt. Schweiz. Entomol. Gesell.* 69: 127-133. [BA 102:69682]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1995. Three distinctive new genera of Baetidae (Insecta, Ephemeroptera) from South America. *Annal. Limnol.* 31: 233-243. [BA 101:129487]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. New Central American and Mexican records of Ephemeroptera species. *Entomol. News* 107: 303-310. [CC 27(51)]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. Central American *Tortopus* (Ephemeroptera: Polymitarcyidae): a unique new species and new country records. *Entomol. News* 107: 23-27. [BA 101:113389]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. New species of Leptophlebiidae (Ephemeroptera) from Mexico and Central America. *Ann. Limnol.* 32: 3-18. [BA 102:22589]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. The genus *Paracloeodes* (Insecta: Ephemeroptera: Baetidae) and its presence in South America. *Ann. Limnol.* 32: 161-169. [CC 27(48)]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. *Crassabwa*: a new genus of small minnow mayflies (Ephemeroptera: Baetidae) from Africa. *Ann. Limnol.* 32: 235-240. [CC 28(5)]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. Phylogeny and classification of the *Baetodes* complex (Ephemeroptera: Baetidae), with description of a new genus. *J. N. Amer. Benthol. Soc.* 15: 367-380. [BA 102:133065]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. Contribution to the taxonomy of *Callibaetis* (Ephemeroptera: Baetidae) in south-western North America and Middle America. *Aquat. Insects* 18: 1-9. [BA 101:129480]
- Lugo-Ortiz, C. R.; McCafferty, W. P. 1996. *Aturbina georgei* gen. et sp. n.: a small minnow mayfly (Ephemeroptera: Baetidae) without turbinate eyes. *Aquat. Insects* 18: 175-183. [BA 102:101548]
- Lynch, J. M.; Byrne, C. F. 1995. *Ameletus inopinatus* Eaton and other Ephemeroptera from Glenveagh National Park, Co. Donegal, Ireland. *Irish Biogeog. Soc. Bull.* 18: 30-36. [ZR 132(13A):2026]
- Malzacher, P.; Mauch, E. 1989. *Siphonurus armatus* (Eaton) (Ephemeroptera): 2. Nachweis für Bayern. *Lauterbornia* 2: 53. (In German) [ZR 132(13A):2072]
- Marchant, R.; Yule, C. M. 1996. A method for estimating larval life spans of aseasonal aquatic insects from streams on Bougainville Island, Papua New Guinea. *Freshwater Biol.* 35: 101-107. [BA 101:109334]
- Marks, J. C. 1995. Ecology and genetics of freshwater algae. Dissertation, University of California, Berkeley. [DAI-B 57(3):1575]
- Martin, P. J. S. 1993. Diflubenzuron (Dimilin (RTM)): Environmental effects and biochemical mode-of-action. Dissertation, University of Massachusetts. [DAI-B 54(10):5011]
- Martinez I Delclos, X. 1991. Hemimetabolous insects from the Spanish Lower Cretaceous: taphonomy and paleoautoecology. Dissertation, Universitat de Barcelona. [DAI-C 55(2):472]
- Mathooko, J. M. 1996. Rainbow trout (*Oncorhynchus mykiss* Walbaum) as a potential natural "drift sampler" in a tropical lotic ecosystem. *Limnologia* 26: 245-254. [BA 102:160293]
- Maynard, D. J.; McDowell, G. C.; Tezak, E. P.; Flagg, T. A. 1996. Effect on diets supplemented with live food on the foraging behavior of cultured fall chinook salmon. *Prog. Fish-Cult.* 58: 187-191. [BA 102:80923]
- McCafferty, W. P. 1996. The mayflies (Ephemeroptera) of North America online. *Entomol. News* 107: 61-63. [BA 101:113391]
- McCafferty, W. P. 1996. Emendations to the *Callibaetis* (Ephemeroptera: Baetidae) of South America. *Entomol. News* 107: 230-232. [BA 102:148179]
- McCafferty, W. P. 1996. The Ephemeroptera species of North America and index to their complete nomenclature. *Trans. Amer. Entomol. Soc.* 122: 1-54. [BA 102:7271]
- McCafferty, W. P.; Flowers, R. W.; Waltz, R. D. 1992. The biogeography of Mesoamerican mayflies. *Tulane Stud. Zool. Botany Suppl. Pub.* 1: 173-193. [ZR 132(13A):2160]
- McDowell, R. M.; Main, M. R.; West, D. W.; Lyon, G. L. 1996. Terrestrial and benthic foods in the diet of the shortjawed kokopu, *Galaxias postvectis* Clarke (Teleostei: Galaxiidae). *New Zealand J. Mar. Freshwater Res.* 30: 257-269. [BA 102:93343]
- McIntosh, A. R.; Peckarsky, B. L. 1996. Differential behavioural responses of mayflies from streams with and without fish to trout odour. *Freshwater Biol.* 35: 141-148. [BA 101:109336]
- McIntosh, A. R.; Townsend, C. R. 1995. Impacts of an introduced predatory fish on mayfly grazing in New Zealand streams. *Limnol. Oceanogr.* 40: 1508-1512. [ZR 132(13A):2173]
- McIntosh, A. R.; Townsend, C. R. 1996. Interactions between fish, grazing invertebrates and algae in a New Zealand stream: a trophic cascade mediated by fish-induced changes to grazer behavior? *Oecologia* 108: 174-181. [BA 102:160162]
- McNicol, D. K.; Bendell, B. E.; Mallory, M. L. 1995. Evaluating macroinvertebrate responses to recovery from acidification in small lakes in Ontario, Canada. *Water Air Soil Pollut.* 85: 451-456. [BA 101:151579]
- Miserendino, M. L. 1995. Species composition and distribution of macrozoobenthos in lotic andean-patagonic system. *Ecologia Austral* 5: 133-142. (In Spanish, English abstract) [BA 101:171979]
- Miserendino, M. L. 1996. First description of the nymph of *Rhigotopus* (Ephemeroptera: Leptophlebiidae), with biological data. *Rev. Soc. Entomol. Argentina* 55: 21-24. (In Spanish, English abstract) [BA 102:101541]
- Moog, O.; Romer, A. 1995. Erstnachweis von *Arthroplea congener* Bengtsson 1908 in Österreich (Ephemeroptera: Arthropleidae). *Lauterbornia* 20: 87-91. (In German, English summary) [ZR 132(13A):2278]
- Muir, D. C. G.; Pastershank, G. M.; Crosley, R.; Noton, L.; Ramamoorthy, S.; Brownlee, B. 1995. Pathways of accumulation and temporal trends of PCDD/Fs in fishes downstream from a bleached kraft pulp mill on the Athabasca River (Alberta). *Organohalogen Compounds* 24: 463-468. [ZR 132(13A):2322]

- Muller, H. J. 1995. Bestimmung wirbelloser Tiere: Bildtafeln für zoologische Bestimmungsübungen und Exkursionen. 3. Auflage. Gustaf Fischer Verlag, Jena & Stuttgart. 362 pp. [ZR 132(13A):2324]
- Munoz, I.; Prat, N. 1994. Macroinvertebrate community in the lower Ebro River (NE Spain). *Hydrobiologia* 286: 65-78. [ZR 132(13A):2332]
- Nel, A.; Roy, R. 1996. Revision of the fossil "mantid" and "ephemerid" species described by Piton from the Palaeocene of Menat (France) (Mantodea: Chaeteessidae, Mantidae, Ensifera: Tettigoniidae). *European J. Entomol.* 93: 223-234. [BA 102:118142]
- Nolte, U.; Tietbohl, R. S.; McCafferty, W. P. 1996. A mayfly from tropical Brazil capable of tolerating short-term dehydration. *J. N. Amer. Benthol. Soc.* 15: 87-94. [BA 101:125438]
- Novikova, E. A.; Kluge, N. Yu. 1994. Mayflies of the subgenus *Nigrobaetis* (Ephemeroptera, Baetidae, Baetis Leach, 1815). *Entomol. Obozr.* 73: 623-644. (In Russian, English summary) [BA 101:81227]
- Novikova, E. A.; Kluge, N. Yu. 1995. Mayflies of the subgenus *Nigrobaetis* (Ephemeroptera, Baetidae, Baetis Leach, 1815). *Entomol. Rev.* 74(8): 16-39. [BA 101:129491]
- Odin, M.; Ribeyre, F.; Boudou, A. 1996. Temperature and pH effects on cadmium and methylmercury bioaccumulation by nymphs of the burrowing mayfly *Hexagenia rigida*, from water column or sediment source. *Arch. Environ. Contam. Toxicol.* 31: 339-349. [CC 27(49)]
- Oertli, B.; Lachavanne, J. B. 1995. The effects of shoot age on colonization of an emergent macrophyte (*Typha latifolia*) by macroinvertebrates. *Freshwater Biol.* 34: 421-431. [BA 101:62149]
- O'Halloran, S. L.; Liber, K.; Schmude, K. L.; Corry, T. D. 1996. Effects of diflubenzuron on benthic macroinvertebrates in littoral enclosures. *Arch. Environ. Contam. Toxicol.* 30: 444-451. [BA 102:28566]
- Ouahsine, H.; Cereghino, R.; Lavandier, P. 1996. Influence of temperature and macrophytes development of the larval population dynamics of *Epeorus sylvicola* Pict. (Ephemeroptera) in a torrential river of the "Haut-Atlas de Marrakech" (Morocco). *Ann. Limnol.* 32: 27-31. [BA 102:18764]
- Palmer, C. G.; Maart, B.; Palmer, A. R.; O'Keeffe, J. H. 1996. An assessment of macroinvertebrate functional feeding groups as water quality indicators in the Buffalo River, eastern Cape Province, South Africa. *Hydrobiologia* 318: 153-164. [BA 101:156335]
- Palmer, R. W. 1993. Short-term impacts of formulations of *Bacillus thuringiensis* var. *israelensis* de Barjac and the organophosphate temephos, used in blackfly (Diptera: Simuliidae) control, on rheophilic benthic macroinvertebrates in the middle Orange River, South Africa. *S. African J. Aquat. Sci.* 19: 14-33. [BA 102:168325]
- Palmer, R. W.; Palmer, A. R. 1995. Impacts of repeated applications of *Bacillus thuringiensis* var. *israelensis* de Barjac and temephos, used in blackfly (Diptera: Simuliidae) control, on macroinvertebrates in the middle Orange River, South Africa. *S. African J. Aquat. Sci.* 21: 35-55. [BA 102:3980]
- Parker, D. W. 1992. Emergence phenologies and patterns of aquatic insects inhabiting a prairie pond. Dissertation, The University of Saskatchewan. [DAI-B 54(9):4497]
- Peckarsky, B. L. 1996. Alternative predator avoidance syndromes of stream-dwelling mayfly larvae. *Ecology* 77: 1888-1905. [BA 102:129525]
- Peckarsky, B. L.; Cowan, C. A. 1995. Microhabitat and activity periodicity of predatory stoneflies and their mayfly prey in a western Colorado stream. *Oikos* 74: 513-521. [BA 101:125622]
- Peters, W. L.; Campbell, I. C. 1994. Ephemeroptera (mayflies). pp. 248-253. In: Naumann, I. D. (ed.). *Systematic and applied entomology: an introduction*. Melbourne Univ. Press, Melbourne. 484 pp. [ZR 132(13A):2602]
- Peters, W. L.; Peters, J. G.; Edmunds, G. F., Jr. 1994(1996). The Leptophlebiidae: Atalophlebiinae of New Caledonia (Ephemeroptera). *Rev. Hydrobiol. Tropicae* 27(2): 97-105. [BA 102:84484]
- Petryszak, A.; Fudalewicz, Niemczyk, W. 1995. Proprioceptors on the legs of poorly flying insects. *Acta Biol. Cracoviensia Ser. Zool.* 37: 1-9. [ZR 132(13A):2607]
- Phillips, E. C. 1993. Aquatic insects and fishes associated with coarse woody debris in northwest Arkansas streams. Dissertation, University of Arkansas. [DAI-B 55(8):3194]
- Pritchard, G.; Harder, L. D.; Mutch, R. A. 1996. Development of aquatic insect eggs in relation to temperature and strategies for dealing with different thermal environments. *Biol. J. Linn. Soc.* 58: 221-244. [BA 102:66043]
- Puig, M. A.; Gaiño, E. 1996. *Choroterpes (Choroterpes) prati* n. sp., a new species of mayfly from north-east of Spain (Ephemeroptera: Leptophlebiidae). *Ann. Limnol.* 32: 229-233. [CC 28(5)]
- Purvis, J. M. 1996. Effects of geology on watershed geomorphology and the ecology of grazing stream insects. Dissertation, The University of Alabama. [DAI-B 57(6):3527]
- Raddum, G. G.; Fjellheim, A. 1995. Effects of liming and acid surface water on the mayfly *Leptophlebia vespertina* in Lake Hovvatn. *Water Air Soil Pollut.* 85: 961-966. [BA 101:150005]
- Randolph, R. P.; McCafferty, W. P. 1996. First larval descriptions of two species of *Paraleptophlebia* (Ephemeroptera: Leptophlebiidae). *Entomol. News* 107: 225-229. [BA 102:148178]
- Rosciszewska, E. 1996. Egg capsule structure of the stonefly *Protonemura intricata* (Ris 1902) (Plecoptera: Nemouridae). *Acta Biol. Cracov. Ser. Zool.* 38: 41. [CC 27(41)]
- Ruffieux, L.; Sartori, M.; Leplatte, G. 1996. Palmen body: a reliable structure to estimate the number of instars in *Siphonurus aestivalis* (Eaton) (Ephemeroptera: Siphonuridae). *Int. J. Insect Morphol. Embryol.* 25: 341-344. [CC 27(52/53)]
- Rutherford, J. E. 1995. Patterns of dispersion of aquatic insects colonizing artificial substrates in a southern Ontario stream. *Can. J. Zool.* 73: 458-468. [ZR 132(13A):2848]
- Saftoiu, A. 1995. Anatomical intergonadal bridges in Baetidae (Ephemeroptera, Insecta). *Studii si Cercetari de Biol. Ser. Biol. Anim.* 47: 23-29. (In Romanian, English summary) [ZR 132(13A):2855]
- Sampson, C. J.; Brezonik, P. L.; Frost, T. M.; Webster, K. E.; Simonson, T. D. 1995. Experimental acidification of Little Rock Lake, Wisconsin: the first four years of chemical and biological recovery. *Water Air Soil Pollut.* 85: 1713-1719. [BA 101:165444]
- Sartori, M.; Elouard, J. M. 1996. New Heptageniidae (Insecta: Ephemeroptera) from the Reserve Naturelle Integrale d'Andringitra, Madagascar. *Fieldiana Zool.* 0(85): 121-130. [BA 102:163736]
- Sartori, M.; Zabriz, D.; Jann, B. 1996. On three mayfly species new for the Swiss fauna (Ephemeroptera, Baetidae, Leptophlebiidae). *Mitt. Schweiz. Entomol. Gesell.* 69: 135-139. (In French, English summary) [BA 102:69683]

- Schaeffer, J. S. 1994. Mechanisms regulating growth and food consumption of walleyes and yellow perch in Saginaw Bay, Lake Huron. Dissertation, The University of Michigan. [DAI-B 55(8):3112]
- Scholl, F. 1993. Der Schlickkrebs (*Corophium curvispinum*) und die Augustfliege (*Ephoron virgo*): zwei Arten mit rezenter Massenentwicklung im Rhein. pp. 89-94. In: Ministerium für Umwelt Rheinland-Pfalz. (ed.). Die Biozönose des Rheins im Wandel: Lachs 2000? Advanced Biology Verlagsgesellschaft mbH, Petersberg. 118 pp. (In German, English summary) [ZR 132(13A):2954]
- Schouten, P. J. 1996. Velocity detection and its relationship to filter feeding in nymphs of the mayfly *Ametropus neavei* (Ephemeroptera: Ametropodidae). Thesis, University of Alberta. [MAI 34(6):2301]
- Schulte, H.; Weinzierl, A. 1990. Beiträge zur Faunistik einiger Wasserinsektenordnungen (Ephemeroptera, Plecoptera, Coleoptera, Trichoptera) in Niederbayern. Lauterbornia 6: 1-83. (In German, English summary) [ZR 132(13A):2965]
- Scillitani, G.; Belfiore, C.; Picariello, O.; Cataudo, A. 1996. Estimating genetic variation from larvae and adults of mayflies: an electrophoretic analysis of three species of Heptageniidae (Ephemeroptera). Ital. J. Zool. 63: 23-30. [CC 27(32)]
- Scrimgeour, G. J. 1992. Foraging patch selection by the lotic mayfly *Baetis tricaudatus*. Dissertation, University of Calgary. [DAI-B 54(6):2872]
- Sempeski, P.; Gaudin, P. 1996. Size-related shift in feeding strategy and prey-size selection in young grayling (*Thymallus thymallus*). Can. J. Zool. 74: 1597-1603. [BA 102:143989]
- Shaffer, L. R.; Robinson, J. V. 1996. Do damselfly larvae recognize and differentially respond to distinct categories of macroinvertebrates? J. Insect Behav. 9: 407-419. [BA 102:65927]
- Sharma, R. K.; Mathur, R.; Sharma, S. 1995. Status and distribution of fauna in National Chambal Sanctuary, Madhya Pradesh. Indian Forester 121: 912-916. [BA 101:140775]
- Shaw, J. L.; Manning, J. P. 1996. Evaluating macroinvertebrate population and community level effects in outdoor microcosms: use of in situ bioassays and multivariate analysis. Environ. Toxicol. Chem. 15: 608-617. [BA 102:12625]
- Shimazu, T. 1996. Mayfly larvae, *Ephoron japonica*, as natural intermediate hosts of salmonid nematodes, *Sterliadochona ephemeridarum* and *Rhabdochona oncorhynchi* in Japan. Japanese J. Parasitol. 45: 167-172. [BA 102:118227]
- Silinia, A. E. 1993. Ecological peculiarities of the sympatric species of mayflies *Cloeon dipterum* L. and *C. inscriptum* Bgtss. (Ephemeroptera, Baetidae). Entomol. Obozr. 72: 776-781. (In Russian, English summary) [ZR 132(13A):3038]
- Simmons, K. R.; Doyle, K. 1996. Limestone treatment of Whetstone Brook, Massachusetts: III. Changes in the invertebrate fauna. Restoration Ecol. 4: 284-292. [BA 102:168385]
- Sivaramakrishnan, K. G.; Venkataraman, K.; Balasubramanian, C. 1996. The biosystematics of the genus *Nathanelia* Demoulin (Ephemeroptera: Leptophlebiidae: Atalophlebiinae) from south India. Aquat. Insects 18: 19-28. [BA 101:129482]
- Smock, L. A.; Gazzera, S. B. 1996. Effects of experimental episodic acidification on a southeastern USA blackwater stream. J. Freshwater Ecol. 11: 81-90. [BA 101:125760]
- Snyder, C. D. 1992. Physiological, population, and genetic responses of an aquatic insect (*Isonychia bicolor*) to chronic mercury pollution. Dissertation, Virginia Polytechnic Institute and State University. [DAI-B 53(12):6100]
- Snyder, S. D.; Janovy, J., Jr. 1996. Behavioral basis of second intermediate host specificity among four species of *Haematoloechus* (Digenia: Haematoloechidae). J. Parasitol. 82: 94-99. [BA 101:116468]
- Soldan, T.; Landa, V. 1989. Saprobital-Veränderungen an einigen Lokalitäten im Elbe-Stromgebiet auf Grund der Verbreitung der Eintagsfliegen (Ephemeroptera). Int. Symp. Entomofaunistik Mitteleuropa 11: 349-353. (In German) [ZR 132(13A):3104]
- Soshkin, D. V. 1993. Parasitic protozoans in water larvae of insects in the basin of the river Ucha near Moscow. Parazitologiya 27: 327-331. (In Russian, English summary) [ZR 132(13A):3120]
- Soulsby, C.; Turnbull, D.; Langan, S. J.; Owen, R.; Hirst, D. 1995. Long-term trends in stream chemistry and biology in north-east Scotland: evidence for recovery. Water Air Soil Pollut. 85: 689-694 [BA 101:151588]
- Spinney, L. 1996. Worm that turns males mayflies into females. New Scientist 151(2042): 16. [CC 27(38)]
- Svensson, B. G.; Petersson, E. 1995. Diurnal and seasonal variations in swarming and mating behaviour of the dance fly *Empis borealis* (Diptera: Empididae). Annal. Zool. Fenn. 32: 403-409. [CC 27(7)]
- Tanatmis, M. 1995. Studies on the determination of Ephemeroptera limnofauna at the Sakarya river system. Türkiye Entomol. Dergisi 19: 287-298. (In Turkish, English summary) [ZR 132(13A):3249]
- Tang, J. X.; Siegfried, B. D. 1995. Comparative uptake of a pyrethroid and organophosphate insecticide by selected aquatic insects. Bull. Environ. Contam. Toxicol. 55: 130-135. [ZR 132(13A):3251]
- Teixeira, R. L. 1995. Reproductive and feeding biology of selected syngnathids (Pisces: Teleostei) of the western Atlantic. Dissertation, The College of William and Mary. [DAI-B 57(1):179]
- Thomas, A. 1996. Mayflies of southwestern France. V. First list of recorded species since 1870 (Insecta, Ephemeroptera). Ann. Limnol. 32: 19-26. (In French, English summary) [BA 102:22590]
- Thomas, A.; Gagneur, J. 1994. Compléments et corrections à la faune des éphéméroptères d'Afrique du nord. 6. *Alainites sadati* n. sp. d'Algérie (Ephemeroptera, Baetidae). Bull. Soc. Hist. Natur. Toulouse 130: 43-45. (In French, English summary) [ZR 132(13A):3292]
- Tikkanen, P.; Muotka, T.; Huhta, A. 1996. Fishless-stream mayflies express behavioural flexibility in response to predatory fish. Anim. Behav. 51: 1391-1399. [BA 102:80372]
- Tobias, W. 1996. Sommernachtliches 'Schneetreiben' am Main. Zum Phänomen des Massenfluges von Eintagsfliegen. Natur Mus. 126: 37-54. (In German) [ZR 132(13A):3318]
- Tzeng, W. N.; Hsiao, J. J.; Shen, H. P.; Chern, Y. T.; Wang, Y. T.; Wu, J. N. 1995. Feeding habit of the Japanese eel, *Anguilla japonica*, in the streams of northern Taiwan. J. Fish. Soc. Taiwan 22: 279-301. [BA 102:19205]
- Vance, S. A. 1996. The effect of mermithid parasitism on the behavior and ecology of its mayfly host. Dissertation, Cornell University. [DAI-B 57(6):3530]
- Vance, S. A. 1996. Morphological and behavioural sex reversal in mermithid-infected mayflies. Proc. R. Soc. London Ser. B. Biol. Sci. 263: 907-912. [BA 102:121292]
- Vance, S. A. 1996. The effect of the mermithid parasite *Gasteromermis* sp. (Nematoda: Mermithidae) on the drift behaviour of the mayfly host, *Baetis bicaudatus* (Ephemeroptera: Baetidae): a trade-off between avoiding predators and locating food. Can. J. Zool. 74: 1907-1913. [BA

- 102:171079]
- Vance, S. A.; Peckarsky, B. L. 1996. The infection of nymphal *Baetis bicaudatus* by the mermithid nematode *Gasteromermis* sp. Ecol. Entomol. 21: 377-381. [CC 27(52/53)]
- Wagner, T.; Neinhuis, C.; Barthlott, W. 1996. Wettability and contaminability of insect wings as a function of their surface sculptures. Acta Zool. 77: 213-225. [BA 102:132767]
- Wallace, J. B.; Grubaugh, J. W.; Whiles, M. R. 1996. Biotic indices and stream ecosystem processes: results from an experimental study. Ecol. Applications 6: 140-151. [BA 101:109206]
- Waltz, R. D. 1996. *Acentrella feminalis*, new combination for an oriental *Baetis* (Ephemeroptera: Baetidae). Aquat. Insects 18: 111-112. [BA 102:22585]
- Waltz, R. D.; Baumgardner, D. E.; Kennedy, J. H. 1996. An atypical larval color form of *Baetis intercalaris* (Ephemeroptera: Baetidae) from Pennsylvania and the Kiamichi River basin of southeastern Oklahoma. Entomol. News 107: 83-87. [BA 101:175909]
- Waltz, R. D.; McCafferty, W. P.; Thomas, A. 1994. Systematics of *Alainites* n. gen., *Dipheter*, *Indobaetis*, *Nigrobaetis* n. stat., and *Takobia* n. stat. (Ephemeroptera, Baetidae). Bull. Soc. Hist. Natur. Toulouse 130: 33-36. [ZR 132(13A):3493]
- Waltz, R. D.; Munro, J. B. 1996. *Callibaetis pretiosus* (Ephemeroptera: Baetidae) from Pennsylvania: new distribution records. Great Lakes Entomol. 29: 37-38. [BA 102:148161]
- Waltz, R. D.; Munro, J. B. 1996. *Procloeon viridocularis* (Ephemeroptera: Baetidae) from Michigan and Pennsylvania, new range extensions with comments on the species. Entomol. News 107: 166-168. [BA 102:54187]
- Wang, T. Q.; McCafferty, W. P. 1996. Redescription and reclassification of the South American mayfly *Melanemerella brasiliensis* (Ephemeroptera: Leptophlebiidae). Entomol. News 107: 99-103. [BA 101:175911]
- Wang, T. Q.; McCafferty, W. P. 1996. New diagnostic characters for the mayfly family Baetidae (Ephemeroptera). Entomol. News 107: 207-212. [BA 102:148176]
- Waringer, J. A. 1996. Phenology and abundance of Ephemeroptera, Plecoptera and Trichoptera caught by emergence traps at the Weidlingbach near Vienna, Austria. Int. Rev. Ges. Hydrobiol. 81: 63-77. [CC 27(20)]
- Watson, R. 1993. The trout. A fisherman's natural history. Swan Hill Press, Shrewsbury. 200 pp. [ZR 132(13A):3532]
- Way, C. M.; Burky, A. J.; Bingham, C. R.; Miller, A. C. 1995. Substrate roughness, velocity refuges, and macroinvertebrate abundance on artificial substrates in the lower Mississippi River. J. N. Amer. Benthol. Soc. 14: 510-518. [BA 101:45780]
- Welnitz, T. A.; Rader, R. B.; Ward, J. V. 1996. Light and a grazing mayfly shape periphyton in a Rocky Mountain stream. J. N. Amer. Benthol. Soc. 15: 496-507. [CC 28(7)]
- Williams, D. D. 1996. Environmental constraints in temporary fresh waters and their consequences for the insect fauna. J. N. Amer. Benthol. Soc. 15: 634-650. [CC 28(7)]
- Winget, R. N.; Mangum, F. A. 1996. Environmental profile of *Drunella coloradensis* Dodds (Ephemeroptera: Ephemerellidae) in the western United States. J. Freshwater Ecol. 11: 225-231. [BA 102:18458]
- Winter, A.; Ciborowski, J. J. H.; Reynoldson, T. B. 1996. Effects of chronic hypoxia and reduced temperature on survival and growth of burrowing mayflies, *Hexagenia limbata* (Ephemeroptera: Ephemeridae). Can. J. fish. Aquat. Sci. 53: 1565-1571. [CC 27(52/53)]
- Winter, A. G. 1994. Influence of oxygen stress, temperature and density on the growth and survivorship of *Hexagenia* nymphs (Ephemeroptera: Ephemeridae). Thesis, University of Windsor. [MAI 34(2):656]
- Wipfli, M. S. 1992. Direct and indirect effects of the black fly (Diptera: Simuliidae) larvicide, *Bacillus thuringiensis* var. *israelensis*, on selected non-target aquatic insects and trout. Dissertation, Michigan State University. [DAI-B 53(9):4478]
- Wood, J. R.; McElravy, E. P.; Resh, V. H. 1996. Thermal-shock tolerance of three species of aquatic insects in a northern California, geothermally influenced stream. Pan-Pac. Entomol. 72: 227-234. [BA 102:147926]
- Wuillot, J.; Gillies, M. T. 1993(1994). *Cheleocloeon*, a new genus of Baetidae (Ephemeroptera) from West Africa. Rev. Hydrobiol. Trop. 26: 213-217. [ZR 132(13A):3637]
- Yangdong, P.; Lowe, R. L. 1994. Independent and interactive effects of nutrients and grazers on benthic algal community structure. Hydrobiologia 291: 201-209. [ZR 132(13A):3669]
- Yasuno, M.; Hatakeyama, S. 1994. Monitoring of heavy metal pollution with freshwater invertebrates. pp. 158-160. In: Salanki, J.; Jeffrey, D.; Hughes, G. M. (eds.). Biological monitoring of the environment: a manual of methods. CAP International, Paris. 167 pp. [ZR 132(13A):3674]
- Yule, C. M.; Pearson, R. G. 1996. Aseasonality of benthic invertebrates in a tropical stream on Bougainville Island, Papua New Guinea. Arch. Hydrobiol. 137: 95-117. [BA 102:97022]
- Zhang, Y. X.; Malmqvist. 1996. Relationships between labral fan morphology, body size and habitat in North Swedish blackfly larvae (Diptera: Simuliidae). Biol. J. Linn. Soc. 59: 261-280. [CC 27(52/53)]
- Zhu, J. 1994. Distribution of mayfly (Ephemeroptera) naiads and its relationship with water quality in Beijing area. Acta Sci. Circumstantiae 14: 308-315. (In Chinese, English summary) [ZR 132(13A):3750]
- Zimmerman, W. 1989. Die Eintagsfliegen (Ephemeroptera) in der Emergenz von zwei Fallenstandorten am Vesser-Bach (DDR, Bezirk Suhl). Gothaer Emergenz-Untersuchungen im Biosphärenrezervat Vessertal, Nr. 11. Int. Symp. Ueber Entomofaunistik in Mitteleuropa 11: 316-321. (In German) [ZR 132(13A):3760]
- Zloty, J. S. 1992. Some applications of cellulose acetate gel electrophoresis to insect systematics and ecology. Thesis, University of Calgary. [MAI 31(3):1144]
- Zloty, J. 1996. A revision of the Nearctic *Ameletus* mayflies based on adult males, with descriptions of seven new species (Ephemeroptera: Ameletidae). Can. Entomol. 128: 293-346. [BA 102:22584]

The Mayfly Newsletter is the official newsletter of the International Conferences on Ephemeroptera and is published twice a year to facilitate communication among ephemeropterists. Subscriptions to the *Newsletter* are free. To place your name on the mailing list or to contribute information for the next issue, contact Peter M. Grant, editor, *The Mayfly Newsletter*, Department of Biological Sciences, Southwestern Oklahoma State University, Weatherford, Oklahoma 73096-3098 USA; phone (580) 774-3294; FAX (580) 774-3795; or via E-mail at grantp@swosu.edu. This publication was authorized by the Dean of Arts and Sciences and was printed at a cost of \$150.00 for 500 copies.

Address Update - New, Corrections, Changes

Changes or additions to the mailing and E-mail addresses published in issue 5(2) are listed below. Updated addresses will be published as they become available. Please inform the editor of any changes in postal or E-mail addresses.

R BARFORD
FLYTREK AUSTRALIA
RMB 2084
COWES VICTORIA 3922
AUSTRALIA
Rod@flytrek.com

CE CUSHING
105 W CHEROKEE DRIVE
ESTES PARK CO 80517
USA
CECushing@aol.com

ES DELFOSSE
10696 GRAELOCH ROAD
LAUREL MD 20723-1188
USA
eds@ars.usda.gov

MJ DUBE
RR 8 SITE 7 COMP 8
PRINCE GEORGE BC
CANADA V2N 4M6
dubem000@unbc.edu

KJ FINLAY
DEPT ECOLOGY AND EVOL
BIOLOGY
MONASH UNIVERSITY
WELLINGTON ROAD
CLAYTON VICTORIA 3168
AUSTRALIA
Kyla.Finlay@sci.monash.edu.au

JF FLANNAGAN
456 ISABELLA POINT ROAD
SALT SPRING ISLAND
BRITISH COLUMBIA
CANADA V8K 1V4

D FUNK
STROUD WATER RESEARCH
CENTER
970 SPENCER ROAD
AVONDALE PA 19311-9514
USA

R GODUNKO
RYNOK STREET 3
VYNNYKY UA - 290902
L'VIV REGION
UKRAINE

A GALLARDO MAYENCO
algama@correo.cop.es

J GILMAN
1 COLE HAAN DRIVE
YARMOUTH ME 04096
USA

MA HARRIS
US GEOLOGICAL SURVEY
221 NORTH BROADWAY
AVENUE
URBANA IL 61801-2706
USA
maharris@usgs.gov

N HOQ
10201 GROSVENOR PARK #411
ROCKVILLE MD 20852
USA
hoq@attmail.com

SE MCMURRAY
KY DIV WATER WATER
QUALITY BRANCH
14 REILLY ROAD
FRANKFORT KY 40601
USA
biomcmur@ACS.EKU.EDU

JB MUNRO
PO BOX 214
LAKE HARMONY PA 18624
USA
jmunro@mail.microserve.net

OK WATER RESOURCES BD
3800 NORTH CLASSEN
BOULEVARD
OKLAHOMA CITY OK 73118-
2855
USA

JB OLIVER
202 BRADFORD ROAD
MCMINNIVILLE TN 37110-2304
USA

ML PESDADOR
mpescador@famu.edu

E POLUBINSKI JR
87 NORTH BRANCH ROAD
CONCORD MA 01742
USA
EdPol@aol.com

JC STEVEN
MADISON METROPOL
SEWERAGE DIST
1610 MOORLAND ROAD
MADISON WI 53523-9201
USA
jeffs@madsewer.org

B SWEENEY
STROUD WATER RESEARCH
CENTER
970 SPENCER RD
AVONDALE PA 19311-9514
USA

M WALTERS
600 NW GARY STREET
PULLMAN WA 99163
USA
walt7616@novell.uidaho.edu

N YONEMITSU
COLLEGE OF SCIENCE AND
MANAGEMENT
UNIV N BRITISH COLUMBIA
3333 UNIVERSITY WAY
PRINCE GEORGE BC
CANADA V2N 4Z9
noboru@unbc.edu

C ZHU
INSTITUTE OF ZOOLOGY
CHINESE ACADEMY OF
SCIENCES
BEIJING 100080
PEOPLES REPUBLIC OF CHINA
sea@panda.ioz.ac.cn

IX International Conference on Ephemeroptera 17-21 August 1998 XIII International Symposium on Plecoptera 20-23 August 1998

Deadlines (1998):

- 1 March: Abstracts, post-conference activities
and guest program, registration and
fees
30 March: Scholarship applications
17 August: Ephemeroptera manuscript to editor
20 August: Plecoptera final manuscript to editor

For further information, visit the international conference
web site at [http://www.unt.edu.ar/congresos/
EPHEMERO.HTM](http://www.unt.edu.ar/congresos/EPHEMERO.HTM) or contact the convenor, Eduardo
Dominguez, via E-mail at mayfly@unt.edu.ar.

SJ LEE
sjlee@kucn.korea.ac.kr

R MAPS
2467 WALNUT AVENUE
VENICE CA 90291
USA
ReelMaps@aol.com

BD MARSHALL
ACAD OF NATURAL SCIENCES
1900 BEN FRANKLIN PARKWAY
PHILADELPHIA PA 19103-1195
USA
MARSHALL@ACNATSCI.ORG

N NAGENDRAN
3 EAST PARK STREET
SINGARAYAR COLONY
MADURAI 625 002
TAMIL NADU
INDIA

RL NEWELL
1550 JOHNSTON AVENUE
RICHLAND WA 99352
USA
RNewell951@aol.com