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THE MAYFLY NEWSLETTER

Vol. 14 No. 1

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

May 2005

Mayflies in Montana

The 2004 Joint International Meeting was held 22-28 August 2004 at the University of Montana's Flathead Lake Biological Station, which is nestled between the shores of Flathead Lake and Yellow Bay. This rural setting provided a quiet location for the conference, encouraged interactions, and allowed participants to explore the station grounds along the hiking trail as exercise or on a search for the nesting bald eagles. A total of 60 people from 19 countries attended the meeting.

Sunday- 22

Many of the participants arrived Sunday and had their first meal in the dining hall. This was our first introduction to the dining hall cooks who provided wonderful meals served with a gigantic dose of Montana hospitality. A casual mixer followed dinner, which was the tradition during the meeting. A delicious beer from a local brewery was always on tap on the dining hall porch to encourage conversation. A light rain began to fall on Sunday.

Monday-23

The meeting officially began on a rainy Monday morning with a welcome by Jack Stanford and Rick Hauer, conference conveners. The first presentation was the plenary session by John Brittain, entitled "Mayflies in a Changing World." After lunch more papers on mayflies were presented, oral and poster.

An auction to support the travel scholarship fund was set up and announced on Monday. See p. 3 for more information.

Tuesday-24

The oral and poster papers on mayflies continued on Tuesday, as did the rain. The Permanent Committee held a business meeting after the paper presentations. (See p. 3 for details.) Participants were treated to a ride on the *Jessie B*, the station's research vessel.

Wednesday-25

On Wednesday individuals, who were going on the field trip, got to make their own lunch right after breakfast. The group then assembled for the field trip and boarded the bus.

We left for the Nyack Flood Plain Research Natural Area and collected on Beaver Creek and the Middle Fork of the Flathead River. Brian Reid showed how hyporheic stoneflies were collected and Jack Stanford and Rick Hauer discussed the history of this site and the research being conducted there.

We ate lunch along the Middle Fork, then the bus headed off to Glacier National Park. We stopped for a short time to peruse the gift shops at the park and purchase mementos of the trip. About this time the deluge from the heavens began. After the moist shopping experience, the bus continued through Glacier Park. We saw evidence of the forest fire from several years ago and Jack provided some background about the fire ecology in this area.

After Glacier Park, we stopped at Big Creek in the Flathead National Forest for some additional collecting.

Of course it was still raining.

We then proceeded back to the biological station for dry clothes and a hot, delicious meal.

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Thursday-26

The stonefly portion of the conference began on a rainy Thursday with the plenary session by Andrew Sheldon. Andy's presentation was entitled, "Scale, Hierarchy and Perspectives in the Ecology of Plecoptera."

Bob Boyle, an author and fly fisherman, was visiting today to collect information about an article he may write about this conference.

Later that day the participants posed for a group photo. (See below.) At the same time a bald eagle flew over – undoubtedly a good omen.

The ephemeropterists and plecopterologists held a joint business meeting after the paper sessions. (See report on p. 3.)

The Conference Dinner was held Thursday evening in the dining hall. Participants were treated to a delectable menu which included prime rib and wine. After the dinner, the two recipients, who each received a CAN\$300 travel scholarship, were announced: Kyla Finlay (Australia) and Sanaa Enkhtaivan (Mongolia). Kyla and Sanaa both had their registration fees waived by the conveners, also. The plecopterologists presented their awards, too.

William Swaney, a member of the local Salish-Kootenai tribe was the featured speaker after the dinner. He discussed the history of the tribes in the area, their relationship with the Biological Station, and Native American traditions and values. He ended by entertaining questions from the group.

On the lighter side, several "special awards" were presented. Because he so ably used a set of subimago rearing boxes as a visual aid to show Palmen units (not Palmen rings!) during his presentation on the Palmen body, Tom Fink received a set of these boxes. Earlier in the week Jean-Luc

Gattolliat lost his wallet. Jean-Luc's wallet was eventually found and returned by one of the station's staff members. To help Jean-Luc the next time he loses his wallet, he too was presented with a set of subimago rearing boxes, only these boxes contained one US dollar for emergency funds. Finally, Kyla Finlay was unsuccessful with her attempt to obtain a set of these containers during the auction earlier in the week. Since Kyla traveled all the way from Australia [someone said it was South America!] just to bid on these containers, a set was presented to her.

Friday-27

Papers on stoneflies continued on Friday, as did the rain.

At the end of the paper session, John Brittain announced that Arnold Staniczek had submitted a proposal to host the next joint conference in Stuttgart in 2008. A formal written proposal will be submitted to both committees for approval within six months.

After lunch, Peter Zwick gave a concluding speech on behalf of the stonefly committee and Tomas Soldan did the same for the mayfly committee.

Some of the participants drove to the Kalispell Mall that afternoon to do some shopping. That evening, the clouds began to dissipate and we were treated to a Montana sunset.

Saturday-28

Many of the participants began to return home on Saturday. One group accompanied Jack Stanford to the Glacier Park Lodge in East Glacier for a guided hike.

Overall, the meeting was quite enjoyable and Jack Stanford, his faculty, staff, and students are to be congratulated.



Participants at the XI International Conference on Ephemeroptera and the XV International Symposium on Plecoptera, Flathead Lake Biological Station, 2004.

Business Meetings at Joint Conference

24 August

The Permanent Committee for the International Conferences on Ephemeroptera held a business meeting on 24 August during the conference. Elda Gaino, Tomas Soldan, John Brittain, Peter Grant, and Jean-Luc Gattolliat (substituting for Michel Sartori) were in attendance.

Kyla Finlay and Sanaa Enkhtaivan were announced as the two recipients of the travel scholarships.

No written proposals were submitted to host the next conference. Arnold Staniczek offered to host the next conference in Germany in 2007 or 2008. If those years are not possible, then 2010 is a possibility.

Tomas offered to host the next conference if there are no other offers.

This committee will meet with the stonefly committee later during the conference to discuss these options. If more than one proposal is officially submitted, the conference participants will need to vote on the options.

John will pass on this information to the stonefly committee.

26 August

The Permanent Committee for the International Conferences on Ephemeroptera held a joint meeting with the Standing Committee for the International Society of Plecopterologists on 26 August. Elda Gaino, Tomas Soldan, Peter Grant, and Jean-Luc Gattolliat (substituting for Michel Sartori) were in attendance for the mayfly committee. Peter Zwick, Ken Stewart, Stan Szczytko, Claudio Froehlich, Boris Kondratieff, and Ignac Sivek were in attendance for the stonefly committee. John Brittain attended as a member of both committees.

Preliminary proposals to host the next conference were submitted by South Africa and Japan during the 2001 Perugia meeting but final proposals were not submitted at

this conference.

Arnold Staniczek offered to host the next conference at the Staatliches Museum für Naturkunde, in Stuttgart, Germany. Arnold discussed many activities that would be available during the meeting for participants and their guests at the museum, in Stuttgart, and the region.

The timing for the meeting was discussed. Early August, late May, and early June were suggested with the committees agreeing on early June. While the next meeting would traditionally be held in 2007, it conflicts with a major exhibit to be held at the museum. Arnold suggested 2008 and the committees agreed.

He also has three options available to publish the proceedings

The committees tentatively accepted his proposal and requested that Arnold submit a formal proposal within six months to both committees for final consideration.

John Brittain will make the announcement during the Friday session that the committees are considering Arnold's proposal.

Members of both committees discussed several aspects of our joint conferences:

- It was suggested that possibilities to reduce the cost (e.g., hostels) for students and amateurs be explored.
- Flexibility for registration was encouraged (e.g., allow late registration, pay on arrival, use of credit cards to pay for registration)
- Conference locations that allow ease of travel were encouraged
- Consider holding meetings in more varied areas (e.g., Asia).

Members of both committees were encouraged to solicit proposals for the meeting after 2008.

Auction Brings in \$716!

Proceeds go toward travel scholarships

The third silent auction was held to raise funds for the Bill Peters travel scholarship fund. This fund is used to help offset the cost of travel for several individuals to attend a mayfly conference. Kyla Finlay (Australia) and Sanaa Enkhtaivan (Mongolia) each received CAN\$300 from this fund to attend the recent conference.

This year 11 individuals donated a total of 31 items for the auction and a grand total of US\$716 was raised.

Special thanks to two of the Biological Station's staff members who assisted with the auction: Ms. Sue Gillespie and Ms. Marie Kohler.

What Was Presented at the Conference?

If you missed the conference, but would still like to see what was presented, check the Montana conference website - www.flbs.umt.edu/Conf. Still available are the following:

- list of oral presentations
- list of poster presentations
- abstracts

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Corrections or additions to the information in the mailing list since the last issue are listed below. Updated addresses will be published as they become available. Please inform the editor of any changes in postal or email addresses.

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Finnegans Wake Explained?

Bob Boyle sent a note about his article in the Spring 2004 issue of *The American Fly Fisher*. His article, "‘Flies Do Your Float’: Fishing in *Finnegans Wake*," is based on James Joyce's novel of the same name. This novel is "laced with riddles and hidden messages" and many individuals have attempted to decipher their meanings.

Bob has studied this novel and his hypothesis is that Joyce had "water on the brain" and was "bonkers about water" – he used a theme of fishing throughout this novel, using words, some made up, for fish, fly fishing, aquatic insects, artificial flies, and aquatic habitats. For example, according to Bob, the *Wake* contains at least 2,417 allusions to fishes, fishing and water.

References to mayflies were also used. There are references to ephemerids, ephemeral, nymphs, imago, and dun. Some words that Joyce may have invented to refer to mayflies include ephumeral, ephemerides, mayjaunties, nymphant, nympholept, nymphosis, and pairanymphs.

For those interested in analyzing this theme further, the Finnegans Wake Society of New York meets above the Gotham Book Mart on West 47th Street in Manhattan, on the fourth Wednesday of each month, at 6:00 PM. Their web site has more information - <http://www.finneganswake.org/>

Conference Quotes

"We will always have mayflies to work with. There is more danger in the extinction of taxonomists."

John Brittain

"This work is coming to you on a geological time scale."

Tom Fink

"When I'm in the field, I live on kippered herring."

Chad Murvosh

"Has anyone seen my wallet?"

Jean-Luc Gattolliat

Summer Seminars on Aquatic Insects

The Humboldt Field Research Institute in Maine, USA, will again hold a series of seminars this summer. Two of these seminars are being taught by Steve Burian:

17-21 May: The EPT taxa: Systematics and Biomonitoring

7-13 August: Aquatic Entomology: Systematics and Biomonitoring

For further information, visit the Institute's website at www.eaglehill.us.

Workshop on Mayflies

A report from U. Humpesch & E. Bauernfeind

On the basis of Bauernfeind, E. & Humpesch, U. H. (2001) *Mayfly of Central Europe – Identification and Ecology (Insects: Ephemeroptera)* we gave an advanced course for students of the University of Vienna on the identification of Central European mayflies down to the species level. With the support of Bohle, Haybach, Kureck, Sartori & Soldan we were able to demonstrate all genera occurring in Central Europe.



As the key worked quite well, the students were able to identify even difficult half-grown larvae of *Ecdyonurus*, *Rhythrogena* or *Baetis* to the species level.

At the end of the course, on a sunny Saturday, we went on an excursion to different streams around Vienna to show the students (see above photo) the larvae in their habitat alive, the emergence of subimagines and how to rear mature larvae to the subimago/imago stage.

So, a young "Ephemeropterist" might emerge, soon or later.

Proceedings Still Available

Copies of the Proceedings of the 6th Ephemeroptera and 10th Plecoptera Conferences (Granada, Spain) are available for US\$50 + \$5.00 postage. To purchase a copy, contact Peter Grant, Department of Biological Sciences, Southwestern Oklahoma State University, 100 Campus Drive, Weatherford, Oklahoma 73096-3098 USA, phone (580) 774-3294, FAX (580) 774-7140, email peter.grant@swosu.edu.

Copies of the Proceedings of the 8th Ephemeroptera and 12th Plecoptera Conferences (Lausanne, Switzerland) are available from Michel Sartori, Museum of Zoology, PO Box 448, CH-1000 Lausanne 17, Switzerland, michel.sartori@serac.vd.ch.

All proceeds from the sale of these publications will be placed in the travel scholarship fund.

2003 Mayfly Bibliography

[Editor's note: This bibliography was published as the Ephemeroptera portion of the 2003(2004) North American Benthological Society's (NABS) *Current and Selected Bibliography on Benthic Biology*.]

The following is a list of current publications on Ephemeroptera that have been published up to and during 2003 and have not appeared in previous NABS Bibliographies.

I would appreciate receiving a reprint or complete bibliographic reference of any article about mayflies, especially if it contains 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, 100 Campus Drive, Weatherford, Oklahoma 73096-3098 USA, phone (580) 774-3294, fax (580) 774-7140, email peter.grant@swosu.edu.

If you would like an electronic copy of this year's mayfly bibliography, simply send me a request via email. I will send this file to you as an attachment. This bibliography will also be available on my website: <http://faculty.swosu.edu/peter.grant/research.htm>

- Adamek, Z.; Sukop, I.; Moreno Rendon, P.; Kouril, J. 2003. Food competition between 2+ tench (*Tinca tinca* L.), common carp (*Cyprinus carpio* L.) and bigmouth buffalo (*Ictiobus cyprinellus* Val.) in pond polyculture. *J. Appl. Ichthyol.* 19: 165-169.
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- Andrade, M. B.; Siciliano, A. T.; Da-Silva, E. R.; Salles, F. F. 2003. Mayfly faunal components of Paquequer River, Serra dos Orgaos National Park, Teresopolis, RJ, Brazil: Preliminary survey and meso-distribution (Insecta: Ephemeroptera). In, Carvalho, A. M. B.; Silva-Matos, D. M. (eds.). Scientific publications of UNIRIO (Anais da I. Jornada de Iniciacao Cientifica da UNIRIO). Universidade Federale do Estado do Rio de Janeiro, Rio de Janeiro. (In Portuguese)
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- Bass, D. 2003. A comparison of freshwater macroinvertebrate communities on small Caribbean islands. *Bioscience* 53(11): 1094-1100.
- Battegazzore, M.; Bottino, A.; Castino, L.; Cirio, M. C.; Morisi, A. 2002. New data on the presence of *Ephoron virgo* (Oliver, 1791) in Piedmont. (Ephemeroptera: Polymitarcyidae). *Mus. Reg. Sci. Natur. Boll. Turin* 20(1): 13-20. (In Italian)
- Baumgardner, D. E. 2003. New synonyms and stage description for three species of Leptohyphidae (Ephemeroptera). *Proc. Entomol. Soc. Wash.* 105(1): 203-208.
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- Boyero, L.; DeLope, J. L. 2002. Short-term recolonization of stones in a tropical island stream. *Mar. Freshwater Res.* 53(6): 993-998.
- Braasch, D. 2002. Mayflies (Ephemeroptera) in the middle and lower River Oder. *Entomol. Nachr. Ber.* 46(2): 117-120. (In German)
- Braasch, D. 2002. A contribution to the mayfly fauna of Brandenburg with special regard to the River Lausitzer Neisse (Ephemeroptera). *Entomol. Nachr. Ber.* 46(2): 120-125. (In German)
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- Burian, S. K. 2001. A revision of the genus *Leptophlebia* Westwood in North America (Ephemeroptera: Leptophlebiidae: Leptophlebiinae). *Bull. Ohio Biol. Surv.* 13(3): 1-80.
- Burian, S. K. 2002. Taxonomy of *Eurylophella coxalis* (McDunnough) with notes on larval habitat and behavior (Ephemeroptera: Ephemerellidae). *J. N. Amer. Benthol. Soc.* 21(4): 602-615.
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- Caudill, C. C. 2003. Measuring dispersal in a metapopulation using stable isotope enrichment: High rates of sex-biased dispersal between patches in a mayfly metapopulation. *Oikos* 101(3): 624-630.
- Cavaletto, J. F.; Nalepa, T. F.; Fanslow, D. L.; Schloesser, D. W. 2003. Temporal variation of energy reserves in mayfly nymphs (*Hexagenia* spp.) from Lake St. Clair and western Lake Erie. *Freshwater Biol.* 48(10): 1726-1738.
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- Cayrou, J.; Cereghino, R. 2003. Life history, growth and secondary production of *Caenis luctuosa* and *Cloeon simile* (Ephemeroptera) in a small pond, S.W. France. *Aquat. Insects* 25(3): 191-201.
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- Collier, K. J.; Smith, B. J.; Quinn, J. M.; Scarsbrook, M. R.; Halliday, N. J.; Croker, G. F.; Parkyn, S. M. 2000. Biodiversity of stream invertebrate faunas in a Waikato hill-country catchment in relation to land use. *New Zealand Entomol.* 23: 9-22.
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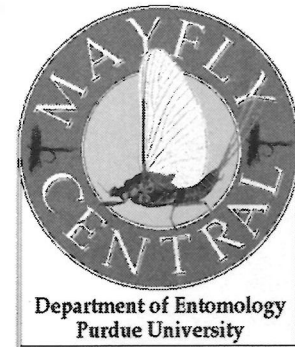
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(Continued on bottom of p. 12)

It's Stuttgart in 2008!

The next joint international conference will be held in Stuttgart, Germany, and will be hosted by Arnold Staniczek. Both committees, the Permanent Committee for the International Conferences on Ephemeroptera and the Standing Committee for the International Society of Plecopterologists, approved Arnold's proposal. Information about the meeting may be found on the following poster. Arnold already has a website (<http://www.naturkundemuseum-bw.de/stuttgart/projekte/jointmeeting08/index.htm>) established for the meeting which includes a PowerPoint presentation about the plans for the meeting and an option to sign up for a newsletter to keep informed about the conference.



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

Ephemeroptera Galactica

<http://www.famu.org/mayfly/index.asp>

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