



FLY TIMES

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We as editors would like to remind our devoted clientele that this newsletter is of the people, for the people! We're depending on you to keep others informed of current projects and needs. This is a good vehicle to inform others of what help you could use (including those specimens needed for the ubiquitous DNA sequence studies!).

All Nearctic Dipterists will want to pay attention to the latest news regarding the upcoming International Congress of Dipterology. We encourage all of you to attend this important international gathering, our own Fly Researcher Olympics! Come and see how high you can jump (or how long you can stay afloat).

As indicated in other issues, this newsletter is also available through the ECORC website as follows: <http://res2.agr.ca/ecorc/program2/entomology/flytimes/flytime.htm>

A variety of other Diptera links, including a number of newsletters restricted to a particular family, are available at: <http://res2.agr.ca/ecorc/cnc/diptera.htm>

The *Directory of North American Dipterists* is in the process of being updated and can be accessed at the following address: <http://res2.agr.ca/ecorc/program2/entomology/diptera/dipteras.htm>

Issue No. 29 of the *Fly Times* will appear next October as both hard copy (for those of you without Internet access) and on the Web. If possible, please send either editor your contributions by email, or on disc; electronic contributions make putting the *Fly Times* together much faster. Those of you with hard copy contributions (last possible choice) may fax, or mail your message to Art Borkent at the above listed address. All contributions for Issue No. 29 should be sent by the end of September, 2002.

NEWS

**5th International Congress of Dipterology
The University of Queensland, Brisbane, Australia
29 September - 4 October 2002**

by David Yeates
Chair, Organizing Committee
CSIRO Entomology, Clunies Ross St., Acton, ACT 2601, Australia

The Organizing Committee of the 5th International Congress of Dipterology is pleased to advise that the **Registration Brochure** and **Call for Papers** is now available at the Congress web site <http://www.uq.edu.au/entomology/dipterol/diptconf.html>

Readers are reminded of the following important dates:

April 15: Deadline for receipt of funding support applications

April 30: Deadline for early registration

April 30: Deadline for receipt of abstracts

June 15: Notification of abstract acceptance

Further details are also available by contacting Sally Brown, Conference Connections, at her email address: sally.brown@uq.net.au or PO Box 108 Kenmore QLD 4069 Australia Telephone +61 7 3201 2808 Fax +61 7 3201 2809 Mobile 0407 178 200. <http://www.uq.net.au/conferenceconnections/>

Progress toward organizing the 5th Congress of Dipterology is building in intensity. The second announcement was mailed in late February, and this information is mirrored on the Congress web site (www.uq.edu.au/entomology/dipterol/diptconf.html). The second announcement contains details of the scientific program, including the plenary speakers, symposia and workshops that have been organized to date. Other abstracts received will be organized into contributed paper sessions. These sessions will be organized according to the nature of the abstracts received by the organizing committee, and will be announced on the web site in May.

Thanks to all those who have already registered: the deadline for early bird registration is 30th April. The second announcement brochure contains information on the scheme to support delegates attendance at the Congress. Applications for this support close on 15th April. For more information or copies of the second announcement brochure please contact Sally Brown (address above). On behalf of the Organizing Committee we look forward to seeing you at the Congress!

A New ICD5 Symposium

by Marion Kotrba
 Museum für Naturkunde der HU Berlin, D-10099 Berlin, Germany
 email: marion.kotrba@rz.hu-berlin.de

As part of the 5th International Congress of Dipterology in Brisbane I am organizing the symposium "Sperm Olympics: Sperm Competition and Cryptic Female Choice in Diptera".

In the range of topics includes not only the actual (proven) occurrence of sperm competition and/or cryptic female choice, but also the context and possible preconditions for such mechanisms, such as sperm morphology and physiology, the morphology and physiology of the male and female reproductive tract, sperm transfer, the fertilization process, etc.

I have chosen the title "Sperm Olympics" because in a way we will be dealing with the competition of spermatozoan "athletes" in various "disciplines" such as speed and endurance in a variety of "arenas" such as multiple sperm receptacles, extremely long spermathecal ducts, etc. The fertilization process constitutes the ultimate "goal", i.e. the decision about who is (or who's genes are) going to make it to the next generation.

I expect that the congress of scientists working on the different aspects of this complicated story will result in vivid discussions and exchange of information, maybe even in some future collaboration. Putting ones results into a comparative or functional context will always add to their general importance. Therefore I plan to reserve much time for free discussion between blocks of talks.

I had sent out a preliminary call for papers for this symposium in June 2001 and had already received some positive responses. Now I beg those who have proposed to present a paper, to reconfirm their participation with me AND the congress organizers, and to start thinking about submitting an abstract.

Those who had not decided to participate so far, are now cordially invited to join in. Moreover, I beg you to distribute this invitation to all other colleagues who might be interested in attending the symposium.

I am looking forward to receive your response and hoping to see you in Brisbane.

Biting Fly Workshop - Henderson, Tennessee
May 23-26, 2002

by James Goodwin
 4015 Fireside Cr., Hawkins, TX 75765, USA

This year's meeting will be held in Henderson, Tennessee. This is a small town a little more than an hour east of Memphis. Freed-Hardeman University, a small Christian institution, is located in Henderson and they have agreed to allow us to use rooms in a male and a female dormitory during the dates of the workshop.

The price per room will be about the same as the rooms at Sul Ross University last year, and I believe, as last year, you will need to bring your own pillow, bed linen, towel, etc. As it is a Christian institution, they have asked that we not have any obvious liquor on campus.

There is also a relatively new motel, the Americana Motel, located about one mile from the campus. Their rates as of the 19th of January are \$40.00 for a room with a single bed, and \$50.00 for a room with two beds. Both rates are for the room, regardless of number of individuals. The telephone number of the Motel is 731-989-0111. I will leave it to each of you to make your own reservation if you decide to stay in the Motel. There are some restaurants in Henderson. We will be within a 30 minute drive of Jackson, Tennessee, which has many restaurants.

As to collecting, there are a great many sites available for virtually anything that has affinity for springs, streams, seeps, and ponds, as well as the usual array of roadside, field, and woodland flowers. Bobby Finley and I have already obtained permission to collect on some locations, and we will have others available by the time of the meeting. There are many State Parks in Tennessee. Most are tied to State Forests which gives them a land area of 3,000 to 30,000 acres. I will be communicating with personnel in Nashville in an attempt to obtain a group permit covering a period of the meeting, plus 5 days before and after.

If you are planning on attending please email me at james.goodwin3@gte.net, or contact me by phone at 903-769-5778 during the day and 903-769-2948 in the evening and on weekends.

People who have indicated that they will attend are Bill Grogan, Jeff Freeman, Frank French, Bruce Sutton, Mac Tidwell, Bob Finley, Steve Murphree, Bruce Ezell, Gary Mullen, and myself.

**Call for Papers for the NADS Meetings at ESA in Fort Lauderdale
Nov. 17-20, 2002**

by Gary J. Steck,
Division of Plant Industry, Florida Dept of Agriculture & Consumer Services, PO Box 147100
Gainesville FL, USA

A request has been made to include a NADS Informal Conference in the 2002 ESA meeting. The exact date and time is yet to be determined. Any member who plans to attend and would like to present a talk or lead a discussion of any Diptera topic, please submit your name, affiliation and address, and topic title to this year's organizer, Gary Steck. From my interpretation of the ESA deadline schedule, we have until May 29 to enter all information regarding presenters and titles of talks into the ESA electronic submission program. Thus, if you want to be included in the printed program, please provide the information to me in advance of May 29.

**NADS Meetings at ESA in San Diego
December, 9-13, 2001**

by Brian Brown
Natural History Museum of Los Angeles County, 900 Exposition Boulevard
Los Angeles CA 90007, USA

About 35 people attended the Dipterological gathering at the last ESA meeting. Three talks were given:

J. E. O'Hara. Review and phylogenetics of the Polideini, a remarkably diverse tribe of Tachinidae.
C. R. Nelson. Flies on the Grand Staircase: collecting on the Colorado Plateau of southern Utah.
B. V. Brown. Characterization of an assemblage of parasitic bee-killing flies, genus *Melaloncha* (Phoridae).

Jon Gelhaus showed some slides of his collecting trip to Mongolia.

Larry Quate Passes Away

from Brian Brown
Natural History Museum of Los Angeles County, 900 Exposition Boulevard
Los Angeles CA 90007, USA

It is with great sadness that I inform you that Dr. Laurence W. Quate passed away on Tuesday, Jan. 15, 2002, after a protracted battle with cancer. Larry was a world authority on the family Psychodidae (Diptera), and was beloved by all for his warm, friendly personality, as well as his great knowledge of and enthusiasm for his flies. I am working with Larry's widow to deal with his entomological material. If you have questions about outstanding loans, or other issues pertaining to his scientific work, please direct them to me.

Needed: Help with Getting the Jump on Frog Biting Midges

by Art Borkent
1171 Mallory Rd., Enderby, British Columbia, V0E 1V3

I am in the middle of a world revision of *Corethrella*, the sole genus in the Corethrellidae. I have found that virtually every sample around the globe includes undescribed species (e.g. 2 specimens from Sarawak = 2 undescribed species). Obviously the genus is actually much larger than the 64 species presently recognized. I would therefore ask anyone who has material in their collection to contact me regarding the loan of their specimens; even a single specimens would be of value.

Request for Specimens: Dolichopodidae of the subfamily Achalcinae

by Marc Pollet

Dept. of Entomology, Royal Belgian Institute of Natural Sciences
Vautierstraat 29 B-1000, Brussels, Belgium

Pollet (1996) and Pollet & Cumming (1998) dealt with the Palaearctic and Nearctic *Achalcus* fauna respectively in papers published in Systematic Entomology. Since then, I have been gathering more Holarctic material and recently started to examine the yields. All three examined species (Japan, Canada, USA) proved to be new to science and are currently described. In order to incorporate all *Achalcus* specimens stored in both private and public collections, I very much like to invite anyone to send me specimens. Any Achalcinae of any realm are most welcome (next to this "project", I am also finishing a manuscript on the Neotropical *Achalcus* fauna and will start a revision of *Xanthina* (excl. Neotropical genus). Any specimens in either 70% alcohol solution and dry would be great, although I prefer wet material which considerably facilitates dissections. Anyone who collaborates with this project will be kept informed and will receive a reprint of the final paper. Specimens can be mailed to the above address.

Dick Foote Passes Away

We regret to report that Dick Foote passed away this past winter at the age of 83. He will be missed terribly. He died unexpectedly in his sleep early Saturday morning while recuperating from a hip fracture. A memorial service was held on Monday, Feb 18, 2002.

Words of Wisdom

Every community, as it matures, attempts to gather and preserve pearls of wisdom from the older generation, to provide light and direction for those who follow. Alternatively, these saying may be made into bumper stickers or be imprinted on tee shirts to be sold for a profit. In an attempt to stimulate this process, the editors provide the following from one our most eminent collectors, a truly great stalker of biodiversity.

Dick Vockeroth's codicil: "The best collecting is half way between where you work and where you think the best collecting will be"

If you know of further great truths or insights, feel free to send them on to the editors. You need not be eminent, you could even be imminent! After all, truths can also come from the mouths' of babes.

Correction to Issue 27, October 2001

The caption to "A Flash from the Past" photo, page 3, should read Dick Deonier instead of Guy Bush. Our apologies to Dick and Guy.

Dixidae Left on the Shelf

from Art Borkent
1171 Mallory Rd., Enderby, British Columbia, V0E 1V3

Mike Peters has informed me that he officially retired from the University of Massachusetts at the end of 1997 and that he has given up all entomological activities. His holotypes and most paratypes have been deposited in the Smithsonian. There are some paratypes left at the University of Massachusetts and many specimens representing a variety of species. Here are the genera and number of species left there: *Dixa*: 22 spp.; *Dixella* - 19 spp.; *Meringodixa* - 1 sp; *Metadixa* - 1 sp.

Cranefly Culture Available

by Arthur Forer
Biology Department York University Toronto, Ont M3J 1P3, Canada

While interested in crane flies in particular, I am not really a Dipterist: I am a cell biologist, who studies (and has studied) meiosis/mitosis in living cells. I have reared and worked with *Nephrotoma suturalis* for almost 40 years now -- my original stock came from 7 larvae (from North Carolina) in the early 60s, so I have reared them through many generations. [I also have reared *N. ferruginea*, *N. abbreviata*, and others, using the same techniques.] Now that I am 65, and was compulsorily retired (though I still have my lab and still hope to work for as long as I have a grant and lab space), I know that one of these years I will have to stop my cultures. I am quite happy to show anyone interested how to rear these flies and to give over a substock (now) or complete stock (later) if anyone in the Dipterist world has an interest. If you are interested write to me at the above address or phone: (416) 736-5398.

Diptera from the Czech Republic

from Miroslav Barták
Czech University of Agriculture, Faculty of Agronomy, Department of Zoology and Fishery,
165 21 Praha 6 - Suchdol, Czech Republic

"Diptera of an industrially affected region (North-Western Bohemia, Bílina and Duchcov environs)" printed in two volumes (altogether 514 pages) has been published. Altogether, 2,887 species were identified, 224 are the first findings in the territory of Bohemia and 180 species represent first records from the Czech Republic. Distributional data are added to each species as well as index of relative abundance in the Czech Republic and larval food preference. On the basis of these characters, the biological value of the area as a whole is evaluated. The process of Diptera succession on restored or spontaneously revitalized localities is discussed. The first volume comprises the Nematocera and

Brachycera (not including the Schizophora), totaling 43 families. The second volume deals with the rest of Brachycera, i.e. Schizophora, Acalyptrata and Calyptrata, totaling 48 families. Each family is treated as a separate chapter with short description of adults and immatures, biology and history of research in the Czech republic.

You may order both volumes on my E-mail address, the cost of both volumes is \$20 US including postage. You receive them after payment to account No 0348332353556011 of the Commercial bank (Komer. n± banka), pp. 839, Na Pá±kop> 33, 11407 Praha 1.

Preservation of DNA in Museum Specimens

from Ho-Yeon Han

c/o Dr. Allen L. Norrbom Systematic Entomology Lab., USDA, ARS Building 005,
Room 137, BARC-West 10300 Baltimore Avenue Beltsville, MD 20705-2350 USA

The following paper describes the affect of different preservatives on longevity of DNA in museum specimens. It seems that mounting flies killed and/or preserved in ethyl acetate or formalin is disastrous for the study of DNA. From my experience, chloroform has a similar negative affect against DNA. One hundred percent ethanol, air-drying in a desiccator, and critical-point dried from alcohol all yielded good results after short and long-term storage, as did specimens from ethylene glycol. It seems that critical point drying is the way to go.

Dillon N., Austin AD, and E. Bartowsky. 1996. Comparison of preservation techniques for DNA extraction from hymenopterous insects. *Insect Molecular Biology*. 5(1):21-24

Great Smoky Mountains National Park ATBI - Acalyptrate Diptera

by Joe B. Keiper,

Curator of Invertebrate Zoology The Cleveland Museum of Natural History
1 Wade Oval Dr. Cleveland, OH 44106, USA

Ben Foote (Kent State University) and I have been collecting selected families of acalyptrate Diptera for the Great Smoky Mountains National Park All-Taxa Biotic Inventory. We give a preliminary report here on what we have collected and identified to date: Anthomyzidae, Chloropidae, Drosophilidae, Ephydriidae, Heleomyzidae, Lauxaniidae, Otitidae, Pallopteridae, Periscelididae, Platystomatidae, Psilidae, Sciomyzidae, Sepsidae, Sphaeroceridae, and Tephritidae. We have so far identified nearly 100 species. Within the park, Chloropidae is by far the most species-rich of these families; much of our chloropid material remains undetermined. Chuck Parker (USGS) and Will Reeves (Clemson University) have been instrumental in supplying malaise trap material.

Books and Publications

Baker, R.H. and G.S. Wilkinson. 2001. Phylogenetic analysis of sexual dimorphism and eye-span allometry in stalk-eyed flies (Diopsidae). *Evolution* 55:1373-1385.

Brown, B.V. 2001. Flies, gnats and mosquitoes. pp. 815-826 *In* Encyclopedia of biodiversity, Vol.2, Academic Press.

A very nice synopsis of the order, with numbers of species in each family, and descriptions of a variety of life histories present in the order

de Carvalho, C. J. B. (ed.) (in press). Muscidae (Diptera) of the Neotropical Region: taxonomy. [Publication date expected by the end of April 2002]

This book has two chapters: Part I, Basal groups, by C. J. B. de Carvalho & M. S. Couri and Part II, Apical groups, by M.S. Couri & C. J. B. de Carvalho. The main scope of this book is to provide means of identifying the Neotropical species of Muscidae, one of the families of Diptera with more than 4000 species in the world. In the Neotropical Region, there are about 840 species distributed in 84 genera, 80 of them in South America. Some species have great medical and veterinary importance, acting as vectors of many diseases and other species have considerable ecological importance. Although muscid flies are very abundant in rural or semi-rural environments, most of them are rarely noticed by man. An indirect goal of this book, is also to identify weak points in our knowledge of muscid taxonomic and diversity for the neotropics (e.g. taxonomic problems, need of generic revisions, need of more collecting in some groups with few known species, among others). If you are interested in this book, please contact the Editora da Universidade Federal do Paraná editora@cce.ufpr.br or the authors CJBC: cjbcarva@bio.ufpr.br or and MSC: mcouri@attgloba.net

Disney, R.H.L. 2001. The preservation of small Diptera. *Entomologist's Monthly Magazine* 137:155-159.

Nirmala, X., V. Hypsa and M. Zurovec. 2001. Molecular phylogeny of calyptratae (Diptera: Brachycera): The evolution of 18S and 16S ribosomal rDNAs in higher dipterans and their use in phylogenetic inference. *Insect Molecular Biology* 10:475-485.

O'Hara, J.E. (in press). Revision of the Polideini (Tachinidae) of America north of Mexico. *Studia Dipterologica*. Supplement 10, 170 pp. [Publication date scheduled for 30 April 2002]

Pape, T. and P.H. Arnaud. 2001. *Bezzimyia* - a genus of native New World Rhinophoridae (Insecta, Diptera). *Zoologica Scripta* 30:257-297.

Pont, A. 2001. The type-material of Diptera in the Staatliches Museum für Tierkunde Dresden (Insecta). Part IV: Fanniidae and Muscidae. *Entomologische Abhandlungen Dresden* 59:455-492.

Roháč, J., S.A. Marshall, A.L. Norrbom, M. Buck, D.I. Quiros and I. Smith. 2001. World catalog of Sphaeroceridae (Diptera). 17 x 24 cm, 414 pages, 1 colour and 26 full-page black-and-white illustrations plus 5 original pen-and-ink drawings of "fly-art" as a bonus (all by Jindřich Roháč). Bound, with colour cover. ISBN 80-86224-21-X. Published by the Slezské zemské muzeum, Opava, 2001. Price: 29 US \$ plus postage.

The first world catalog of Sphaeroceridae (lesser dung flies) has been prepared by an international team of six dipterists. It includes all taxa described in the family during 1800-2000. Altogether 1,344 valid species-group taxa and 124 genus-group taxa are recorded along with all synonyms and published generic and subgeneric combinations. In addition, nomina nuda and doubtful genera and species are listed. A number of new nomenclatural changes are proposed (one new name; one new suprageneric, five generic and 29 specific synonyms; 150 new combinations; three species restituted from synonymy; two subspecific taxa elevated to specific status). One neotype and 26 lectotypes are designated. Taxa excluded from Sphaeroceridae are reviewed in detail. A history of taxonomic research on the family is outlined and its systematic position and classification summarized. A total of 26 illustrations are provided, depicting characteristic representatives of the different subgroups of Sphaeroceridae. A world bibliography of Sphaeroceridae, with a total of 1,386 references, is given.

Contents: Introduction; Acknowledgements; History of taxonomic research on Sphaeroceridae; Systematic position and classification of Sphaeroceridae; Format of the catalog, bibliography and index; Acronyms used in the catalog; New nomenclatural changes; Designations and notes on primary type material; Taxa excluded from Sphaeroceridae; Catalog of Sphaeroceridae: Tucminae, Copromyzinae, Sphaerocerinae, Homalomitrinae, Limosininae, Doubtful genera and of Sphaeroceridae [unplaced to subfamilies], Unavailable generic and specific names proposed in Sphaeroceridae, Numbers of valid taxa of Sphaeroceridae in the catalog; Gallery of Sphaeroceridae; Bibliography; Index.

Orders should be send to: Slezské zemské muzeum, Tyršova 1, CZ-746 46 Opava, Czech Republic

Wheeler, W.C., M. Whiting, Q.D. Wheeler and J.M. Carpenter. 2001. The phylogeny of the extant hexapod orders. *Cladistics* 17:113-169.

Woodley, N. E. 2001. A World Catalog of the Stratiomyidae (Insecta: Diptera). *Myia* 11: (6), 1-475. ISBN 90-5782-083-8 Published by the North American Dipterist's Society and Backhuys Publishers, Leiden, distributed by Backhuys: Backhuys Publishers PO Box 321 2300 AH Leiden The Netherlands www.backhuys.com price:\$98.00 US

Submission Form for Directory of North American Dipterists

For those who have not yet sent in a synopsis of their interests for the *Directory of North American Dipterists*, the following form is provided. Please restrict yourselves to no more than 20 words when listing the titles of your major projects and the animals you work with. Should any of you like to expand or modify your entries from the last list, use the form to indicate the changes.

The information can be emailed, or the form completed and faxed or sent to the following address:

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 Ottawa, Ontario, CANADA, K1A 0C6

FAX: (613) 759-1927

Email: cummingjm@em.agr.ca

Full name: _____ **Address:** _____

Telephone Number: _____

FAX Number: _____ **Email:** _____

Projects and taxa studied: _____
