FLY TIMES

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The Fourth International Congress of Dipterology, held in Oxford, England on Sept. 6-13 is over and it was a smashing success. Word is that everyone is recuperating nicely and back to the tasks at hand. We have a synopsis of the Congress in this issue of the *Fly Times* as well as reports of other meetings past and yet to take place. Readers will see that this issue is one of the shorter *Fly Times* that we've put together. Please do send in your news, reports, suggestions, and thoughts so that we can keep the communication flowing between Dipterists. You students out there should especially consider sending in synopses of your work so other Dipterists in North America (and in the world via the Web) may know what you're up to; not a bad way to advertize yourself!

As noted in the last issue, this newsletter is also now available through the ECORC website as follows: http://res.agr.ca/ecorc/program2/entomology/flytimes/flytime.htm

The *Directory of North American Dipterists* is on the web and can be accessed at the following address: http://res.agr.ca/ecorc/program2/entomology/diptera/dipteras.htm

Issue No. 22 of the *Fly Times* will appear next April 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. 22 should be sent by the end of March, 1999.

1998 Dipterists Informal Conference

by Stephen D. Gaimari

This year's Informal Conference of the North American Dipterists' Society will be held at the Las Vegas Hilton on Monday, 9 November, at 7 pm, as part of the Annual Meeting program of the Entomological Society of America. In addition to the Business Meeting, there are three scheduled talks, as follows. Dr. Benjamin Foote (professor, Kent State University) will talk about the biology of marsh-inhabiting acalyptrate Diptera, focusing on trophic ecology and larval feeding habits. Scott Fitzgerald (Darlene Judd's first doctoral student at Oregon State University) will present a paper reviewing the distributional patterns of New World Bibionidae, with a comparison of genus and species richness by region. Martin Hauser (Mike Irwin's new doctoral student at the University of Illinois from the Technical University of Darmstadt, Germany; Martin also worked for 2 years as an entomologist at the Natural History Museum in Stuttgart) will talk about the interesting, very rare, Palearctic genus *Exochostoma* (Stratiomyidae). In addition to the scheduled presentations, the floor will be open afterwards to anyone who wants to discuss NADS business, the goings-on in their labs, or other dipterological news and views. Overall, this should be a great meeting, with several very interesting talks, and a hopefully lively discussion. I hope to see you all there!

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North American Dipterists Society Biennial Field Meeting -Mountains of Western North Carolina, USA, May 24-27, 1999

By Brian M. Wiegmann

Preliminary arrangements have been made to accommodate 50 dipterists at Camp Broadstone, Valle Crucis, NC. Camp Broadstone, located in the Blue Ridge Mountains, is on 53 acres of woods and meadows in the small community of Valle Crucis, six miles west of Boone and the campus of Appalachian State University. The camp is located near the Blue Ridge Parkway, Linville Gorge, Grandfather Mtn., and the Pisgah and Cherokee National Forests.

Collecting will be possible on the grounds of the camp and excursions will be planned to sites in the

Pisgah and Cherokee Forests. Facilities include a main lodge, six cabins, business office, maintenance building, arts and crafts cabin and classroom cabins. The main lodge and dining hall of 4,600 square feet is a multipurpose facility for serving meals, indoor workshops and evening activities. The large natural stone fireplace, on a cool evening, provides a relaxing atmosphere after a full day of outdoor activity. Meals are served family style from the fully-equipped modern kitchen located in the main lodge. Sleeping accommodations are in modern, clean and comfortable bunk-house style cabins. The cabins feature bunk beds, indoor bathroom facilities with individual hot showers and are fully insulated and electrically heated. They are able to accommodate up to 100 people in the six cabins.

The projected cost per person is \$120, covering registration, lodging and meals for the entire meeting.

If you would like to be put on the mailing list to receive registration materials and further information about the meeting check out the NADS meeting website at: http://www4.ncsu.edu/unity/users/b/bwiegman/public html/ncflies99.html

or contact: Brian M. Wiegmann Department of Entomology Box 7613 North Carolina State University Raleigh, NC 27695 email: bwiegman@unity.ncsu.edu phone: 919-515-1653 fax: 919-515-7746

Thailand Diptera or Better-Late-Than- Never

by Dick Deonier

In 1965, I collected and sent to Dr. J.L. Laffoon (now deceased) several thousand insects from various localities in Thailand. Jean had all of them processed, fully labelled, and deposited there in the Iowa State Collection. For the most part these were Diptera and I would estimate there are at least 4,000 to 5,000 specimens (other than Ephydridae) awaiting proper study.

D.L. Deonier P.O. Box 405 Lawrence, KS 66044 from Dan V. Hagan

The organizers (Dr. Frank E. French, Georgia Southern University, et al.) of the 1999 BFW are considering holding the BFW jointly with the 1999 NADS meeting in North Carolina. Further details are not yet available.

Brazilian Empidiod Work in Ottawa

from Jose A. Rafael Instituto Nacional de Pesquisas da Amazonia, Manaus

Jose writes that he is currently in Ottawa for a year and a half on a Brazilian fellowship, working with Jeff Cumming researching the subfamily Empidinae. Jose's projects in Ottawa include revisions of the Neotropical genera *Macrostomus* and *Porphyrochroa*, and the phylogeny and higher classification of the Empidini. The project will finish at the end of 1998.

March Flies Marching Right Along

from Scott Fitzgerald

Scott is a Ph.D. student working with Darlene Judd at Oregon State University. He wrote to say he plans to work on the classification of the bibionid genus *Plecia* (i.e. species groups, subgenera, etc.) on a world scale. He believes there will certainly be other projects that stem from this along the way, but he "hasn't been at it long enough to know what those may be".

Dipterology at the Lyman Entomological Museum

by Terry A. Wheeler

The Lyman Entomological Museum is the insect collection and systematic entomology lab of McGill University. The museum was founded in 1914 and over the past 85 years the collection has grown steadily and now numbers about 2.8 million specimens, making it the second largest insect collection in Canada (behind the CNC). The collection is particularly strong in Orthopteroids, Lepidoptera and Coleoptera but the Diptera collection has lagged far behind other orders in growth. There has not been

a dipterist associated with the Lyman Museum for many years and the Diptera collection reflects that grievous oversight.

I joined McGill University in 1995 and became Director of the Lyman Museum in 1997. Most of my time since then has been focused on trying to build the Diptera collection and establish a research and training program in Diptera systematics and diversity. We have finally reached the point where there is something worth reporting so it seemed like a good time to profile the Lyman Diptera program.

Collection development has been a major priority, mainly because we need some specimens to work on. In 1995 the Diptera collection was almost completely uncurated, with only a few families reliably identified to the generic or specific level, and much of the rest only to family (with about 75% accuracy). Almost half the collection was unidentified to family. We have put a lot of effort into sorting the miscellaneous material to family and, where reasonable expertise exists, to genus. Also, through the efforts of some hard core students, a few long collecting trips, and a lot of sorting of existing residues, the Diptera collection has been growing by about 20,000 pinned specimens per year since 1996. The collection is now about 80% sorted to family and further in some groups. The focus was initially on acalyptrate families, especially the Chloropidae and Agromyzidae, but as more students have developed their own interests and we have launched some multi-taxon sampling programs, the representation across all families of Brachycera is getting better. The Nematocera still lags behind but hopefully we'll find a good student or two who'll straighten out the inequality.

We've been very lucky to attract a solid group of students in the first few years of the new Lyman. It's a particularly busy time now, with a couple of cohorts of students overlapping in their programs. The following list outlines the current roster of graduate students working on Diptera, with their projects:

Frederic Beaulieu (M.Sc.): Diptera community associated with wetland sedges in southern Quebec. Stephanie Boucher (M.Sc.): Zoogeography of Brachycera of relict grasslands in the Yukon. Scott Brooks (Ph.D.): Higher classification of the subfamily Dolichopodinae. Vanessa Crecco (M.Sc.): Ecology and diversity of Agromyzidae in arid grasslands. Joanne Mudd (M.Sc.): Ecology and diversity of grassland acalyptrates. Cyrena Riley (M.Sc.): Diversity and host associations of arthropod fauna in bird nests.

I also have two undergraduate students working on B.Sc. Honours theses who will be staying on to start graduate work in 1999. Jade Savage has just finished a project on the systematics and phylogeny of *Cetema* (Chloropidae) and Joelle Perusse is currently immersed in a revision of the Nearctic *Lauxania* (Lauxaniidae).

When I'm not dealing with memos, meetings, fundraising, or reading drafts of work by those on the above list, I continue my work in Chloropid systematics, higher classification of acalyptrates, and biodiversity work on Diptera in arid habitats.

Although our own Diptera collection is not a major one (yet) we are fortunate that we are only 1.5 hours from the CNC, with their excellent fly collection, library and the expertise of their staff. CNC staff have taken an active role in encouraging, training and supervising many of the Lyman's junior dipterists and a steady flow of traffic ensures close cooperation between our two collections. I would like to promote

further use of our collection and those few dipterists still out there doing revisionary work are encouraged to make use of our material in studies. Loans are available and encouraged and any dipterists passing through the Montreal area are invited to visit, have some secret Lyman Blend coffee and look over the collection. But if your favourite family is one that we haven't gotten around to curating yet, then please promise not to laugh when you see it. We're still under construction.

Money, Money, Money: \$ \$ \$

Readers are reminded that the Dipterology Fund has money available for student research and travel as well as supporting the development of North American Dipterology. Details of the fund are given in Fly Times 19:5 (October, 1997). For those of you who have lost your copies (unforgivable) and have no Internet access, contact:

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Travels in Argentina

by C. Riley Nelson

In August I attended the IX International Conference on Ephemeroptera and the XIII International Symposium on Plecoptera in Tafi del Valle, Argentina in the company of Robert Hansen and Lisa Weston, both of Austin, Texas. The meetings were wonderfully hosted by Dr. Eduardo Dominguez and other folks at the Universidad Nacional de Tucumán and the associated Instituto Miguel Lillo.

I flew into Cordoba on a cheap ticket (\$599) from Miami. Flying into Buenos Aires would have been much more expensive and more of a hassle to change airports. From Cordoba I took buses, in steps, to Tucuman then Tafi del Valle then Quilmes then Jujuy. The habitat on the ride from Cordoba to Tucuman started in agricultural land that changed to beautiful desert shrublands that no doubt harbored many asilid species. I encountered other permutations of desert shrubland at higher elevations in the Santa Maria Valley west of Tucuman. I would much enjoy collecting asilids from

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these habitats, but it was winter and schedules were tight. The Yunga habitat (a type of mid-elevation cloud forest new to me) along river canyons was impressively squeezed between lower elevation desert scrub and higher elevation grasslands and desert. When I stayed in Tafi, elevationally above the Yunga I could look down and see the clouds filling the canyons. It was beautifully impressive. Epiphytes including many bromeliads and bryophytes draped the "temperate" trees here. I did manage to photograph a few aquatic insects in this habitat, including some of the many blepharicerids collected by Dr. Peter Zwick of Schiltz, Germany and myself. Robert and Lisa continued on to the Bolivian border at La Quiaca. Here they got to see Altiplano habitat and large lakes home to flocks of flamingos. I missed this part of the trip because I needed to get back to the start of classes. I arrived in Austin at 10:30 am and taught at 2:00 and 4:00 pm that afternoon.

It was winter so collecting of flies was not a major goal of the trip, but I did make contacts with several people studying flies there: Dr. Mercedes Lizarralde de Grosso, studying Ephydridae and a graduate student Cristina Rueda studying systematics of robber flies (Asilidae) especially the genus *Atomosia*. Cristina took several of us collecting aquatics in the rivers near Jujuy in the extreme north of the country. Both Mercedes and Cristina are based at the Instituto Miguel Lillo in downtown Tucuman. This institute is pleasantly surrounded by a small botanical garden in which I was able to photograph quite a few colorful and otherwise interesting insects. Moving around Argentina was cheap and easy by bus. Taxis or remisses were easy to find and reasonable to get to short hop urban locations. I didn't use them to get to more remote locations, but I'm sure it would be possible, but not completely cheap (\$12 per hour). Both the nation and individual provinces have protocols for collecting permits that need to be initiated several months before a planned visit.

I am most intrigued by getting to the southern portion of the country, near Bariloche and Esquel. There are fine university scientists there who I met who will be most useful in collaborative efforts.

Reminiscing on ICD-4 (Oxford, 1998)*

by Neal L. Evenhuis

I arrived to do some collaborative work just outside of London a few days before the Congress and encountered the remnants of Hurricane George still having enough punch to dump a bit of rain onto jolly old England after pounding the Caribbean and eastern seaboard of North America weeks earlier. The next hurricane due to roll into the UK was the delegation of dipterists attending the fourth International Congress of Dipterology in Oxford (ICD-4). Almost 300 paying customers attended the Congress, which took place 6-11 September. Any non-paying customers shall remain anonymous except for their names being prominently displayed in the list of Bests and Worsts, which can be viewed on the web at http://www.bishop.hawaii.org/bishop/ento/icdlist.html.

The weather turned out to be, for the most part, accommodating, with only a few hours of necessary

umbrella time in between sessions. All activity took place on the beautiful grounds of Keble (pronounced "Kee- Bull") College just across from the famous Oxford University Museum, which houses the Hope Entomological Collections. Stepping into Keble College (you literally must do so through a small door) one is at once struck by the age, grandeur, and beauty of the buildings and grounds. The main quad area sported an immaculate lawn, which was off-limits to everyone except a groundskeeper, who daily trimmed the edges and picked mushrooms when they appeared [no one was able to find out what happened to the mushrooms, though an investigation is still ongoing]. The buildings include a large chapel and associated 3-story buildings that housed staff, students, classes, and laboratories of the college.

Sunday afternoon saw many of the delegates at registration where we all got shiny new black tote bags and our program paraphenalia. The ARCO Room, where registration took place, as well being the venue for booksellers stalls and coffee and tea breaks, was a fair sized room with an outside area with canopied tables for conversation and relaxing. When there was nothing else to do, you could always go to the ARCO Room during the Congress and browse the bookseller stalls or meet people over a coffee or just sit and read some of the latest Diptera journals or the various flyers and adverts on display.

Sunday evening was the official start of the Congress and included a mixer in the Oxford University Museum exhibit hall. Drinking wines and concurrently rubbing elbows with dinosaur skeletons was a definitely unique experience. I think the skeleton I was getting to know will never forget it (if I remember, I think I did manage to get the wine bottle out of its jaws before the mixer was over ...).

Monday morning was the start of the sessions with the plenary opening in the University Museum lecture hall and welcoming by the Director of the Museum and the Local Organizer, David Henshaw. Here we were presented with the announcement of the three new Honorary Council members, Drs. D. Elmo Hardy, Graham Griffiths, and Antony Downs. After we had a short lecture on the stiff rules we must follow at the Keble College Dining Hall (shades of "Oliver Twist" to be sure), we filed out of the lecture hall to walk across the street to the Keble College lecture rooms. Soon to come would be the delegate's first experience with the high quality of technology that Keble College had promised its organizers with regard to media equipment (see below).

Most sessions took place in four rooms within what was called the Pusey Quad (pronounced "Pyoo-Zee"). One of the smallest of these rooms -- from the looks of it, a music classroom -- was the Ley Room (pronounced "Lee"). Unfortunately, incorrect guestimates by the organizers as to how many people would attend various sessions caused the Ley Room to never have been large enough for its various sessions. Quite often, latecomers would be relegated to sitting on the harpsichord at the back of the room and rumor has it that bets were being placed on how many people could sit on it before it collapsed. It did creak a few times, but no collapses as far as I know. Others would open the door, see a full room, and hang out in the hallway trying in vein to hear the talks through the thick oak doors; and still others were lucky enough to either sit on the ground near the door or to even sit in a moderator's seat if it was vacant. The Ley Room was also prone to glare on the projection screen from the afternoon sun -- yes, English sunshine, though some still think it is an

oxymoron. Obviously, the rarity of such an event such as sunshine in England was not foreseen by the Keble College conference personnel and many afternoon sessions in the Ley Room unfortunately suffered.

The upstairs Pusey Room was the largest of the lecture rooms and had curtains to shade from the afternoon sun. This room, despite its size, still had problems with not enough seats for certain popular sessions. The Gibbs Room, conveniently near the first aid station and surgeon's office, was probably the most jinxed of all the rooms. Obviously a failed exorcism had taken place there sometime in the near past as almost all sessions had problems with either seating, inoperable projection equipment, or weird noises (though the last may have been my rumbling stomach).

The poster sessions (two of them: one each for 2 1/2 days) took place across the hall from the Ley Room and were a popular venue -- as they are at most conferences -- here probably because most poster viewers were those that could not get into the Ley Room. The quality of poster production by those with enough money to afford it was very clearly evident at this conference. Glossy color posters (large-format roll-up single sheets) were the highlight of the sessions and exhibited well-tuned graphics as well as good content and stimulating project descriptions. If this last four years of the evolution and development in the quality of posters is any indication, the next four years may show another leap in technology in poster presentation so that it might not be far-fetched to see hyperlinks or touch screens on posters at the next Congress.

Probably the most popular of all the sessions was the one on the status of Diptera collections that took place the last day of the Congress in the Pusey Room. The afternoon portion was also the best attended session since it did not conflict with any other concurrent session and most every registered participant tried to get a seat or had to stand in the hall stairway and listen. Those of us that could get a seat were not disappointed. Among the many fine presentations, Loic Matile gave a light hearted talk of the history and current status of the collections at the Museum d'Histoire Naturelle in Paris and Emilia Narchuk gave an excellent account of the history of Russian entomology and the collections in St. Petersburg with a memorable slide with a striking juxtaposition of photographs of Rohdendorf and Stackelberg taken decades apart, but with almost the identical pose next to (probably the same!) dissecting scope.

Overall, this Congress met or exceeded many expectations. There were some unfortunate circumstances, but some of this must also be put into the context of the situation. Unfortunately, the organizers could not, despite many attempts, get sponsorship for the Congress. This was a serious financial hardship that was dealt with by the organizers taking out personal loans to see that the Congress would actually take place. To this end, they deserve or gratitude and thanks for seeing the Congress to its successful conclusion! However, to their and our consternation, there were still problems that affected a few delegates during this Congress. One was the unfortunate failure of projection equipment in the Gibbs Room on Monday afternoon, which resulted in quite a bit of quick adlibbing on the part of co-moderators, Dan Bickel and Roy Crossley and a large dose of patience by presenter Marc Pollet to have to endure not only a broken slide projector, but also a computerized presentation that did not work correctly. My talk after Marc's only suffered the hilarity of slides

turning into projectiles once they were advanced with the remote control.

The closing plenary session took place in the ARCO Room with David Henshaw and Milan Chvala hosting the ceremonies. New Honorary Council members Graham Griffiths and Antony Downes gave speeches concerning their respective rises to stardom and Wayne Mathis and Roger Crosskey gave eloquent anecdotal remarks in memory of Curtis Sabrosky, who had passed away earlier this year. New Council members were introduced and the new venue for the next Congress was announced. Saturday was the day for post-congress field trips to various nearby forests. Ed Jarzembowski also organized a last-minute 4 day fossil Diptera field trip, which had some takers as well.

We all went away wanting more.

I hope to see many of this year's delegates, as well as new ones and old ones at the next Congress (ICD-5) in Brisbane, Australia. Best of luck to new council member David Yeates in his organization of that Congress.

*Summaries of all talks given at the Congress were published in an Abstracts Volume, details of which are given below under "Books and Publications" (the editors).

Books and Publications

- Gilbert, F. and M. Jervis. 1998. Functional, evolutionary and ecological aspects of feeding-related mouthpart specializations in parasitoid flies. Biological Journal of the Linnean Society 63(4): 495-535.
- Ismay, J.W. 1998. (ed.). Abstract Volume. Fourth International Congress of Dipterology. Oxford, United Kingdom, 275 pp.
- Powell, J.R. 1997. Progress and prospects in evolutionary biology: the *Drosophilia* model. Oxford University Press, New York, xiv + 562 pp. ISBN 0-19-507-691-5. \$70 US.
- Rohacek, J. 1998. Taxonomic limits, phylogeny and higher classification of Anthomyzidae (Diptera), with special regard to fossil record. European Journal of Entomology 95 (1): 141-177.
- Whiting, M.F. 1998. Phylogenetic position of the Strepsiptera: Review of molecular and morphological evidence. International Journal of Insect Morphology and Embryology 27: 53-60.

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.

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

Dr. J. M. Cumming, Biological Resources Program, ECORC Agriculture & Agri-Food Canada, K.W. Neatby Building, C.E.F. Ottawa, Ontario, CANADA, K1A 0C6

FAX: (613) 759-1927 Email: cummingjm@em.agr.ca

Should any of you like to expand or modify your entries from the last list, use the form to indicate the changes.

Full name:	Address:		
		Telephone Number:	
FAX Number:	Email:		
Projects and taxa studied:			
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