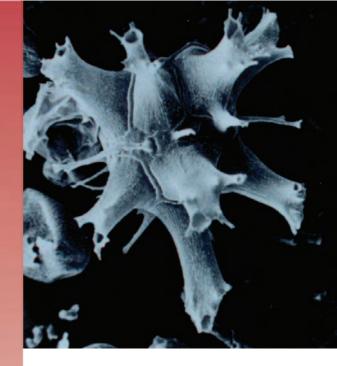
# AMERICAN ASSOCIATION OF STRATIGRAPHIC PALYNOLOGISTS

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# NEWSLETTER



December 2006 Volume 39, Number 4

Published Quarterly by the American Association of Stratigraphic Palynologists Inc.

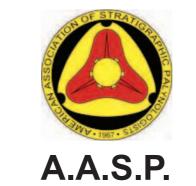


# A.A.S.P. NEWSLETTER

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# December 2006 Volume 39, Number 4

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#### American Association of Stratigraphic Palynologists Inc.

The American Association of Stratigraphic Palynologists, Inc. - AASP - was established in 1967 by a group of 31 founding members to promote the science of palynology. Today AASP has a world-wide membership of about 800 and is run by an executive comprising an elected Board of Directors and subsidiary boards and committees. AASP welcomes new members. The AASP Foundation publishes the journal Palynology (annually), the AASP Newsletter (quarterly), and the AASP Contributions Series (mostly monographs, issued irregularly), as well as several books and miscellaneous items. AASP organises an Annual Meeting which usually includes a field trip, a business luncheon, social events, and technical sessions where research results are presented on all aspects of palynology.

AASP Scientific Medal recipients Professor William R. Evitt (awarded 1982) Professor William G. Chaloner (awarded 1984) Dr. Lewis E. Stover (awarded 1988) Dr. Graham Lee Williams (awarded 1996) Dr. Hans Gocht (awarded 1996) Professor Svein B. Manum (awarded 2002) Professor Barrie Dale (awarded 2004) Dr. David Wall (awarded 2004) Dr. Robin Helby (awarded 2005) Dr. Satish K. Srivastava (awarded 2006)

#### AASP Honorary Members

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Teaching medal recipients Professor Aureal T. Cross (awarded 1999) Professor Alfred Traverse (awarded 2001) Professor Bill Evitt (awarded 2006)

AASP Distinguished Service Award recipients Dr. Robert T. Clarke (awarded 1978) Dr. Norman J. Norton (awarded 1978) Dr. Jack D. Burgess (awarded 1982) Dr. Richard W. Hedlund (awarded 1982) Dr. John A. Clendening (awarded 1987) Dr. Kenneth M. Piel (awarded 1990) Dr. Gordon D. Wood (awarded 1993) Dr. Jan Jansonius (awarded 1995) Dr. D. Colin McGregor (awarded 1995) Professor John H. Wrenn (awarded 1998) Professor Vaughn M. Bryant (awarded 1999) Dr. Donald W. Engelhardt (awarded 2000) Dr. David T. Pocknall (awarded 2005) Dr. David K. Goodman (awarded 2005) Prof. Owen K. Davis (awarded 2005)



# A.A.S.P. NEWSLETTER

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Sophie Warny, swarny@lsu.edu, Museum of Natural Science, Louisiana State University, 119 Foster Hall, Baton Rouge, 70803, Louisiana, USA.

The AASP Newsletter is published four times annually. Members are encouraged to submit articles, "letters to the editor", technical notes, meetings reports, information about "members in the news", new websites and information about job openings in the industry. Every effort will be made to publish all information received from our membership. Contributions which include photographs should be submitted a week before the deadline. Deadline for next issues of the newsletter is FEBRUARY 1. All information should be sent by email. If possible, please illustrate your contribution with art, line drawings, eye-catching logos, black & white photos, colour photos, etc. We **DO** look forward to contributions from our membership.

### PRESIDENT'S PAGE By Carlos Jaramillo

It is an honor and a privilege to be the president of AASP. I joined the organization in 1992, 14 years ago, when I was in my last year of College at the Universidad Nacional de Colombia. It was by pure chance that I found out about AASP. In those days, we didn't have Internet. Hard to believe, isn't it? A friend of mine was in graduate school in USA and had bought Paleopalynology by AI Traverse. I went to his home and saw the book, and I fell in love with pollen and dinoflagellates. I bought the book from him and read it slowly so many times, that I decided to become a palynologist. I learned about AASP from Traverse's book, and somehow, I got an AASP newsletter and I learn how to subscribe. After that, with my friend Oscar Yepes, now with Chevron in Angola, we decided to do our undergraduate thesis on dinoflagellates; so, we bought the Evitt book on dinos and read it many, many times. For a while, those two books were our only source of information on paleopalynology.

Just after graduation, in a bold move, Yepes and I decided to present our work at the 26th Annual Meeting in Baton Rouge, Louisiana in1993. So, we took a plane from Bogotá to Miami, an Amtrak train to New Orleans, and a greyhound bus to Baton Rouge. It was a long trip, our first time in USA and in an English-speaking country. It was an incredible experience and a fantastic meeting. I could not believe that I was meeting the authors of the books I read! I remember that in the second day of the meeting I met Jan Jansonius in an elevator. I always wanted to have the Jansonius and Hills catalogue, but no university in Colombia had it, and I didn't have enough money to buy it. So, I just asked Jansonius for a copy, and he said, OK, no problem. A month later, I received my first Jansonius& Hills catalogue! I couldn't believe it.

I felt that I was part of a big family, and probably one of the reasons I am still doing palynology is because I still feel that AASP is my family. I usually attend several meetings each year, but the AASP meeting is always special. You meet good friends and colleagues, have good wine or beer, and overall talk about our passion: palynology.

I think AASP is really important because we are a small science field, perhaps over 800 paleopalynologists worldwide? There are 6,551,243,342 humans on this planet, thus we have one palynologist every 8.1 million people. We share a really special and rare passion and we need a strong support system to not feel so isolated. To me, AASP has been that and I hope it continues doing that for many decades to come.

Nevertheless, a small science does not mean that we cannot do large contributions to science. In the last year, for example, there have been 200 paleontological papers in either Nature or Science. Fifteen of them have palynological data on them. This is about a 7.5% of the total paleontological production. But still we are a 2.5% of the global number of Paleontologist.

And nowadays more and more people are recognizing how useful palynological data can be, not only for the traditional uses as biostrat, paleoecology, but for quantitative analysis related to diversity, extinction, origination, food web structure, phylogeny, and biogeography that requires the kind of data that only palynology can provide.

I see a bright future for Palynology, right now it is a good time to be a palynologists and I think AASP must play a big role in pushing palynology in the 21st century. Past presidents have given the first steps. Palynology is now indexed along with the major league journals in Citation Index, Biosis, Geoscience World, a major milestone for our journal and our organization.

Our next big challenge is Cenex, the center for excellence in Palynology, hosted by LSU at Baton Rouge. Cenex must play a big role in shaping the next generation of palynologists in America, and the BoD will work hard to see that happening.

The next year meeting will be in Panama. I would love for all of you to come. More information on the meeting would be available soon in the NL and AASP website.

On a sad note, we just recently learned about the passing of Dr. John Wrenn a respected member of AASP. We are very grateful to his effort to maintain the Center for Excellence in Palynology. To his wife and family, our deepest regards.

# MANAGING EDITOR'S REPORT

*Palynology* Volume 30 for 2006 is currently at the printers. The contents are exactly as listed in the last edition of the Newsletter (i.e. Volume 39, Number 3, p. 5), except that the order has somewhat changed because of the insertion of color plates into some of the articles. It therefore will be published on time, i.e. during December 2006. In addition to the nine technical articles, this volume also contains numerous AASP award citations, the annual meeting abstracts from the St Louis meeting in 2005, and the group photograph from that meeting. Next year's issue (volume 31) is looking in excellent shape, even at this early stage. The rate of manuscript submissions continues to be relatively high. I would again like to record my heartfelt thanks to all the many reviewers who have assessed manuscripts for me; your sterling efforts are greatly appreciated. If you are interested in potentially joining the Editorial Board, please get in touch with me.

Jim Riding (jbri@bgs.ac.uk), Managing Editor December 2006

## STUDENTSHIP, FELLOWSHIP AND JOB CORNER

#### Funded Research Studentships in Plio-Pleistocene Dinocyst Ecology and Paleoceanography

Two funded research studentships (one PhD and one MSc) are available in dinocyst studies, starting in January 2007. Dinocysts are now used frequently in quantitative reconstructions of later Quaternary marine environments, especially at higher latitudes where calcareous microfossil assemblages decline in diversity. However, using dinocysts to reconstruct many earlier Quaternary and Pliocene environments is hindered by the increasing presence of extinct species and unusual species associations. The challenge is to understand the environmental significance of these older assemblages, thereby extending backwards in time the utility of dinocysts for quantitative environmental analysis.

The research will examine the dinocyst record at very high stratigraphic resolution across several time intervals of critical paleoclimatic interest for the Pliocene and Pleistocene. Material will be examined from across the North Atlantic region, based on existing deep-sea core material. Assemblages will be uniquely calibrated throughout by obtaining stable isotopes and Mg/Ca ratios to serve as fully independent proxies for climate change, and allow precise tuning to an orbital timescale. Results will address the dynamics of late Cenozoic climate, especially at higher latitudes where dinocyst reconstructions of sea-ice cover and seasonality will provide new insights into the timing and causes of Northern Hemisphere glaciations.

The PhD student will be registered through the Department of Geology, University of Toronto. The two-year MSc research student will be registered through the Department of Earth Sciences, Brock University. Training will be given in dinocyst morphology and taxonomy, paleoceanography, geochemistry and statistical analyses. Applications should be submitted online as soon as possible.

For further information please contact: Prof. Martin J. Head, Department of Earth Sciences, Brock University, St. Catharines, Ontario, Canada (mjhead@brocku.ca), and Department of Geology, University of Toronto, Canada.

# QUATERNARY & PALEOCLIMATE GRADUATE OPPORTUNITIES IN GEOLOGY & GEOPHYSICS AT THE UNIVERSITY OF WISCONSIN-MADISON

The Department of Geology & Geophysics at UW-Madison has multiple graduate funding opportunities available for research in the fields of Quaternary Geology and Paleoclimatology starting Fall 2007 in the form of Research Assistantships, Department Fellowships, and Diversity Fellowships, as well as more standard Teaching Assistantships.

Our research group specializes in ice sheet and glacier history, the interactions of ice sheets and climate, paleoceanography and paleoglaciology, and is part of the much larger Quaternary/Climate community at UW-Madison.

Interested students can find more information on faculty, research and applying at www.geology.wisc.edu/~qlab/.

Smithsonian Tropical Research Institute

## 3-Year Tupper Postdoctoral Fellowship

The Smithsonian Tropical Research Institute (STRI) located in the Republic of Panama is a division of the Smithsonian Institution in Washington DC and maintains research facilities in different marine and terrestrial locations on the Isthmus of Panama. STRI invites applications for the Earl S. Tupper three-year postdoctoral fellowship in the areas represented by its scientific staff. Disciplines include ecology, anthropology, paleontology, paleoecology, evolutionary biology, molecular phylogenetics, biogeography, animal behavior, neurobiology, soils sciences, and physiology of tropical plants and animals. Research should be based at one of the STRI facilities; proposals that include comparative research in other tropical countries will be considered. One fellowship is awarded annually.

In order to apply send a detailed research proposal with 1 page abstract and budget (less than 10 pages), a curriculum vitae, 2 letters of reference, names and telephone numbers of 3 additional professional references and reprints of most important papers. We suggest applicants consult with the STRI scientific staff member who will serve as their host before submitting final application. Staff and research interests are listed at <a href="http://www.stri.org">http://www.stri.org</a>. Annual stipend is \$40,000 with yearly travel and research allotments. Deadline for submission: January 15, 2007.

Applications consist of one (1) printed copy, plus one (1) electronic copy of all requested materials. The electronic copy should be submitted on a CD or by e-mail, as a SINGLE file in Word or preferably PDF, including proposal with budget and CV. Reference letters may also be submitted electronically. Send hard copy of the application to STRI/Office of Academic Programs, Unit 0948, APO AA 34002-0948 from the US/Europe or Apartado 0843-03092, Balboa, Panama from Latin America. Electronic version should be sent to fellows@si.edu.

### Environmental Scientist – Climate/Global Change: Assistant Professor(Tenure Track); Vacancy # 07TSM068

The Department of Earth and Environmental Sciences seeks a broadly trained geologist who applies diverse modern approaches to conducting research in the areas of Atmosphere, and Climate or Global Change, including related fields (e.g., Glaciology or Palynology). Teaching responsibilities include: undergraduate courses in environmental sciences and graduate courses specializing in the environmental aspects of the atmosphere, the hydrosphere, and their interactions. Other expectations include developing a sustainable, externally funded research program, supervising thesis research, and mentoring students at the undergraduate and graduate levels. Additional information about the department is available at: www.csufresno.edu/geology/. An earned doctorate (Ph.D.) in a field of Environmental Sciences or related fields is required. Please send a C.V., statement of research and teaching interests, recent publication(s) and at least three letters of recommendation to Professor John Suen, Search Chair, California State University, Fresno, 2576 East San Ramon Avenue M/S ST 24, Fresno, CA 93740-8039 before November 15, 2006 for full consideration. The position will be open until filled.

Smithsonian Tropical Research Institute

## Fellowships in Tropical Biology

The Smithsonian Tropical Research Institute (STRI) located in the Republic of Panama is a division of the Smithsonian Institution in Washington DC and maintains research facilities in different marine and terrestrial locations on the Isthmus of Panama. STRI offers fellowships for undergraduate, predoctoral and postdoctoral research in the areas represented by its scientific staff. Disciplines include ecology, anthropology, paleontology, paleoecology, evolutionary biology, molecular phylogenetics, biogeography, animal behavior, neurobiology, soils sciences, and physiology of tropical plants and animals.

**STRI Earl S. Tupper 3-Year Postdoctoral Fellowship** (deadline: 15JAN07): Applications should include detailed research proposal with budget, curriculum vitae, 2 letters of recommendation, names and telephone numbers of 3 additional references. Applicants should consult with STRI scientists who will serve as advisors before submitting final application. For more information: fellows@si.edu.

**SI Postdoctoral, Senior Postdoctoral and Predoctoral Fellowships** (deadline: 15JAN07): From 3 months up to two years depending on research. Available through the Office of Research Training and Services, Victor Building Suite 9300, MRC 902 PO Box 37012, Washington DC 20013-7012 or visit www.si.edu/research+study

**SI Molecular Evolution Fellowships** (deadline: 15JAN07): Available through the Office of Research Training and Services, Victor Building Suite 9300, MRC 902 PO Box 37012, Washington DC 20013-7012 or visit www.si.edu/research+study

**STRI Short Term Fellowships** (deadlines: Feb15, May 15, Aug 15 and Nov 15) thru STRI. For information, visit <u>www.stri.org</u>. Proposals in Spanish are accepted

**STRI Fellowship Program for students in Latin America** (deadlines: Feb15, May 15, Aug 15 and Nov 15). Candidates must be from universities in Latin America, particularly Central America, to carry out short-term projects and/or internships. For more information: see instructions for short-term fellowships and internships, <u>www.stri.org</u>, or contact <u>fellows@si.edu</u>. Proposals in Spanish are accepted.

**STRI** applications may be submitted either in English or in Spanish. Applications consist of one (1) printed copy, plus one electronic copy of all requested materials. The electronic copy should be submitted on a CD or by e-mail, as a single file in Word, WordPerfect or preferably PDF, including application form, proposal with budget and CV. Send hard copy of the application to STRI/Office of Academic Programs, Unit 0948, APO AA 34002-0948 from the US or Apartado 0843-03092, Balboa, Panama from Latin America. Electronic version should be sent to fellows@si.edu.

Note: For those interested in applying to the **SI Postdoctoral, Senior Postdoctoral and Predoctoral Fellowships** and the **Molecular Evolution Fellowships**, besides the copies requested in the guidelines provided by the Office of Research Training and Services, please submit one electronic copy of application form, proposal/budget and CV to <u>fellows@si.edu</u>.

Awards are based upon merit, without regard to race, color, religion, gender, national origin, age or condition of handicap of the application

# 2006 AASP Student Scholarships Recipients

Shelly Crausbay crausbay@wisc.edu, University of Wisconsin, "A new proxy for palynologists: Fossil fern sporangia improve taxonomic resolution for reconstruction of tropical montane cloud forests.



I was born and raised on the southern High Plains of Texas, where the rain is the center of most conversations. I have since become interested in how precipitation changes over the Holocene have altered vegetation. I completed a MS in Botany with a minor in Quaternary Paleoecology at the University of Minnesota under Dr. Ed Cushing. For my PhD (with Dr. Sara Hotchkiss), I am focusing on the sensitivity of tropical cloud forest vegetation to climate change. I work at the upper limit of the cloud forest on windward Haleakala on the Hawaiian island of Maui.

Tropical montane cloud forests (TMCFs) play a vital role in watershed hydrology. TMCFs are also expected to be extremely sensitive to global climate change. Paleorecords are needed to determine the degree and nature of this sensitivity. Toward this end, I am investigating TMCF response to Holocene climate variation along an elevational transect bracketing treeline in Hawai'i.

Psilate monolete fern spores dominate (up to 80%) pollen/spore assemblages in Hawaiian lake/bog sediment. Ferns and their allies are indeed abundant and highly diverse in the Hawaiian cloud forest, and are therefore important descriptors of TMCF community types. Without the perispore however, fossil fern spore taxonomic resolution is greatly limited. This limitation substantially restricts interpretations of TMCF community dynamics. To overcome this challenge, I propose to develop a new proxy for fern community composition based on fern sporangia, the spore-bearing sacs. I will analyze fern sporangia from a network of 45 surface samples and compare these data with surrounding vegetation data. This work will greatly improve the taxonomic resolution of paleoecological records from TMCFs, and may provide a promising new tool for palynologists worlwide.

Silane da Silva, (silvas@si.edu or silave@inpa.gov.br), Amazonian Research Institute. "Palynology and palynofacies analuses of Miocene sediments in the Amazonian area: Paleoecological and biostratigraphical insights.



I am Silane da Silva, PhD candidate in Ecology at INPA-Brazilian Institute of Amazonian Research and Smithsonian Tropical Research Institute. Presently, I'm interested in understanding the vegetational response to environmental changes during the Miocene in tropical areas with focus in Amazon. The presence of large wetland areas affected by episodic marine incursions could have played an important role in the plant community.

Several hypotheses have been proposed to explain the high species diversity of the tropical lowlands of northern South America, but few Miocene data are available to test if the high diversity observed is a consequence of stability or unstability throughout the geological time.

Current advances in multidisciplinaries Miocene Amazon studies combinated with a good biostratigraphycal framework promise to promote changes in our understanding of factors driving the high species richness of tropical lowlands forests over the time.

In order to value both Miocene biostratigraphical and vegetational data, together with Dr. Carlos Jaramillo and Dr. Maria Lucia Absy, we are studying palynological data from Brazilian and Colombian to compare palyno diversity indices between different epochs, characterize environmental conditions as well as improve present palynostratig-raphycal framework in the northern of the South America.

With AASP schoolarship I went to Geological Society of America-Philadelphia to present: "A quantitative biostratigraphy for the Miocene of tropical South America".

Thank you to the scholarship committee (Owen Davis, Len Eames and Barbara Whitney) for overseeing the process.

# Palynologist tops Norwegian geology Morten Smelror, a portrait

By Svein B. Manum (Oslo) and Jorunn Os Vigran (Trongheim)



Morten Smelror (born 1958) has climbed to a top position in Norwegian geology by his appointment to Director of the Geological Survey of Norway (Norges Geologiske Undersökelse, NGU) as of August 1st, 2006. He is well known to AASP members, particularly the dinocyst workers for organizing the DINO 6 Conference in Trondheim, in 1998. He has headed the geological subdivision of the NGU since 2000. NGU at present employs well over 200 persons, 60% of which are scientific personnel (Photograph to the left by Ola M. Seather).

Morten graduated in paleontology from the University of Oslo in 1985 under the direction of Barrie Dale. Morten's thesis, on Early Silurian acritarchs from the Oslo Rift system, was a pioneer work, adding acritarchs to the wide range of fossils previously known from the early Palaeozoic Oslo graben. After graduation, he returned to his home district to join the Continental Shelf Institute (IKU), in Trondheim, where his main occupation became Mesozoic dinocyst stratigraphy. His major contribution has been the study of cores obtained by the Shallow drilling program at IKU. This project aimed at coring seismically well defined, subcropping deposits from along the Norwegian coast and the Barents Sea.

In 1992, he submitted several papers on dinoflagellate stratigraphy in the Arctic, Western European, and Circum-Mediterranean regions for the Dr. philos. degree at the University of Oslo. This is an unsupervised degree previously offered by Scandinavian universities and still maintained as an option to candidates who are unable to meet the requirements of obligatory courses and supervision for the Anglo-American type of Ph.D., which is now the mainstream degree. The absence of course work is compensated by a more substantial volume of papers which have to be presented in a published format. The candidate is intensely questioned in a public debate for hours by two opponents, one of which in Morten's case, was Graham Williams from AGC in Dartmouth.

Morten's publication list includes projects like palynology of ODP cores from the northernmost Atlantic. A particularly challenging and rewarding project has been his participation in the team work that lead to the discovery of the huge sub sea impact crater "Mjölnir" in the Barents Sea (Paleo3 2006, in press). Charred organic rich sediment particles were flung over vast areas in the Late Jurassic to produce a distinctive deposit observed on Spitsbergen and in IKU's shallow cores from the Barents Sea, and initially interpreted as a sequence boundary.

Morten has headed subdivisions in IKU and NGU, and has occupied leading positions in the Faculty of Science at the University of Trondheim, where he also holds an adjunct professorship. Three years ago, he took over editorship of the Norwegian Journal of Geology and successfully introduced its digitalization. He is a member of the steering group of the International Continental Drilling Program.

Project tasks and administration filling normal working hours, most of Morten's published papers had to be produced in his spare time. However, this has not been at the expense of family activities, which he enjoys very much. He has been coaching girls' and boys' soccer teams of his local sports club, involving his own children. As a person who has accepted many demanding administrative challenges, Morten might be expected to appear busy and burdened, but to his associates, he in fact appears genial.





Morten is now facing the honorable and challenging task of leading NGU into its 150th anniversary in 2008. His geologial make-up being different from that of earlier NGU directors, he will be followed by an Argus-eyed community of Norwegian geologists.

The palynological community offers his most sincere congratulations and wholehearted wishes for his success. Morten has shown that he is a researcher at heart, and after a 6-year tenure as NGU Director, we will be delighted to welcome him back into the ranks of active palynologists.

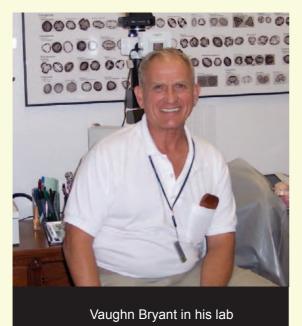
# **CSI: HOW POLLEN GOT ITS MAN**

### David Jarzen Gainesville, Florida

Al Traverse once wrote, in regards to what constitutes a palynomorph, "What my net catches is a fish" (Traverse, 1988, p. 1). In other words we as palynologists investigate a variety of palynomorphs in our daily work. What we retrieve in our palynological preparations may be considered fair game as a palynomorph. Pollen and spores are typical palynomorphs, however, we frequently also recover dinoflagellate cysts, acritarchs, scolecodonts, fungal and algal spores, nannofossils, and many other microfossil forms. The organisms or units we work with are diverse.

But so too, diversity runs through the areas we investigate. Many of us use some or many of these palynomorphs to understand and correlate stratigraphic sequences. Some of us study palynomorphs dating as far back as the Pre-Cambrian while others enjoy the search for more recent entities as found in Neogene and Holocene deposits. Still others use palynology as a tool in such diverse non-geological disciplines as archaeology, entomology, agriculture, medicine, aerobiology, and most recently in forensic studies. The science of palynology is indeed as diverse as are the people working in the field.

Vaughn Bryant is one example of a diverse and talented palynologist whom many of us know. The key to his success has been his willingness to "try" all sorts of ways to use pollen data to recover vital informa-



tion. He began as an archaeologist using pollen first to reconstruct past environments and to identify food plants used by ancient cultures, and then to identify cargoes and goods carried on sunken shipwrecks. From there an opportunity to search for pollen information in human coprolites (ancient feces) led to 30+ years of work in that area. As he mentioned to me, "one day a guy from the USDA called and said he needed someone to verify the origins of honey." Vaughn said he had never looked at a honey sample before, but decided "why not" and agreed to do it. Today he is listed as the key palynologist recommended by the National Honey Board and he currently examines over 100 honey samples a year for producers, beekeepers, and the federal government. Another call from a different USDA office led to his early work in the field of entomopalynology, publications, and finally a position for Dr. Gretchen Jones, one of his graduate students. Forensics, his most recent venture, was just another opportunity to try to use pollen to "catch crooks," as Vaughn puts it.

Vaughn has been in the business of playing Sherlock Holmes with a microscope, looking to provide evidence useful in criminal cases, for 30 years. Recently, his work has made national and international news; including, CNN and Fox News (see elsewhere in this issue and at: http://www.foxnews.com/video2/resize05. html?100906/100906\_greta\_mystery&On\_t).

So is there a future for forensic palynology in the U.S.? If so, where does one begin? That is something that AASP needs to think about in serious terms.



Dallas Midenhall



Forensic palynological studies have developed over the past 50 years, primarily in the UK, New Zealand, and most recently in Canada. Although the science has been used since the late 1950's, it was infrequently used until Dallas Mildenhall in New Zealand gained quite a bit of national interest when he used pollen to solve some criminal cases during the late 1980s. Since then, Pat Wiltshire has become the key forensic palynologist in the UK, Lynne Milne in Australia, and Vaughn Bryant in the U.S. All of these palynologists have been instrumental in bringing forensic palynology to the forefront, and in doing so have made the science of palynology better known to law enforcement agencies as well as to the general public.

The first forensic palynology paper presented at the International Palynological Congress (IPC) was in 1988 in Brisbane, Australia. Later, there was an entire symposium on forensic palynology at the 1996 IPC in Houston, and most recently another forensic symposium was included at the 2004 IPC in Granada. In 2004 the first symposium (outside an IPC meeting) dedicated to forensic palynology became part of 17th International Association of Forensic Scientists held in Wellington, New Zealand. Each of these meetings clearly demonstrated the growing interest in forensic palynology being generated around the world. The journal Forensic Science International will publish this year a special issue on forensic palynology, publishing a selection of papers including some from the New Zealand and Granada symposia.

Criminal cases, especially those involving a murder or a missing person, frequently make front page headlines. Crime scene investigators (CSI) use a plethora of tools at their disposal to identify and describe the scene of the crime, and collect clues that will aid law enforcement agencies find, arrest, and convict guilty persons. Palynology has demonstrated its potential value as an important technique useful in assisting crime scene investigations. Most recently, Lynne Milne has written an interesting and readable book, for the general public, on how forensics and pollen played key roles in catching and convicting a murderer in Queensland, Australia (See Milne, 2005, and the review of her book by Bryant, 2006).

All of those palynologists currently using pollen in forensic work have increased our awareness of this important field. However, until now most of this type of pollen work has been limited to the United Kingdom, Canada, New Zealand, and to a lesser degree, Australia. Little interest has been shown within the United States to use pollen evidence in criminal or civil cases. Bryant and Jones (in press) suggest that this lack of interest is in part due to the limited number

of specialists trained in the field, the paucity of information available to discuss and describe the techniques employed by forensic palynologists, and perhaps the prime reason is due to the absence of funding for academic centers to focus on training these specialists.

Vaughn once asked me why I don't start a forensic palynology setup at the Florida Museum of Natural History. My response was that the funding to support such a program is wanting. Although that is true, several other factors also have entered into my decision.

We, as palynologists, need to take the lead set by these specialists and others. Our job is to promote the use of pollen, spores, and other palynomorphs in all sorts of innovative ways. We can do this through our attendance at meetings, through our contacts with other professionals (botanists, allergists, lawyers, politicians, geologists, etc.) around the world, and perhaps most successfully through exposure to others via our AASP web pages. The Internet is the key to learning today. Google™ searches on the web now number in the millions each day! Serious, science-based web sites receive thousands to hundreds of thousands of "hits" per day. The audience reached is world wide, and growing daily. If our discipline is to grow and flourish, AASP needs to give serious attention to the use of its web site. Perhaps we should provide information on careers in palynology, or tips on "how pollen can be used in YOUR discipline." We must not and cannot retreat to the musty corners of our labs or hide behind our desks and say, "all we want to do is to be left alone so we can do our own research!"

To survive as a discipline and forge new markets and jobs for the next generation of palynologists we must "market and advertise" our goods just like any other company in competition for customers!

We are palynologists and we can cover the world through the stratigraphic column, we can understand the present and the past, we can investigate modern pollen rain, agricultural practices, archaeology, and now the world of crime scene investigations. Palynology has grown over the years to incorporate many new facets requiring new talents. We are now in need of growing once again. We need to look to the future, to use what we have studied to demonstrate the need and utility of our science. If we do not, palynology will soon join the fate of our friends the dinosaurs!

**References Cited** 

Bryant, V.M., Jr. 2006. (Book review). "A Grain of Truth: how pollen brought a murderer to justice." AASP Newsletter 39(3):10-11.

Bryant, V.M., Jr. and Jones, G.D. (in press). Forensic palynology: Current status of a rarely used technique in the United States of America. Forensic Science International.

Milne, L. 2005. A Grain of Truth: How Pollen Brought a Murderer to Justice. Reed New Holland (New Holland Publishers [Australia] Pty Ltd. 175 pp.

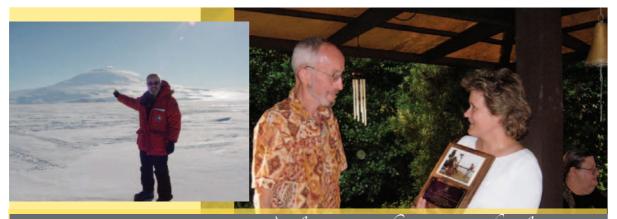
Traverse, Al. 1988. Paleopalynology. Unwin Hyman, Boston, 600 pp.



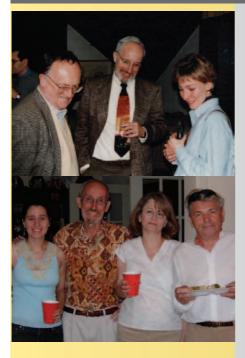
# Palynology News Flash!!!

Attached is a photo of the famous Gubbio section used by Alvarez et al. as evidence for a bolide impact at the KT boundary. I took the photo a few months ago. The large amounts of iridium seem to have caused gigantism in some of the surviving dinocysts.

Martin Head



AASP offers its most sincere condolences to John Wrenn's family. AASP is forever grateful for John's life-long contributions to palynology.



John Wrenn at Mont Erebus, Antarctica. John and Laurie Anderson, chair of the Geology and Geophysics dpt. at LSU. Maurice Streel, John and Martine Hardy at UCL, Belgium. John between his wonderful wife (Allison) and daugther (Maggie), and advisor, George Hart.



John Wrenn retired this past August from the Louisiana State University, after 13 years of distinguished service as the Director of its Center for Excellence in Palynology. Unfortunately, John did not have the time to enjoy this new part of his life. He passed away Tuesday November 28 in Baton Rouge, Louisiana.

Before joining the LSU faculty, John had worked with Amoco Production Company (1981-1993), first as a Research Scientist and then as a Staff Geologist/Paleontologist, with far-reaching responsibilities. John held a B.S. and an M.S. from Northern Illinois University and a Ph.D. from LSU. He had published numerous articles on marine palynomorphs. and had edited or co-edited several AASP and other conference proceedings, including The Pliocene, Time of Change (1999) and Neogene and Quaternary Dinoflagellate Cysts and Acritarchs (1992). His professional awards and honors included the Antarctic Service Medal of the United States of America, National Science Foundation (2000); Palynology Professorship, LSU College of Basic Sciences (2002); LSU Athletic Foundation Undergraduate Teaching Award (2002); and Division of Environmental Geosciences Research Award, American Association of Petroleum Geologists (2003).

In the middle of a very busy career and family life, John had found time to provide outstanding service to AASP. He was the chairman or an active member of many committees through the years, received the society's Distinguished Service Award in 1998, and served as the President in 1991-92. We will miss him tremendously.



# Hurricane Katrina and the role of Holocene environmental catastrophes in human history

## Reflections following the IGCP field trip

Sophie Warny and Suzanne Leroy







Last year, I was contacted at the Museum by Dr. Suzanne Leroy, a fellow Belgian palynologist and professor at the Brunel University, West London, UK. Suzanne is the coordinator of one of the UNESCO IGCP projects (Project 490). As part of this project, she needed to organize the 2006 annual meeting on the role of Holocene environmental catastrophes. After the worldwide attention that Hurricane Katrina gave to our part of the world, it became obvious that hosting the meeting in an area hit with such a major human and geological tragedy was well fitted. Suzanne introduced me to palynology in 1990 and I was happy to help bring her group to Louisiana. After many emails and conversations, we got the green light to host the IGCP meeting in collaboration with the 2006 GCAGS conference held in Lafavette. This could not have happened without Mary Broussard and Mike Cornyn, both with Stone Energy, and the rest of their team. So I want to take the opportunity to thank both of them for their tremendous help and fantastic organizational skills.

For those unfamiliar with this program, the IGCP is the International Geological Correlation Programme. It is a joint endeavor of UNESCO (United Nations Educational, Scientific and Cultural Organization) and IUGS (International Union of Geological Sciences). It was launched in 1972 to facilitate cooperation among geoscientists across frontiers and boundaries. Its objective is to bring scientists from all over the world together and enhance interaction through joint research work, meetings, and workshops.

Project 490 focuses on the inter-disciplinary investigation of Holocene geological catastrophes, which are of importance for civilizations and ecosystems. This project is concerned with environmental events since the beginning of the Holocene (the last 11,500 calendar years) excluding therefore the influence of the glacial-interglacial cycles. The project examines how quickly ecosystems and civilizations are able to recover from catastrophic events. With the growing recognition that major natural events can have abrupt global impacts, this project is a timely opportunity to assess the sensitivity of modern society to extreme natural threats (www.mun.ca/canqua/igcp490/).



family's house near the London ave. canal in the days following Hurricane Katrina, 2-4) Dr. Nelson guiding the trip. This page: 1) Francesca Budillon (Italy) holding a cross section showing the sand deposits, 2-3) sandy "Katrina outcrop" at London avenue canal with Suzanne and I as scale. As part of the conference, we needed to organize a field trip that would allow the visiting scientists to better understand what happened on August 29, 2005 when Hurricane Katrina made landfall, and why levee breaches occurred from a geological point of view. Dr. Steve Nelson (Tulane University, Dept. of Geological Sciences), who has just published an article on this subject in GSA Today (Nelson and Leclair, September 2006), agreed to lead the field trip.

Dr. Nelson brought us to visit several "Katrina outcrops" and shared geological cross sections of areas along the levees, helping us understand what were the main causes of levee failure. If some of the levees in New Orleans were indeed overtopped because they were not high enough to offer protection for a category-3 hurricane, geological evidences tend to prove that some failures were linked to the poor integration of known sedimentological data into the levee design. Evidence we observed showed that some of the levees were not armored, therefore lacking the protection against erosion from overflowing water. It was reassuring to see that ongoing wall repairs were done using "T" shaped walls, therefore offering better protection in the future. Near the lakefront, "Katrina peat samples" indicated that some of the floodwalls were probably anchored in or close to peat deposit, a very unstable sediment that was originally deposited in swampy forest existing in the area in a notso distant past. But one of the most disturbing sites was the southern breach of the London Ave. Canal. There, approximately 26,380 m2 of sediments were deposited in the days that followed Hurricane Katrina, which means a deposition rate ranging from 0.3 m to 1.8 m in two days (Nelson and Leclair, 2006). Despite this unusually high sedimentation rate and the quantity of sand deposited. no sand was observed in the breached levees. On this basis, and on the basis of the deposit composition (finegrained sand, shells, shell fragments), Nelson and Leclair postulated that these sands originated from the Pine Island Trend beach deposits. This is a very disturbing fact because these sands, that were deposited about 4,000 years ago as sea-level rose (Coleman et al., 1998), can be found in the subsurface beneath all of the drainage canals. This raises significant concerns about the future stability of the New Orleans drainage canal levee system (Nelson and Leclair, 2006).

This reminds us that the faith of the historical Crescent City is in the hands of those who work for the country, from our politicians to the engineers. Our hope is that this tragedy will help foster discussions between policy makers and scientists, and that the new levee-system design will be based on risk evaluation and not only on cost-effective models.



Palynology was an integral part of the GCAGS/IGCP meeting. Professor Kam Biu Liu (LSU) and Professor Suzanne Leroy contributed to the sessions, while Dr. Sophie Warny set up one of the two fieldtrips. Although pollen is not a proxy often used to reconstruct past hurricanes, it could contribute in many ways, especially when used in combination with other microfossils such as dinoflagellate cysts, green algae and cyanobacteria. Pollen and spores are of course indicators of regional vegetation and therefore, may reflect a change of vegetation cover linked to a change in salinity, induced by massive flooding associated with storm surge. The sediment deposited by large storms themselves are more detrital (dilution of the palynomorphs and lower concentration) and contain more marine elements such as dinoflagellate cysts. It is therefore not surprising that the field of paleotempestology is a field more and more used in areas such as the U.S. Gulf Coast (i.e., Louisiana, Mississippi, and Florida) to study past hurricanes and other tropical activities. For instance, Dr. Liu studies sediments in the Gulf of Mexico's northern coast to better constrain past hurricanes. Results from his palynological research on lake and marshes deposits suggest a 300 years return period between hurricanes of Category 4 or 5.



**Picture legend** This page: 1) Ongoing levee reconstruction, 2) Signs covering the streets of New Orleans, sad reminders of the tragedy, 3) Hurricane-damaged vegetation in the Wax lake region, in South Louisiana.

# Phytoliths: A Comprehensive Guide for Archaeologists and Paleoecologists

## **Dolores R. Piperno**

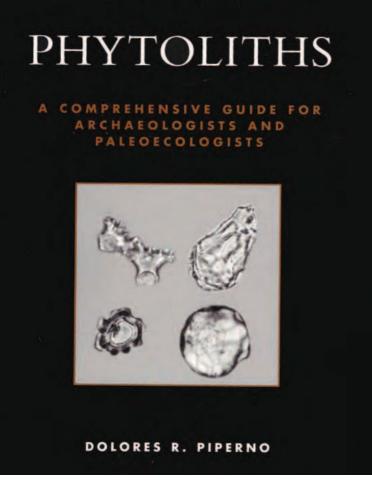
Altamira Press (Division of Rowman & Littlefield Publishing Group, Inc.), 248 pp., illus. (B&W), tables, biblio, index, ISBN: 0-7591-0385-2. (\$59.95) (paperback) 2006.

The first thing that impressed me about Dr. Piperno's new book on phytoliths was its beefy size (8 1/2 x 11) and its reasonable cost. Perhaps not everyone is concerned with the cost of books these days because it costs more to fill our cars with gasoline than it does to buy a good book! Nevertheless, I am concerned about book prices and I want to compliment the author and publisher for providing this important reference book at a price that most students and professionals can afford.

So why should a palynologist want a copy of this book, or why should we even be concerned with phytoliths? One reason is the similarity between the two disciplines. In many respects, the history of phytolith research mirrors the development of palynology. First, both disciplines focus on the study of tiny, microscopic elements that are morphologically unique to the family, genus, or species level and both are produced in large numbers by plants. Second, these microscopic traces of the parent plants often remain preserved in sediments for thousands or millions of years. Third, both types of elements can be recovered from ancient sediments for analysis using a variety of extraction procedures. Fourth, the potential scientific value of both disciplines was first noted during the 1830s by the same German scientist, Carl Ehrenberg, and later both disciplines followed a similar developmental history. Fifth, both fossil pollen and phytoliths are important for their interpretive value in a wide range of disciplines ranging from archaeology to geology and from paleoecology to forensics.

Most of the initial taxonomic studies on both pollen and phytoliths were conducted between the middle 1800s and early 1900s. Then, in 1916, Lennart von Post issued in a new era for palynology when he reported that the statistical study of fossil pollen could be used to identify and determine cycles of past vegetational change, and hopefully date sediments to time periods. Regrettably, it would be four decades later before this same type of applications would be recognized for phytolith data. One other factor that spurred the faster development of palynology during the last half of the twentieth century was its recognized value by industries as a useful technique in the search for petroleum resources.

The main body of the book is divided into eight chapters, each covering a new and important topic. For those not too familiar with the development or anatomy of plants, the first chapter will be quite helpful because it thoroughly discusses how phytoliths are formed, where they occur in plants, their chemical characteristics, how they are dispersed, what factors ensure preservation, and which major plant families have phytoliths and which do not. The second chapter covers the many different morphological types of phytoliths including the characteristics of ones found in monocots and how those differ from ones found in dicots or gymnosperms. The third chapter is one of the more important ones because it provides detailed information about many phytolith types that are found in cultigens. The chapter then discusses how those types differ from the phytoliths produced by related taxa, which are wild forms rather than cultigens. The reason this chapter is so important is because during the past several decades the discovery of key phytolith taxa in ancient archaeological soils in South and Central America have provided archaeologists with the best confirmed evidence for the beginning of plant domestication in the New World. Previous to these recent phytolith discoveries, most believed that it was the early pollen and corn cob records from archaeological deposits in Central Mexico that held the key to the origin of farming in the New World. Likewise, the search for the origins of when Polynesians first occupied many of the islands in the Pacific is becoming much better documented as a result of the discoveries of cultigen phytoliths and starch grains in early archaeological sites. Unfortunately, earlier searches for fossil pollen or other types of plant remains from many of those same sites revealed no useable data due to the high levels of organic oxidation in the soils.



Chapters 4 and 5 are important because they explore techniques for sampling and recovering phytolith records from field locations such as archaeological soils, geologic deposits, lakes, swamps, and bogs, and then discuss how to extract essential phytolith data in the lab. Chapter 4 covers field sampling and the importance of collecting modern control samples from surface soils. It also stresses the importance of understanding the complexity of the local vegetation cover and the types of phytoliths they produce. The second of these two chapters covers various methods used in extracting phytoliths from a variety of matrixes, including the calculus on teeth. Chapter 5 also examines techniques for recovering starch granules from fresh sources as well as from a variety of sediment types and it suggests ways to collect sufficient numbers of phytoliths (containing trapped carbon particles) needed for precise AMS radiocarbon dates and isotope studies. The chapter ends with tips on staining phytoliths, the best types of mounting media to use, microscope photography, and the proper ways to ensure for the long-term preservation of samples.

Chapter 6 is another one of the critical chapters because it focuses on the importance of making proper identifications and then it turns to a discussion on how to interpret phytolith data. In the past some phytolith studies have presented the data in terms

of ubiquity. Others have tried different ways to quantify the numbers and types of phytoliths found in samples. Some have tried to find ways to determine phytolith concentration values similar to the techniques used in pollen analyses. Still others have focused on trace element and isotope variations in phytoliths. The chapter concludes with an examination of some of the ways to statistically report phytolith results in ways that may best reflect past vegetational and environmental conditions.

Grasses are prolific produces of phytoliths. Thus, early phytolith studies of prairie soils and Holocene deposits were used mainly by botanists, soil scientists, agriculturalists, and ecologists to determine the types and expanses of early grasslands. Slowly other types of phytolith morphological studies emerged to complement those already known for many types of grasses. It was this emphasis on learning more about grass phytoliths that led to its first application in archaeology. Chapter 7 is devoted to the importance of phytolith research in the field of archaeology and chronicles a history of its use. As early as 1900, European researchers applied their knowledge of phytoliths to the search for wheat, barley, and millet agriculture and to trace the spread of early farming at archaeological sites in Europe and Turkey. Later, these same techniques were applied to the excavations of early farming settlements discovered in the Middle East. More importantly, detailed studies of ancient and modern maize (Zea mays) phytoliths show that they too are distinctive and can be used as key indicators to trace the earliest domestication and spread of maize farming throughout the New World. Chapter 7 also focuses on the many other cultural clues that can be revealed from phytolith evidence at archaeological sites. Recent discoveries of phytolith scratches on human teeth and on flint artifacts provide clues to the types of plants being harvested and the diets eaten. Some ancient stone, bone, and metal cutting tools contain the dried remains of plant materials still stuck to their cutting surfaces. Careful studies of those remains have revealed trapped phytoliths from the plant materials being cut. Phytoliths recovered from archaeological sites have also played a key role in identifying the source materials used for making adobe bricks, the types of material used to temper pottery, the plant sources used for caulking the seams of ancient ships, the types of fibers used for

making prehistoric twine and ropes, and phytoliths found in ancient human coprolites (feces) have revealed important information about food sources in early human diets.

The final chapter examines the importance of phytolith research as a tool in the search for paleoenvironmental information. Although fossil pollen has played a significant historical role in reconstructing ancient environments and vegetational patterns, pollen is destroyed in some types of sediments by oxidation and/or microbial activity. Fortunately, phytoliths are often preserved in sediments that prove hostile for fossil pollen preservation. Thus, in those regions the preserved phytolith chronology has often provided our only glimpse of the paleoenvironmental conditions and vegetational changes. Better still, in some regions the same sediment cores are now being used to search for both fossil pollen and phytoliths. Those types of studies are now providing more detailed information about past vegetations because, for example, grass pollen all looks the same but grass phytoliths can be assigned to a number of key groups each of which is ecologically sensitive. Chapter 8 concludes with a look to the future and offers speculations about the potential uses of phytolith research in the decades to come. One potential area is the discovery that phytoliths occur throughout the Tertiary in many types of sediments yet in the past geologists have been slow to seize upon the potential of using phytoliths in their analyses. The use of pollen and phytoliths as forensic tools is relatively new, but has great potential for the future. The recent discovery that aluminum ions in phytoliths can be used to distinguish between forested and herbaceous vegetations has great potential for future use as does the study of oxygen and hydrogen isotope signatures in phytoliths. Finally, many phytoliths trap tiny particles of carbon inside of them as they form. Perhaps DNA studies of these trapped carbon particles will help us unravel clues about plant evolution and about the paleoenvironments of the past. So why should I want to own a copy of this book? The bottom line is that this is an amazing book and it is well worth the cost. The original and shorter version of this book was first published in 1988, and was as least as expensive as this second, longer, revised edition. That was 18 years ago, so in today's dollars the current edition is a bargain. For any member of the palynology discipline who plans to interact and work with archaeologists, or who wants his/her research to be recognized and used by paleoethnobotanists, this book is an essential purchase.

If I have not convinced you to buy the book yet, then buy it for the beautiful photographs and the key to major phytolith types listed in the book's appendix. This is one of the very few available sources that illustrate many different phytolith types.

Vaughn M. Bryant, Jr. Texas A&M University

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Please consider renewing your membership if it is expired, and talk to your colleagues and friends about the advantages of becoming an AASP members. It is a great way to stay in touch with the world of palynology and help us keep supporting students through scholarships. **Thank you for supporting AASP!** 

#### To renew, contact Thomas Demchuk at: Thomas.D.Demchuk@conocophillips.com or go online at: http://www.palynology.org/content/memapp.html

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#### **Recent AASP-Member Publications**

The recent Membership Survey (you did participate didn't you?) indicated that over 66% of responding members wanted to see lists of AASP member publications. The first such list is printed below. So that we can include your work, please send your latest publication (at any time) to Sarah de la Rue, Chair of the Ad-hoc Membership Committee, sdelarue@geol. Isu.edu, for inclusion in our new section of the AASP newsletter! If you would like to be contacted be sure to include your email address. Let's see if we can't generate and increase inter-membership communications and perhaps forge some new collaborations!

Bart, P.J., Hillenbrand, C.D., Ehrmann, W., Iwai, M., Winter, D., and Warny, S.A., In Press. Are Antarctic Peninsula Ice Sheet grounding events manifest in sedimentary cycles on the adjacent continental rise?. Marine Geology. swarny@lsu.edu

Bryant, V.M., and Dean, G.W., 2006. Archaeological coprolite science: The legacy of Eric O. Callen (1912-1970). Palaeogeography, Palaeoclimatology, Palaeoecology 237: 51-66. vbryant@neo.tamu. edu

Bryant, V.M., and Jones, G.D., 2006. Forensic palynology: Current status of a rarely used technique in the United States of America. Forensic Science International 163: 183-197. vbryant@neo.tamu.edu

Crame, J.A., Pirrie, D., and Riding, J.B., 2006. Mid-Cretaceous stratigraphy of the James Ross Basin, Antarctica. In: Francis, J.E., Pirrie, D., and Crame, J.A. (eds.). Cretaceous-Tertiary high-latitude palaeoenvironments, James Ross Basin, Antarctica. Geological Society, London, Special Publication, No. 258, pp, 7-19. jbri@bgs.ac.uk

de la Rue, S.R., Rowe, H.D., and Rimmer, S.M., In Press. Palynological and bulk geochemical constraints on the paleoceanographic conditions across the Frasnian-Famennian boundary, New Albany Shale, Indiana. International Journal of Coal Geology. sdelarue@geol.lsu.edu

Edwards, L.E., Barron, J.A., Bukry, D., Bybell, L.M., Cronin, T.M., Poag, C.Y., Weems, R.E., and Wingard, G.L., 2005. Chapter H. Paleontology of the Upper Eocene to Quaternary Postimpact Section in the USGS- NASA Langley Core, Hampton, Virginia. In: Horton, Jr., J.W., Powars, D.S., and Gohn, G.S. (eds.), Studies of the Chesapeake Bay Impact Structure --The USGS-NASA Langley Corehole, Hampton, Virginia, and Related Coreholes and Geophysical Surveys. U.S. Geological Survey Professional Paper 1688. All chapters are downloadable from http://pubs.usgs.gov/pp/2005/1688/ak/. leedward@usgs.gov

Egger, A., Eriksson, S., Franks S., Hall, M., Marlino, M., Mogk, D. Ruzek, M., Scotchmoor, J., and Warny, S., 2006. Geoscience Education and Public Outreach Network (GEPON). Report of a workshop held at UNAVCO, Boulder, Colorado, March 22-24, 2006. Marlino, M. and Scotchmoor, J. (eds). Available online at: http://www.gepon.org/reportPrintWS2.html. swarny@lsu.edu

Fauquette, S., Suc, J.-P., Bertini, A., Popescu, S.-M., L., Warny, S., Bachiri Taoufiq, N., Perez Villa, M.-J., Ferrier, J., Chikhi, H., Subally, D., and Clauzon, G., 2006. How much the climate forced the Messinian Salinity Crisis? Quantified climatic conditions from pollen records in the western Mediterranean region. Palaeogeography, Palaeoclimatology, Palaeoecology 238: 281-301. swarny@lsu.edu

Frederiksen, N.O., Edwards, L.E., Self-Trail, J.M., Bybell, L.M., and Cronin, T.M., 2005. Chapter D. Paleontology of the Impact-Modified and Impact-Generated Sediments in the USGS-NASA Langley Core, Hampton, Virginia. In: Horton, Jr., J.W., Powars, D.S., and Gohn, G.S. (eds.), Studies of the

Chesapeake Bay Impact Structure --The USGS-NASA Langley Corehole, Hampton, Virginia, and Related Coreholes and Geophysical Surveys. U.S. Geological Survey Professional Paper 1688. All chapters are downloadable from http://pubs.usgs.gov/pp/2005/1688/ak/. nfrederi@usgs.gov and leedward@usgs.gov

Keleman, S.R., Afeworki, M., Gorbaty, M.L., Kwiatek, P.J., Sansone, M., Walters, C.C., and Cohen, A.D., 2006. Thermal transformations of nitrogen and sulfur forms in peat related to coalification. Energy & Fuels 20: 635-652. cohen@geol.sc.edu

Kelso, G.K., and Solomon, A.M., 2006. Applying modern analogs to understand the pollen content of coprolites. Palaeogeography, Palaeoclimatology, Palaeoecology 237: 80-91. gerald.kelso@az.usda. gov

Kelso, G.K., Dimmick, F.R., Dimmick, D.H., and Largy, T.B., 2006. An ethnopalynological test of taskspecific area analysis: Bay View Stable, Cataumet, Massachusetts. Journal of Archaeological Science 33: 953-960. gerald.kelso@az.usda.gov

Kloosterboer-van Hoeve, M.L., Steenbrink, J., Visscher, H., and Brinkhuis, H., 2006. Millenial-scale climatic cycles in the early Pliocene pollen record of Ptolemais, northern Greece. Palaeogeography, Palaeoclimatology, Palaeoecology 229: 321-334. h.brinkhuis@bio.uu.nl

Leorri, E., Martin, R., and McLaughlin, P., 2006. Holocene environmental and parasequence development of the St. Jones Estuary, Delaware (USA): Foraminiferal proxies of natural climatic and anthropogenic change. Palaeogeography, Palaeoclimatology, Palaeoecology 241: 590-607. ppmclau@udel. edu

Li, J., Wicander, R., Yan, K., and Zhu H., 2006. An Upper Ordovician acritarch and prasinophyte assemblage from Dawangou, Xinjiang, northwestern China: Biostratigraphic and paleogeographic implications. Review of Palaeobotany and Palynology 139: 97-128. Reed.Wicander@cmich.edu

Mathewes, R.W., 2006. Forensic palynology in Canada: An overview with emphasis on archaeology and anthropology. Forensic Science International 163: 198-203. mathewes@sfu.ca

Monroe, J.S., and Wicander, R. 2006. The Changing Earth: Exploring Geology and Evolution, 4th ed. Brooks/Cole Publishing Company, Pacific Grove, California, 736 pp. Reed.Wicander@cmich.edu

Monteil, E., 2005. Morphostratigraphy: a new non-taxonomic biostratigraphical technique applied to a turbiditic deep-sea reservoir (Paleocene Maureen Formation, Fleming Field, UKCS). In: Powell, A.J. & Riding, J.B. (eds). Recent Developments in Applied Biostratigraphy. The Micropalaeontological Society Special Publications. The Geological Society, London. Eric.Monteil@ga.gov.au

Monteil, E. (coord.), 2006. Australian Mesozoic and Cenozoic Palynology Zonations - updated to the 2004 Geologic Time Scale. Geoscience Australia Record 2006/23. (CD-ROM, ISBN 1 921 236 05 1). Eric.Monteil@ga.gov.au

Mudie, P.J., and McCarthy, F.M.G., 2006. Marine palynology: potentials for onshore-offshore correlation of Pleistocent-Holocene records. Transactions of the Royal Society of South Africa 61: 139-157. mudiep@ns.sympatico.ca and francine@brocku.ca

Playford, G., and Wicander, R., 2006. Organic-walled microphytoplankton of the Sylvan Shale (Richmondian: Upper Ordovician), Arbuckle Mountains, Southern Oklahoma, U.S.A. Oklahoma Geological Survey Bulletin 148: 1-116. geoff@earth.uq.edu.auReed.Wicander@cmich.edu

Powell, A.J., and Riding, J.B. (eds), 2005. Recent Developments in Applied Biostratigraphy. The Micropalaeontological Society, Special Publications. The Geological Society, London, 245 pp. jamespowell@bluewin.ch and jbri@bgs.ac.uk

Pross, J., Pletsch, T., Shillington, D.J., Ligouis, B., Schellenberg, F., and Kus, J., In Press. Thermal alteration of terrestrial palynomorphs in mid-Cretaceous organic-rich mudstones intruded by an igneous sill (Newfoundland Margin, ODP Hole 1276A). International Journal of Coal Geology. joerg.pross@em. uni-frankfurt.de

Rawlins, B.G., Kemp, S.J., Hodgkinson, E.H., Riding, J.B., Vane, C.H., Poulton, C., and Freeborough, K., 2006. Potential and pitfalls in establishing the provenance of earth-related samples in forensic investigations. Journal of Forensic Sciences 51: 832-845. jbri@bgs.ac.uk

Riding, J.B., Wilkinson, I.P., Jones, L.D., and Freeborough, K., 2006. The occurrence of dinoflagellate cysts in calcareous/siliceous microfossil preparations from the Eocene of southeast England. Journal of Micropalaeontology 25: 35-36. jbri@bgs.ac.uk

Sorrel, P., Popescu, S.M., Head, M.J., Suc, J.P., Klotz, S., and Oberhaensli, H., 2006. Hydrographic development of the Aral Sea during the last 2000 years based on a quantitative analysis of dinoflagellate cysts. Palaeogeography, Palaeoclimatology, Palaeoecology 234: 304-327. mhead@brocku.ca

Stasiuk, L.D., Sweet, Art R., and Issler, D.R., 2006. Reconstruction of burial history of eroded Mesozoic strata using kimberlite shale xenoliths, volcaniclastic and crater facies, Northwest Territories, Canada. International Journal of Coal Geology 65: 129-145. asweet@nrcan.gc.ca

Tedford, R., and Warny, S., 2006. Investigating the cake-layer Earth and its fossil record. National Science Teacher Association, December, pp. 40-44. rtedfo1@lsu.edu and swarny@lsu.edu

# **ATTENTION STUDENTS:**

AASP Student Scholarships are awarded annually to support studies in palynology. These comprise two scholarships each for \$1500, and a third award of \$1500 may be given as The Cranwell Award. Ordinarily, the scholarships will be offered to beginning graduate students, but advanced undergraduates may also apply. The qualification of the student, the originality and imagination evident in the proposed project, and the likelihood of significant contribution to the science of palynology are factors that will be weighed in the selection of award winners. Previous winners of this award are eligible only if they are pursuing a different degree than the one they were pursuing when they received the previous award. AASP Scholarships are available to all students of palynology in all countries and these students need not be members of AASP. Application forms are available from the Chairman of the AASP Awards Committee (Martin Farley, mbfarley@hal-pc.org), or can be downloaded from our website at http://www.palynology.org/content/scholar.html. Scholarship applications must be postmarked no later than March 31. Awards at each Annual Meeting: Best Student Paper Award, and Best Poster Award.

# New Zealand fossil spores and pollen: an illustrated catalogue

J.I. Raine, D.C. Mildenhall, E.M. Kennedy (2006). New Zealand fossil spores and pollen: an illustrated catalogue. 2nd edition. GNS Science miscellaneous series no. 4. http://www.gns.cri.nz/what/earthhist/ fossils/spore\_pollen/catalog/index.htm ISBN 0478099541, ISSN 1177-2441.



This web-based catalogue has been compiled as a reference tool for palynologists engaged in biostratigraphic work in New Zealand pre-Pleistocene strata, and was developed from an earlier check-list compiled for the Species 2000 project. It presents an entry for each of c. 830 species of fossil spore or pollen from the New Zealand region that are recorded in the scientific literature, and includes only published records to June 2006. The second edition contains minor additions and corrections to the first version which was put on-line in 2005. Some records of extant taxa from pre-Pleistocene strata have been omitted if they have not also been assigned a form-species name. We intend to include these taxa in a later edition of the catalogue. Our choice of a taxon name for the primary listing has been guided mainly by current usage, and no new combinations have been made.

In the index page, taxa are listed according to the artificial morphological classification of Potonié and others (as arranged by Dennis Burger, 1994), to which there is a simple hypertext key. For each taxon, there is a link to a separate species page with a detailed synonymy listing significant nomenclatural changes, all published records from New Zealand strata, important illustrated records from elsewhere, and records which are regarded as misidentifications. The species pages are comprehensively illustrated with previously published images of New Zealand specimens, where possible reproduced from original photographs. Brief notes on nomenclatural problems, NZ stratigraphic range, and natural phylogenetic relationships are also included. Each species page also contains a very brief morphological description, which at present reflects only the major classification categories. Spores and pollen united into multiple units (dyads, tetrads, polyads, etc.) are treated according to the morphology of a single component grain. The full bibliography is organised as a separate web page.

The very extensive synonymy information is largely the work of Dallas Mildenhall; Liz Kennedy helped with editing, especially of images; and Ian Raine assembled the database and hypertext system. The catalogue was produced using DELTA system software (Dallwitz 1980; Dallwitz et al. 1993). At present, as well as a web browser's own search tool, Google can be used to search the website for taxa, author names, basic morphological categories, natural affinity, etc. After elaboration of the morphological coding we intend to include an interactive identification package, using the DELTA-based program INTKEY.

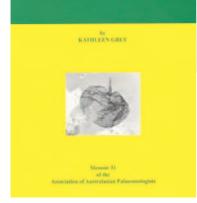
Burger, D. 1994: Guide to genera file of fossil spores and pollen of Jansonius & Hills (1976). Australian Geological Survey Organisation record 1994/46. 36 p.

Dallwitz, M. J. 1980. A general system for coding taxonomic descriptions. Taxon 29: 41-6. Dallwitz, M. J., Paine, T. A., and Zurcher, E. J. 1993 onwards. User's guide to the DELTA system: a general system for processing taxonomic descriptions. 4th edition. http://delta-intkey.com

#### Note:

The catalogue is also available in CD version from: Publications Officer, GNS Science, P.O. Box 30368 Lower Hutt, New Zealand. Price for purchasers outside NZ is US\$100, including postage and packing (NZ\$100 for NZ-based purchasers). Order form available at http://www.gns.cri.nz/store/publications/order.html. The CD version is the same as that on the web, but the Google search only connects to the on-line pages.

#### Ediacaran palynology of Australia



# Ediacaran palynology of Australia by Kathleen Grey.

©2005. Memoir of the Association of Australasian Palaeontologists, volume 31, 439 pages. ISBN 0-949466-29-8; ISSN 0810-8889.

Probably the best way to begin this review is to recommend you read the "News from Australia" column in the September, 2005 issue of the AASP Newsletter (volume 38, #3, p. 11-12). For those of you who don't know Kath Grey, Eric Monteil provides a wonderful and delightful account of his first meeting with her. Having had the pleasure of knowing her for many years, his account perfectly captures her personality. Eric also gives a brief summary of her opus magnum, which is the focus of this review.

For those of you who aren't Precambrian acritarch workers, don't make the mistake of thinking this volume has nothing to offer you because you would be wrong. Despite its price, this is a gold-mine of information, not only about Proterozoic palynology and biostratigraphy, but also an excellent review of acritarchs, green algae, sample preparation techniques, taphonomy, and more. Because there is so much to cover, the best way to approach this review is to give an overview of its contents, followed by some general observations. However, a word of warning is in order. This is not a volume that you can read in one, or even several sittings. It contains so much useful information that it is best to read it in stages. For the specialist, there is much to savor about Kath's comprehensive coverage of Ediacaran palynology, and for the palynologist working in the Phanerozoic, an excellent introduction to the palynomorphs that preceded their Paleozoic descendents.

This volume is based on microfossils recovered from more than 1000 samples from more than 30 continuously cored drillholes and 13 sections in the Adelaide Rift Complex and Centralian Superbasin (comprised of the Officer, Amadeus, and Georgina basins). Seventy-one palynomorph taxa are recognized and recorded, 44 of which are specifically identified, with the remaining 27 taxa placed either in open nomenclature or tentatively assigned to known taxa. Sixty-four taxa are placed in the Group Acritarcha, whereas the other seven palynomorphs are filaments and incertae sedis. Twenty-six new acritarch species and six new acritarch genera are described, and seven new combinations are made.

As stated in the Introduction of this tome (p. 2), "the main aim of the study presented here was to develop an acritarch biostratigraphy that would improve correlation of Ediacaran (latest Neoproterozoic) successions throughout Australia ...... The purpose of the study was three-fold: to provide a biostratigraphic basis for international deliberations establishing formal subdivisions of the Neoproterozoic; to improve understanding of stratigraphic and tectonic relationships of Australian Neoproterozoic basins to aid hydrocarbon and mineral exploration; and to examine significant biotic changes at a time of intense evolutionary change." This initial statement is followed by brief reference to the ages of the Proterozoic glaciation events, and a figure showing the subdivisions of the Neoproterozoic Era including the newly ratified Ediacaran System and Period (late Neoproterozoic). This is followed by a Background to Current Study section. In this section Table 2 shows the global records of Ediacaran acanthomorph (spiny) acritarchs and Table 3 is an excellent summary of terminal Proterozoic microfossil and palynomorph assemblages in which the age, region, formation, reference, and type of fossil(s) reported are given.

A very complete and extensive historical review of previous Proterozoic palynological studies follows (p. 15-27), with the reminder that for years much research into Precambrian paleontology was greeted with a certain degree of skepticism. A very nice summary of the main events in the historical development of Precambrian paleontology is provided in Table 5. As noted by Grey, both stratigraphic and paleobiological nomenclature pertaining to her study is complex and sometimes controversial. Thus, in the pages that follow, she discusses the stratigraphic terminology used in this study as well as giving a brief overview of what palynology is and what acritarchs are purported to be, as well as what citations such as '?' and 'cf.' in relation to fossil nomenclature mean.

The section on Materials and Methods was particularly interesting in that she discusses how refinements in preparation techniques have resulted in recovery of greater number of palynomorphs, particularly the larger Neoproterozoic acanthomorph acritarchs. Grey mentions that previous publications reported only low to moderate yields using conventional techniques, but by using the modified methods she describes, far greater numbers of specimens can be recovered. Such difference in yields, particularly when it affects diversity has great consequences in interpretation of the preserved fossil assemblage, not only for Neoproterozoic studies, but for those from the Phanerozoic as well.

A section on the Geological Setting of the Australian Neoproterozoic is next, followed by an extended section on the Ediacaran of the Adelaide Rift Complex in which the Neoproterozoic succession of this area is discussed including all of the stratigraphic units studied (p. 38-56). This is followed by a discussion of the Ediacaran stratigraphy and all of the stratigraphic units studied in the Officer Basin, which is subdivided into the Eastern and Western Officer Basin and spans the Western Australian and South Australian border (p. 56-106). In this section, lithostratigraphy, paleoenvironment, palynology, paleontology, and isotope chemostratigraphy are covered. Lastly, the Ediacaran of the Georgina Basin is discussed.

Classification and Morphology are taken up beginning on p. 114. Because the majority of organic-walled microfossils from the Australian Ediacaran assemblages are acritarchs, Grey presents a very nice overview of this enigmatic group of organisms that Proterozoic and Paleozoic workers alike will find useful. In addition, she rightly points out (p. 115) that "one problem with Neoproterozoic palynological studies is that some taxa are classified phylogenetically, others are treated phenetically, and some cannot be treated either way." A discussion on morphology of organic-walled microfossils that is nicely illustrated with line drawings follows. Problems with taxonomy of Neoproterozoic acid-insoluble microfossils are discussed, including a very insightful observation about the effect of taphonomic alteration and its effect on taxonomy. Paleoenvironmental controls and its relationship to biostratigraphy is covered, followed by an extended discussion on abundance, species diversity and dominance, and relative abundance of species. As mentioned before, the thrust of this section relates to Neoproterozoic palynomorphs, but much of it can also be applied to Phanerozoic studies and is well worth a careful reading.

The global Proterozoic acritarch record is summarized on p. 129-136, followed by a discussion on the paleobiology of the Ediacaran assemblages. I especially enjoyed and recommend the discussion and summary of the biological affinities of the various organic-walled microfossils covered in this section. This section in particular should be required reading for all palynologists (p. 139-144) and should certainly be referenced in palynology courses.

Following a discussion on the principles of biostratigraphic correlation, Grey then presents her zonation scheme of five Ediacaran assemblages zones. Correlation between Australian basins is demonstrated in this study, but as Grey points out (p. 154) an extension of this scheme globally is not yet possible because of the scarcity of key species reported outside Australia.

The last section before the Systematic Paleontology section is a discussion on acritarch evolution and event stratigraphy, specifically the possibility between global bio-events and global geo-events during the Ediacaran Period. These include the Marinoan glaciation and 'Snowball Earth' hypothesis and the Acraman impact event.

The final section deals with systematic paleontology of the recovered palynomorphs. Following a discussion on taxonomy, the systematics of the Ediacaran palynomorphs previously discussed and mentioned are presented. This section (p. 178-355) is the foundation on which the volume rests. A detailed discussion of this section is beyond the scope of this review, other than to say this section contains a detailed taxonomic treatment of the Ediacaran palynomorphs discussed previously and each taxon is beautifully illustrated with excellent photomicrographs. An extensive References follows, and completing this volume are four appendices.

This review may seem to some readers to be too encyclopedic. I thought long and hard on how best to review this volume, and the problem I always encountered was, 'what do I leave out?' Having decided that this volume needed an extended review, I went ahead with my chronologic discussion, which you have hopefully stayed to read to the end. There is something here for both Proterozoic and Paleozoic palynologists, and I hope that the somewhat high cost of this volume doesn't deter potential buyers. If you can't afford a personal copy, make sure your library purchases one.

This is a work that will be cited for many years to come and is destined to become an important reference on Ediacaran palynology. This volume has laid the foundation for future studies and as Kath Grey states at the end of the Conclusions (p. 168) "Much work remains to be done in confirming the distributions demonstrated by this study and in assessing the relationship between the changes observed and major events in Ediacaran geology, but the results presented here provide a useable framework for future analysis."

This volume is available from: The Business Manager, Geological Society of Australia 706 Thakral House, 301 George Street, Sydney NSW 2000, AUSTRALIA

It can be purchased on-line at www.gsa.org.au (go to Bookshop). Australia: A\$141.00 Overseas: A\$150.00 Prices includes postage, GST for Australia.

Reviewed by: Reed Wicander, Department of Geology, Central Michigan University, Mt. Pleasant, Michigan 48859

## AASP: What's in a name?

At the incoming Board of Director's (BOD) meeting in Philadelphia in October, one of the agenda items was a discussion of our association's name. This was not a unique discussion, as the subject has come up at several other BOD meetings over the history of our organization. What was different about this discussion, though, was the general consensus of those present that we should approach the membership with a proposal to emend our name in much the same manner the SEPM has done (see details below). Here's what precipitated this year's BOD meeting discussion around our name:

Current membership demographics:

- 50% of our membership is from countries other than the USA.
- 70% of our membership is in fields other than stratigraphy.

At the turn of this century, AASP found itself in an exciting transition period in its ontogeny as an organization. With the new millennium came more challenges for attracting, retaining and engaging new members, increasing the visibility of AASP and of the science of palynology. Two major transitions were occurring. Not only were our membership demographics shifting from stratigraphic palynologists to other palynological subdisciplines, but many technical societies had begun to transition their communications collateral from the physical world to cyberspace. We debated with ourselves about what the coming years would bring with all the digital possibilities for publishing and communications and as a result became initial members of on-line resources such as GSW and BioOne, and worked hard to secure that our journal, Palynology be accepted in the Science Citation Index. All of these accomplishments were attempts by the BOD to reach out to palynological colleagues in subdisciplines not well represented in our current membership.

Then the debate about our name began again in the last few BOD meetings. We focused on two main issues:

- We asked ourselves again whether the fact that we are called an "American Association" is inadvertently limiting our membership?

o Our membership consists of, and we actively encourage members from all over the world. Could we attract more members if we addressed this somehow?

- Is the fact that we call ourselves "Stratigraphic Palynologists" inadvertently limiting our membership?

o We have many members who are in fields other than stratigraphy and would like to embrace many more. Could we attract more members if we addressed this aspect of our name as well?

The SEPM has had similar debates over their name, the Society of Economic Paleontologists and Mineralogists. The BOD of the SEPM challenged itself in the same way we are challenging ourselves in AASP. The SEPM recognized the value of their brand identity as the "SEPM" and didn't want to lose that. They also recognized that they were inadvertently limiting people's interest in joining their organization because of that very same brand identity. As such the SEPM has modified their name. They are now known as the "SEPM - Society for Sedimentary Geology" and have modified their hallmark to reflect this. The AASP BOD thought this was pretty good logic and a brilliant solution to both maximizing their brand identity and opening themselves up to greater pool of interest and membership. The BOD thought our organization might benefit if we did something similar, and would like to suggest to the membership that we append our name as follows: AASP - The Palynological Association.

What do you think? E-mail Sharma Lynn Gaponoff with your thoughts at SLGaponoff@Chevron.com. Thanks.

# MORE PALYNOLOGY NEWS FLASH...

## Now it's pollen delaying trains

Article published on the BBC website at: http://news.bbc.co.uk/1/hi/wales/mid/5402692.stm **66** Thick pollen was affecting the radiators Mike Bagshaw, Arriva Trains

First it was leaves on the line, then the wrong kind of snow, now pollen has caused problems for rail managers. High levels of it over the summer blocked some train radiators on the Cambrian Line between Shrewsbury and Aberystwyth, Arriva Trains Wales has revealed.



The Cambrian Line links mid Wales with England

Details emerged when a passenger watchdog complained about delays. Mike Bagshaw of Arriva Trains said: "We are confident that the problem will not arise next summer." It is not the first time Mother Nature has caused rail companies problems. Leaves on the line has been a common complaint, but in 1991 British Rail blamed the "wrong type of snow" for the delay to trains.

Ivor Morris, treasurer of the watchdog, Shrewsbury to Aberystwyth Rail Passenger Service (Sarpa), said the issue emerged at a meeting with Arriva. He said: "The meeting had been arranged to discuss, in the main, the feasibility of a new hourly service between Aberystwyth and Shrewsbury. "But some members of our group were annoyed that some services on the Cambrian Line had been

up to an hour late in June. "Arriva said the gradient on the track at Tallerdig (near Machynlleth), the hot weather and high levels of pollen were to blame. They said pollen had blocked train radiators and they had failed."

Mr Bagshaw, commercial director for Arriva Trains Wales, said: "Thick pollen was affecting the radiators on a very small number of our trains, on a small section of the Cambrian railway line, near Welshpool.

## **News from Brazil**

The Boletim de Geociencias da Petrobras (Petrobras' Bulletin of Geoscience) volume 14, n. 1 is now available on-line on the page: http://www2.petrobras.com.br/tecnologia/ing/index.htm

Among 16 papers presented inside, there is an interesting report on Santonian (Late Cretaceous) fire which was recognized by palynological analyses.

If you want go directly to this paper, access:

<http://www2.petrobras.com.br/tecnologia/port/boletim\_geociencias/v14\_n1\_nov\_2005\_maio\_2006/ pdf/Arai\_et\_al.pdf>

The main text is written in portuguese, but abstract and figure captions are in English. Arai

P.S.: Please send me any e-mail to my alternative e-mails: <mitsuru.arai@gmail.com> or <arai2002rs@yahoo.com.br>. They have respectively 2GB and 1GB in memory capacity!!!

# Thirty-Ninth Annual Meeting of the American Association of Stratigraphic Palynologists

#### **By Owen Davis**

The Thirty-Ninth Annual Meeting of the American Association of Stratigraphic Palynologists took place in Philadelphia, Pennsylvania, U.S.A. on October 22 to October 26, 2006. AASP met in affiliation with The Geological Society of America. This is the second time AASP has met with GSA, the first was in 2000.

The meeting was planned by Tom Demchuk and Doug Nichols, with local logistical support by Peter McLaughlin. The AASP events began with a field trip to Cape May, New Jersey, on Saturday. Nine AASP members visited coastal localities south of Philadelphia, including the site of the Cape May lighthouse, and a Pine-Barrens lake.



Cape May Lighthouse

Pine Barrens Lake near Stockton State College

The Meeting's social events included the AASP Icebreaker, attended by fifty members and guests including Tom Davies, Director at Large, and Jim Ritchie, Editor, Palynology, pictured below. On Tuesday evening, AASP met with The Cushman Foundation, NAMS, and Chronos in the penthouse of the Loews Hotel. About 200 micropaleontologists, including long-time AASP Member Howard Simpson, pictured below, enjoyed a very entertaining evening.



L-R Davies, Riding

Howard Simpson

Two meetings of the AASP Board of Directors took place on Sunday (outgoing board) and Wednesday (incoming board). The AASP booth in the Exhibition Hall featured AASP publications and gave advertising gifts to visitors. Several GSA attendees filled out membership applications after receiving information about AASP.

AASP hosted two scientific sessions: "Icehouse / Hothouse – An Analysis Of Late Paleozoic Floras And Their Response To Global Climate Change," was co-sponsored the GSA Coal Geology Division and took place in a packed lecture hall. "Stratigraphic Palynology: Applications To Geologic Problems." was likewise very well attended. In all, fifty talks featuring palynological applications were given at the four-day meeting.

About 45 AASP members attended the annual luncheon, at which **Satish Srivastava received AASP's highest** research award – The Medal for Scientific Excellence, and Bill Evitt was awarded the AASP Medal for Teaching Excellence in absentia. In accepting his award (given by former AASP President Sharma Gaponoff), Satish acknowledged the influence of palynologists such as A.K. Ghosh, C.R. Stelck, Lucy Cranwell, Ken Plel, Harry Leffingwell and Warren Drugg; and the lasting support of Rosalind, his wife of 31 years.



L-R Gaponoff, Srivastava L-R Paterson, Ruckwied, Strother

Paul Strother, chairman of the AASP Awards Committee, presented the L. R. Wilson Award for The Best Student Paper to Niall Paterson for his talk entitled "Palynological Correlation of Mississippian Stage Boundaries," and to Katrin Ruckwied for her talk entitled "Dinoflagellate Cysts From The Upper Cretaceous of The Vocontian Basin (SE France) Highlighted With CLSM: Base For A Sbiostratigraphical Zonation.". Both recipients received a plaque and a check for \$250. Five students competed for this year's award.

At the end of the Business Meeting, President Bob Cushman passed the gavel to incoming President Carlos Jaramillo, who presented to the membership the venue of next year's (2007) annual meeting in Panama City, Panama.



## PollenID : a new email group in palynology

## Florence Boutet, Christiane Tisse, Denis Vernier

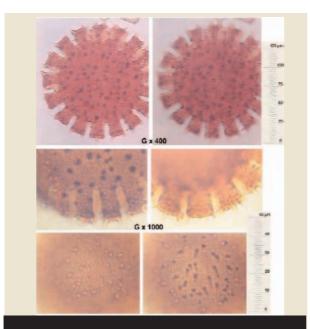
Why create PollenID ?

Denis Vernier believes that in identifying pollen grains, there is nothing to beat the help of living palynologists with a better expertise than yours. A wide-ranging palynotheque and photo atlas are invaluable tools, but they tend to stay on their shelves until you are prodded by someone else in the trade to go and check the most respectable knowledge accumulated in them. An email group that would allow people to submit unidentified pollen grains appeared to him as a way of summoning this living expertise. On the other hand, Christiane Tisse and Florence Boutet, had observed that it was pretty difficult to find palynology courses and to procure photo atlas and flowers for reference slides (particularly those from remote countries). So it seemed to them that a forum was an opportunity to improve further in pollen identification by sharing photos and information and by making contact with palynologists. The idea for Pollen ID was born.

PollenID is intended for research scientists in palynology wishing to post pictures of unidentified pollen grains, but also for anyone interested in improving his expertise by sharing experience and knowledge about palynology. There is no geographical nor time restriction, also ancient and modern pollen grains from any place or origin may be submitted.



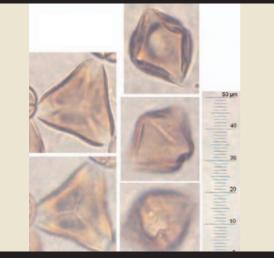
Expand Messages	Author	Sort by Date	
Mystery pollen grain from honey in Yucatan, Mexico The attachment shows a pollen type found in a honey sample from Yucatan, Mexico. The scale in the background is calibrated so that the distance between any	vaughn Bryant vbryant@neo.tamu.edu	Sep 21, 2006 6:00 pm	
Re: Mystery pollen grain from honey in Yucatan, Mexico Hello, Thank you for your message. I've already seen this pollen but I can't remember if I had found its name Couldn't it be from ARECACEAE	Florence Boutet et Ch florence_boutet © ==	6:23 pm Sep 22, 2000 6:55 pm	
Re: Mystery pollen grain from honey in Yucatan, Mexico Philesia magellanica (SMILACACEAE)is also a little like your mystery pollen isn'it? What are the number and the nature of its apertures? To see a photo of	Florence Boutet et Ch florence_boutet © ==		
Re: Mystery pollen grain from honey in Yucatan, Mexico Did you find the name of your mystery pollen at the end? I looked in my books but I couldn't find it. For a moment I thought it was a Crocus but no from	Florence Boutet et Ch florence_boutet		
Mystery pollen grain from honey in Yucatan, Mexico The pollen grain remains a mystery. Maybe the pictures I took are not the idea for that pollen type. The problem is that I did not find another grain exactly	vaughn Bryant vbryant@neo.tamu.edu	Oct 1, 2006 5:05 pm	
Re: Mystery pollen grain from honey in Yucatan, Mexico Hello, sorry for the late reply. It is not certain that your clavulate pollen from Yuacatan is a Monocotyledonae like Smilaccaceae Philesia magellanica	guillaumebuchet 😌 🛤 🔶	Oct 3, 2006 2:57 pm	
< Prev Topic   Next Topic >			
		Start To	



Unidentified



Acanthaceae - Confirmed thanks to Pollen ID



Unidentified

In addition PollenID is a website that will collect the references of the books palynologists work with (identification keys, photo atlas, books about habitat of plants...) so that everybody can compare and complete his library.

The « Links » section will provide the members homepages addresses and a list of pollen photos websites.

The « Photos » section already contains three albums :

1- pollens from Christiane and Florence's collection (at the moment this album contains 40 photos)

2- pollens identified thanks to PollenID

3- unidentified pollens

Members are invited to write in English but this should not prevent members who feel uncomfortable with this language to participate as some willing members will surely help with translations.

Today we are glad to announce that PollenID already has 81 members but we would like this number to increase in order to assure a constant and lasting activity of the group.

The group has been founded by F. Boutet, C. Tisse and D.Vernier. F. Boutet and C. Tisse work for the DGCCRF laboratory (General Directorate for Fair Trading, Consumer affairs and Fraud Control) in Marseille, Southern France. They belong to the department of foodstuffs either of animal or vegetal source. They receive many kinds of honey from all over the world and the analysis of pollens allows them to identify the botanical and geographic origins. D. Vernier works for the Palynology Unit of the School of Agronomy in Montpellier, Southern France. He proceeds to pollen analysis of various aeropalynological samplings for agronomic and allergenic studies.

# To learn more about PollenID, please visit:

http://tech.groups.yahoo.com/group/ PollenID/

If you want to join the group, send a blank message to:

PollenID-subscribe@yahoogroups.com

### Atlas of the Pleistocene vascular plant macrofossils of Central and Eastern Europe Part 1. Pteridophytes and monocotyledons

By F. Yu. Velichkevich, and E. Zastawniak, 2006, W. Szafer Institute of Botany, Polish Academy of Sciences, Krakow, 224 pp. ISBN: 83-89648-37-7

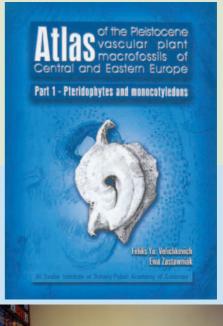
A review by Steven R. Manchester, Florida Museum of Natural History

#### Illustrations provided by Ewa Zastawniak Head of the Department of Palaeobotany Polish Academy of Sciences, Cracow

This hard-bound book is an excellent guide to the meso- and macrofossils recovered from glacial, interglacial an interstadial deposits in the Pleistocene of central and eastern Europe, including Poland, Belarus, Russia, Lithuania, Estonia, Latvia, and the Ukraine. This volume, devoted to the lower vascular plants and monocots, treats more than a hundred species. The atlas includes 61 high-quality halftone plates illustrating by reflected light and scanning electron microscopy. Each species is accompanied by a detailed description, taxonomic notes when warranted, a brief summary of the ecology and distribution of extant representatives or closely related taxa, and summaries of the stratigraphic ranges and a list of the localities from which it is recorded in each of the above mentioned countries. Selection of species included in this volume was guided by the choice of those in a good state of preservation and present in sufficient quanitites in the collections, and which are useful in their stratigraphic occurrences in Pleistocene floras of different ages.

Although macrofossils are correctly emphasized in the title, palynologists may wish to note the inclusion of well-illustrated and carefully described megaspores of species representing the aquatic ferns (Salvinia, Azolla, Pilularia,) and lycopods (Selaginella, Isoetes). The monocots, including Sparganium, Potomogeton, Caulinia, Alisma, Caldesia, Stratiotes, Hydrocharis, Carex, Dulichium, Eleocharis, Scirpus, Lemna and others are represented by carpological remains.

A correlation chart is provided in Table 1 indicating the position of floral complexes from NW Europe, Germany, Poland, Belarus, Lithuania and Russia, based on the philosophy that "on the basis of previous paleo-







Illustrations from top to bottom: Book cover, F. Yu. Velichkevich, and E. Zastawniak.

carpological studies of the Pleistocene in Central and Eastern Europe one may state with certainty that floras with similar species compositions are of the same age, irrespective of their geographical position." (p. 13).

This volume is an excellent compilation and summary of results from numerous careers from investigators in various countries. This manual, in English, will also be convenient to international users. New students to the discipline will also benefit from the list of bibliographic references including fundamental literature published in several languages.

The price of the book including mailing expense is: 39 EURO. The address for ordering copies: W.Szafer Institute of Botany, Polish Academy of Sciences, 31-512 Cracow, Lubiz str. 46, Poland, e-mail: ed-office@ib-pan.krakow.pl

## **Membership Committee News**

Sarah de la Rue, Chair, Ad-hoc Membership Committee <sdelarue@geol.lsu.edu>

In light of declining membership, the formation of the Ad-hoc Membership Committee in April (and reported in the June newsletter) was a critical move to determine the changes needed to better serve AASP's current members and attract new members. With this important task in mind, the committee put its nose to the grindstone!

Two AASP-sponsored sessions (recently hosted during the Geological Society of America (GSA) annual meeting in Philadelphia, October 22-25) were advertised this summer with articles and notices placed in societal newsletters and websites, including those of NAMS, CIMP, TSOP, and IOP. A paid \_-page ad was placed in the Programs with Abstracts (page 32) which was provided to attendees during the GSA meeting. We feel this was a successful beginning in increasing AASP's visibility. Consider: this Program will be added to university and geology departmental libraries for reference by students. Additionally, a list of palynology-oriented presentations to be given at GSA was made available to our members via the newsletter and email before the meeting, and as handouts at the AASP booth during the meeting. 57 of the authors listed were non-AASP members. Joyce Lucas-Clark, one of our new Directors-at-Large, has volunteered to write to each of these individuals inviting them to join AASP. Thank you Joyce!

Another possible way to increase AASP's visibility (and that of its membership, of course!) is to be affiliated with larger geological/paleontological societies and to this end SEPM's President Bob Dalrymple was approached. He welcomed the opportunity to visit with us and attended the Outgoing Board Meeting the final day of GSA. The information he provided concerning the pros and cons of AASP becoming an SEPM-affiliated society is being considered by the board.

In order to gauge how successful AASP is in retaining members and attracting new ones, members were invited to discuss their concerns and ideas with the committee this summer. These volunteered communications were used to construct a professional, confidential survey which was sent out atlarge to our entire individual membership in October, which consisted of approximately 430 people at that time. We sincerely thank all 130 members who considered the survey important enough to not only take the time to respond, but to also provide personal comments and suggestions on the various issues. If you are interested in seeing the numbers and responses generated by the survey, please send me an email.

The committee was pleasantly surprised by the intense concern and sense of loyalty our long-term and even newest members have for AASP (see first table - next page - for summary)!

Your voices are absolutely vital to help AASP continue as a society worthy of your needs and instrumental in promoting palynology. To prove our sincerity in wanting to improve AASP, your survey responses were reported to the Board of Directors during the GSA meeting (October 22-25). Items that were immediately acted upon included (1) enhancing/improving the newsletter (How do you like the new look and content?!); (2) multiple issues of Palynology (Jim Riding reports that at this time we do not have enough back-logged, reviewed articles to consider 2 issues/year); and (3) increasing student financial awards (the L.R. Wilson Award was increased from \$250 to \$500 with a 2-year free membership). Items to be discussed in greater detail during the mid-year meeting (Houston 2007) include extending the length of the President's term and initiating a Best Student Poster award.

	Total*	What is your current membership status? (One only, please)						
		Individual member/ practicing palynology	Individual member/ no longer practicing palynology	Retiree/ practicing palynology	Retiree/ no longer practicing palynology	Student/ Masters	Student/ Doctoral	Other, please specify
		95	5	8	7	1	9	4
AASP Benefits for active, practicing palynologists	44 34.1%	36 37.90%	1 20%	3 37.5%	0%	0	4	0%
AASP Benefits for	14	37.50%	20%	37.5%	1	078	44.470	070
students	10.9%	8.4%	0%	0%	14.3%	0%	55.6%	0%
Loyalty to AASP for past services and	46	31	2	4	7	0	2	0
support	35.7%	32.6%	40%	50%	100%	0%	22.2%	0%
Continued interest in palynology	109 84.5%	84 88.4%	4 80%	87.5%	3 42.9%	100%	88.9%	2 50%
Other, please specify	9 7%	6 6.3%	0	0	1 14.3%	0	0	2 50%

Some items of obvious great interest to our members are (1) the addition of student mentoring and (2) short courses during meetings, (3) advertising AASP, (4) reformatting Palynology (Jim Riding is very receptive to this idea!!!), and (5) having more financially-accessible meetings.

Nearly half of the survey respondents voted for student mentoring! This was a strong reaction and it is very heartening to realize that our members want to help our up and coming students, soon to be full-fledged palynologists and hopefully long-term AASP members. The next meeting's registration form could ask for volunteers, but we need to know what needs to be done and how, in order to be efficient and successful! Did you 53 members have specific ideas on how to accomplish student mentoring?

Coordinating a short course requires not only volunteer hosts but also a university- or institute-based meeting venue with access to microscopes (if needed)!! Jim Riding's excellent Jurassic dinoflagellate course in Ensenada 1998 was the last AASP-hosted short course!!! It is most likely too late to consider a short course for Panama 2007, but we should plan for 2008! Are any of you interested in teaching a short course?

Our intention is to begin an active and perhaps even aggressive public outreach campaign. This next half year we plan to (1) write several full-page ads with one specifically oriented towards attracting students which can be placed at no cost in several societal newsletters, (2) place one free \_-page color ad in GEOTIMES, (3) redraft the membership form on the website so that it is more inclusive of demographics and interests of our members (e.g., with this information, a list of members coded by their time interests could be placed on the website), and (4) develop a new front cover theme/concept for AASP's journal Palynology.

To accomplish these goals we need people, meaning you! It was obvious that many of you (see table 2 - next page) would like to help but thought you lacked experience, needed an invitation, or, if international, thought distance would hamper communications. None of these concerns are warranted- distance and inexperience are never a hindrance!!

	Total*	In which location do you work/live? (One only, please)						
		Total*	USA	Canada	Mexico/ Central America	South America	Asia	Europe
	97	34	10	4	6	2	27	14
No	74 76.3%	25 73.5%	8 80%	3 75%	4 66.7%	0 0%	22 81.5%	12 85.7%
Board of Directors	10 10.3%	4 11.8%	2 20%	0 0%	0 0%	0 0%	2 7.4%	14.3%
Membership	4 4.1%	2 5.9%	0 0%	0 0%	0%	1 50%	0 0%	7.1%
Publicity	4 4.1%	2 5.9%	0 0%	0 0%	1 16.7%	0	0 0%	7.1%
Web	2	2 5.9%	0 0%	0%	0%	0%	0	0%
Awards	8 8.2%	4 11.8%	1 10%	1 25%	0	1 50%	0 0%	7.1%
Nominating	4	4 11.8%	0 0%	0	00%	0	0 0%	0%

Would you like to serve on one of the following AASP committees/Board?

We are inviting all of you to help make AASP a more enjoyable and prosperous society that we can be proud to be a part of. Particularly, those of you who responded favorably in the survey (and you know who you are!), please contact me..... However, we are appealing to all members who have an interest in participating on a committee or with public outreach, e.g., writing blurbs and designing ad/journal cover layouts, to contact us immediately! We definitely want and need your help - AASP cannot succeed without you!

The committee hopes that you are pleased with our accomplishments to date and that we have represented you as you wanted to be. We promise to keep you updated on the actions taken with these various issues following the mid-year board meeting.

Lastly – A warm welcome is extended to our 36 new members!! Hope to see you in Panama 2007!

Happy Holidays and Happy New Year!





# PANAMA 2007 40th Annual Meeting September 8-12, 2007

## http://striweb.si.edu/ aasp07

The 40th Annual Meeting of the AASP will be held on Sept 8-12, 2007 at the Smithsonian Tropical Research Institute in Panama. The Smithsonian is located in Panama City, Panama is located at 9°N and boarders Costa Rica and Colombia. The country is 50-120 miles wide and is bounded by 477 miles of Caribbean coastline and 767 miles of Pacific coastline. The temperature in Panama City is usually 80-85 °F (27 degrees °C) during most of the year. Much for the countryside is farmland, but large areas of forest remain in many regions. Close to the city there are many Natural Parks to visit and explore. The capital, Panama City, is located on the Pacific coast next to the entrance to the Panama Canal. The city offers a wide choice of restaurants, hotels and some museums. Other large cities include Colon at the Caribbean entrance to the canal, and David, in the province of Chiriqui (for more information on Panama visit http://www.panamainfo.com). The Smithsonian Tropical Research Institute (STRI: www.stri.org) is a unit of the Smithsonian Institution, and one of the world's leading centers for basic research on the ecology, behavior and evolution of tropical organisms.

A block of single and double rooms has been reserved in the Hotel El Panama for participants at the meeting (ask for the AASP 2007 rate). There will be an opening mixer on Sunday evening (September 8th) at the Hotel El Panama following a pre-meeting field trip to Barro Colorado Island, one of the research stations of STRI, or to the Canopy Crane at the Metropolitan Park in Panama City. We will also have a tour during the meeting to the Miraflores Locks at the Panama Canal

Contributions will be accepted from January 1 until July 5. For those interested in organizing a Symposium please, contact Carlos Jaramillo (aasp2007@si.edu)

With the exception of keynote addresses, talks will be 20 minutes long (15 minutes for presentation and 5 minutes for questions). Information about registration, technical sessions, abstract submission, filed trips and social events, can be found on the meeting website at <a href="http://striweb.si.edu/aasp07">http://striweb.si.edu/aasp07</a>. Please direct questions about logistics to Audrey Smith (aasp2007@si.edu) and questions about the technical program to Carlos Jaramillo (aasp2007@si.edu).

Hope to see you in Panama Carlos Jaramillo, Aasp2007@si.edu





## European Geosciences Union General Assembly 2007 Vienna, Austria, 15 – 20 April 2007 SESSION SSP17: Environmental perturbations during the Palaeozoic-Mesozoic interval: Organic geochemical and palynological proxies

Convener: Ulrich HEIMHOFER, Bochum (Germany), ulrich.heimhofer@rub.de Co-Convener: Annette E. GÖTZ, Halle (Germany), annette.goetz@geo.uni-halle.de

The objective of this session is the reconstruction of palaeoenvironmental change in the marine and terrestrial biosphere by integrating organic geochemical and palynological techniques. Major environmental perturbations documented in the Palaeozoic and Mesozoic sedimentary record are often associated with prominent changes in terrestrial vegetation patterns, marine productivity, phytoplankton and microbial communities as well as in organic carbon burial and preservation. The composition and distribution of sedimentary organic matter is a sensitive recorder of these changes and allows to trace changes in palaeoclimatic and palaeoceanographic evolution as well as in ecosystem structure and biogeochemical cycling across critical intervals on different time-scales during the Palaeozoic and Mesozoic Era. To better understand the causes and consequences of palaeoenvironmental change we encourage contributions from different subdisciplines studying sedimentary organic matter from various perspectives including stable isotope and biomarker studies, palynofacies and maceral analyses as well studies with focus on spore-pollen and marine palynomorph assemblages. The high potential of such integrated analyses will benefit from the dialog between the various disciplines. Thus, we welcome all colleagues to contribute to this session for a broad scientific exchange and discussion.

Further information: http://meetings.copernicus.org/egu2007/



The CIMP Lisbon'07, joint meeting of the Spores/Pollen and Acritarch CIMP Subcommissions, organized by LNEG-LGM (Portuguese Geological Survey), will be held in Lisbon, Portugal from 24 to 28th September 2007.

This meeting will involve 3 days of scientific sessions followed by a 2-day post-meeting field trip to Southern Portugal. The venue is at the Portuguese Geological Survey headquarters.

CIMP Lisbon'07 will be a forum for specialists interested in current progress, future developments, and application of Palaeozoic palynology.

You are strongly encouraged to participate and submit papers to CIMP Lisbon'07. The official working language is English and you are most welcome to visit the web page at http://e-geo.ineti.pt/CIMPLisbon07 for further information. Please visit the web page and fill out the questionnaire regarding your possible attendance. This will help us greatly in planning for the meeting by letting us know how many people will possibly attend.

Lisbon, the capital of Portugal, is known throughout the world as the city of sun. It is located near the Atlantic Coast and is a well-known venue for international events.

We hope to see you in Lisbon in September 2007. The Organizing Committee: Z.Pereira, J.Tomás Oliveira, P. Fernandes and N. Vaz

# MORE TO MARK ON YOUR AGENDA

### 2007



## July 10-13 First International Palaeobiogeography Symposium, Paris

#### **University Pierre et Marie Curie**

More info, contact Monique Troy, palstrat@ccr.jussieu.fr

La 2ème circulaire va être mise en ligne sur le site de la Société géologique de France, en voici le lien: http://sgfr.free.fr/rencontrer/seances/s07-07paleobiogeo.html

#### \*\*\*\*\*\*

The second announcement will be available online shortly at the following link:

http://sgfr.free.fr/rencontrer/seances/s07-07paleobiogeo.html

### May 2nd to 5th 2007 Third Argentinian Symposium on the Jurassic Mendoza, Argentina

Estimado Colega

Cordialmente lo invitamos a visitar el sitio web del Tercer Simposio Argentino del Jur·sico que se realizar· en la ciudad de Mendoza, entre el 2 y 5 de Mayo de 2007. Toda la informaciÚn disponible acerca de esta reuniÚn puede ser consultada en la p·gina web del Simposio: http://www.cricyt.edu.ar/saj, la cual seractualizada periÚdicamente.

Esperamos contar con su presencia. La ComisiÛn Organizadora 3sa-jurasico@lab.cricyt.edu.ar



Dear colleague,

\*\*\*\*\*\*\*

We invite you cordially to visit the website of the Third Argentinian Symposium on the Jurassic, which will be held in Mendoza, Argentina, from May 2nd to 5th 2007. All information available about this meeting is in the site: http://www.cricyt.edu.ar/saj, which will be updated periodically.

# Meeting follow up...



The 2006 international workshop on dinoflagellates and their cysts took place 10-12 November at the Geological Survey of Denmark and Greenland (GEUS) in Copenhagen, Denmark.

The successful work shop was attended by thirty four participants. Besides microscope work and discussions, there were given twenty oral presentations and eight poster presentations. The abstracts for the talks and posters can be found by visiting the following website:

http://www.geus.dk/departments/quaternarymarine-geol/research-themes/dw2006-uk.htm

Niels Poulsen

## New members and reinstatements - Thank you for supporting AASP!

CRAUSBY, SHELLEY 430 LINCOLN DRIVE MADISON, WI 53706 TEL. (608) 262-2279 crausby@wisc.edu

DESPRAT, STEPHANIE WOODS HOLE OCEANOGRAPHIC INST. WOODS HOLE, MA 02543 TEL. (508) 289-3452 sdesprat@whoi.edu

GOETZ, ANNETTE E. VON-SECKENDORFF-PLATZ 3 HALLE (SAALE) D-06112 GERMANY TEL. +49 345 55 26 114 annette.goetz@geo.uni-halle.de

JARDINE, PHIL SCHOOL OF GEOGRAPHY EARTH, AND ENVIRONMENTAL SCIENCES UNIVERSITY OF BIRMINGHAM EDGBASTON, BIRMINGHAM B15 2TT UNITED KINGDOM TEL. +44 (0) 7817 873406 pej083@bham.ac.uk

LENHARDT, NILS AUF DEM FRONGRUND 2A DIEBURG, GERMANY 64807 TEL. +49 6071 25141 n\_lenhardt@gmx.de

MARSH, PAMELA 701 SUMTER ST. EWS 617 COLUMBIA, SC 29208 TEL. (802) 777-3353 marshp@mailbox.sc.edu

MILLER, IAN 2521 CLARKSON ST. DENVER, CO 80205 TEL. (203) 980-9576 ian.miller@dmns.org PATERSON, NIALL WILLIAM DEPARTMENT OF GEOLOGY TRINITY COLLEGE DUBLIN DUBLIN 2, IRELAND paterson@tcd.ie

SHAW, DAVID 17 WOODLAND AVENUE NORTON GREEN, STOKE-ON-TRENT UNITED KINGDOM ST6 8NE TEL. +44 01782 544314 FAX. +44 01782 544314 daveshaw.biostrat@btinternet.com

SWETS INFORMATION SERVICES B.V. (Sub. #36170944) C/O NA PUBLISHER DEPARTMENT 160 NINTH AVENUE RUNNEMEDE, NJ 08078

TUZZI, EVA 1100 CAMBRIDGE CT. #24 LINCOLN, NE 68505 TEL. (402) 467-6310 evatuzzi@libero.it

UNIVERSITEIT LEIDEN FAC WIS-EN NATUURWETENSCHAP POSTBUS 9502 2300 RA LEIDEN THE NETHERLANDS

VAN HOOF, TOM NORMANDIE 12 UTRECHT THE NETHERLANDS 3524 RK TEL. +31 (0) 302564733 tom.vanhoof@tno.nl

YANSA, CATHERINE DEPARTMENT OF GEOGRAPHY MICHIGAN STATE UNIVERSITY 226 GEOGRAPHY BUILDING EAST LANSING, MI 48824-1117 TEL. (517) 353-3910 FAX. (517) 432-1671 yansa@msu.edu Reinstatements GUERSTEIN, G. RAQUEL INSTITUTO GEOLOGICO DEL SUR UNIVERSIDAD NACIONAL DEL SUR DEPARTMENTO DE GEOLOGIA SAN JUAN 670 - B8000ICN BAHIA BLANCA ARGENTINA

PALAMARCZUK, SUSANNA C. 9274 FAIRVIEW CT. TOBYHANNA, PA 18466 TEL. (570) 894-5856 FAX. (570) 894-5856 eilizz1@aol.com

Address Updates DALZELL, MATTHEW DEPT. OF GEOLOGICAL SCIENCES 114 SCIENCE PLACE SASKATOON, SASKATCHEWAN CANADA S7N 5E2 TEL. (306) 373-8670 FAX. (306) 934-8555 m.dalzell@sasktel.net

MUNSTERMAN, DIRK DAMMERSBOOG 10 1991 SK VELSERBROEK THE NETHERLANDS dirk.munsterman@tno.nl

WOOD, GORDON D. THE IRF GROUP, INC. 24018 SEVENTH HEAVEN KATY, TX 77494-0174 TEL. (281) 693-2860 eakbros@compuserve.com

## EDITOR'S NOTE

Dear AASP members,



This completes the first newsletter under my shift. I want to thank Carlos Jaramillo for his help making this a smooth transition. I am honored to take care of the newsletter while Carlos is actively preparing the 2007 AASP meeting in Panama! I hope our members enjoy this issue of the newsletter, and that the size will not be too much of an issue.

For those who don't know me, I graduated from the Universite Catholique de Louvain (Belgium) in 1999, after completing a dissertation on the Messinian Salinity Crisis using a palynological approach, under the direction of Pr. Jean-Pierre Suc (CNRS, France). I then moved to Louisiana and worked with Pr. John Wrenn (LSU, CENEX). Soon after, I became the lucky mom of two little girls, Manon and Zoe (their birthdates pretty much correspond with the gap in my publication record...). I was fortunate to be hired in 2002 as the education director

of the LSU Museum of Natural Science. Because our Museum is located on the LSU campus, and is a research museum, all employees are encouraged to pursue research. John was always very generous to let me use the CENEX facilities, allowing me to keep working on palynological research. I am forever thankful. My latest projects were an Antarctic palynological project in the Ross Sea in 2003/2004 and one in the Antarctic Peninsula in 2005/2006, both sponsored by the NSF Office of Polar Program.

I want to thank the AASP board members for offering me to serve as the new AASP editor, it is a great chance to connect with all our members. I want to reiterate that this newsletter cannot be created without your support. I encourage each of you, AASP members, future members, and colleagues, to send your contributions or ideas. I see the newsletter as a way of helping members to stay in touch with each others, and find out about all that palynology has to offer.

#### With this in mind, I am looking forward to receiving your contributions.

Please send items such as (note that the order is not a reflection on priorities):

- Student thesis abstracts, updates on student research, etc.
- Reports on meetings, workshops, etc.
- Review on unique palynomorphs (one will be selected to illustrate our new NL cover)
- Historical notes
- Reviews on active research (climate, archeology, etc.)
- News on upcoming palynological and related meetings
- News on publications
- Human interest stories about members and students
- Information from groups out of the United States
- Opinion pieces on palynological subjects
- Job oppening in your company, university, or that you are aware of
- News flash items, serious or humorous
- Advertisements on palynological-related items
- And any items our members thinks are appropriate.

Thank you!

Sophie Warny swarny@lsu.edu 1-225-578-5089 Louisiana State University

