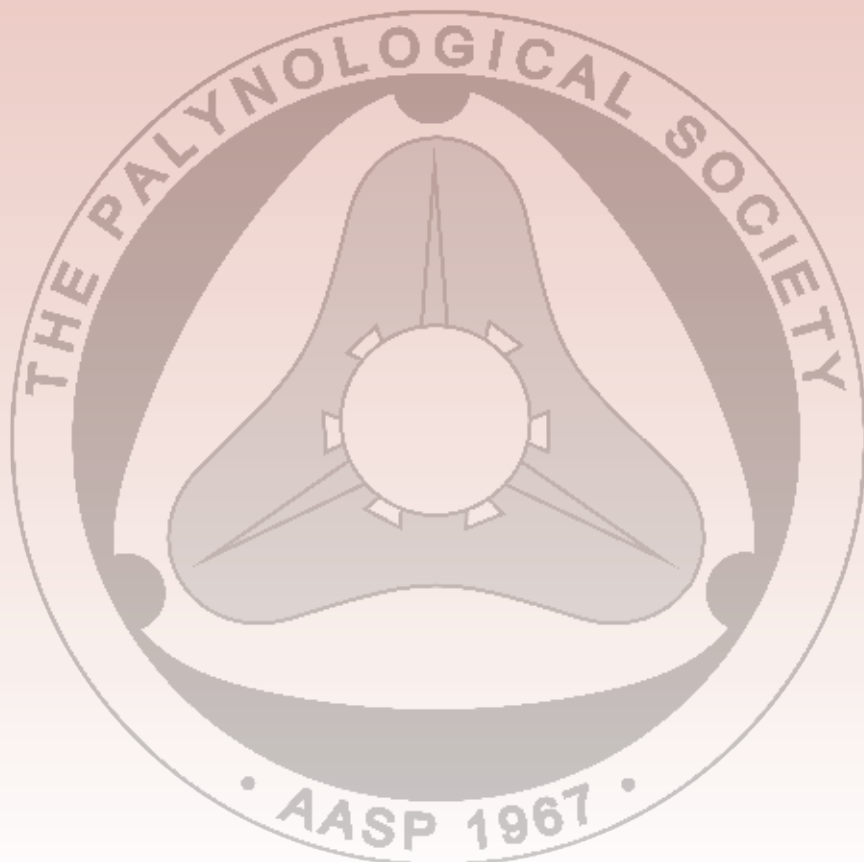


AASP- THE PALYNOLOGICAL SOCIETY



Coptospora
by J. Ian Raine



NEWSLETTER



June 2009
Volume 42, Number 2



A.A.S.P. NEWSLETTER

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A.A.S.P.

The Palynological Society

The American Association of Stratigraphic Palynologists, Inc. - AASP-The Palynological Society - 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.

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Prof. Vaughn Bryant (awarded 2005)
Prof. Alfred Traverse (awarded 2005)

AASP Board of Directors Award recipient

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Teaching medal recipients

Professor Aural T. Cross (awarded 1999)
Professor Alfred Traverse (awarded 2001)
Professor Bill Evitt (awarded 2006)

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Dr. Norman J. Norton (awarded 1978)
Dr. Jack D. Burgess (awarded 1982)
Dr. Richard W. Hedlund (awarded 1982)
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Dr. D. Colin McGregor (awarded 1995)
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Dr. Donald W. Engelhardt (awarded 2000)
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Prof. Owen K. Davis (awarded 2005)



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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 **August 15**. 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.**

Working with Schools

By Fredrick Rich

Some interesting events have transpired that you can read about later in this newsletter; the events lead to some students in Oregon taking on a palynology research project in spite of the fact that they had never had formal training. They were able to succeed because Vaughn Bryant was willing to work with them from his remote post in College Station, Texas. I won't say anything more about it, but you can read Vaughn's account later on.

Working with students, and teachers in public or private schools is one of the most rewarding things a scientist can do. I've dedicated the last four years of my career to developing university-school system connections. An NSF-funded grant, administered through the Math-Science Partnership program, was called the Partnership for Reform in Science and Mathematics and, in spite of the fact that the program and the funding are almost history, we've developed some wonderful ties with public schools, particularly. Just the other night I had 24 Middle School students with me over in the Georgia Southern Museum, discussing our premier skeletons, a mosasaur from South Dakota, and *Georgiacetis*, an amazing fossil whale from the Georgia coastal plain. We went on to discuss palynology as well, of course.

It's easy to get kids attention when you have skeletons such as we have here but, believe me, even kids as young as second graders can really get excited about all kinds of things that are a part of natural history. It is a common refrain now that kids don't get out enough, that they have lost touch with the world outside, and that they don't understand much science or math. All one has to do is present them with the opportunity to dabble in science, or walk in the woods, and the interests surface immediately. The middle schoolers really did

enjoy dissecting owl pellets as I related the nasty tidbits to taphonomy and fossil assemblages.

The Board of Regents of the University System of Georgia now officially recognizes substantive work in schools as a legitimate part of a faculty member's portfolio. This was due to the success of the grant I referred to above. Even if your own institutions or corporations don't extend this kind of recognition, it will be worth your while to try a little work in the schools. Most teachers are desperate for some help, and the students, in my experience, invariably respond with great enthusiasm. Give a class of sixth graders a bucket auger, and ask them to discover what is buried beneath the surface of the school yard, and you won't be able to get them to stop. I hope one day a student will take a college level class from me, and maybe even major in geology because of what they experienced in sixth grade. It's what I consider a genuine investment in the future.



Archeological Palynology of the Willamette Valley takes First Place Prize

By Vaughn M. Bryant



I would like to paraphrase Forest Gump and say, *"Email is like a box of chocolates, you never know what you are going to get!"* Often I get all sorts of email and much of it is junk and spam, which I have to delete. One day I got an email with the words something like, *"I have a question,"* but I don't remember the exact wording. I almost deleted it but then decided to open it and see what it was. It turned out to be a high school kid named Ian Love, age 16 who attends West Salem High School in Salem, Oregon. His question was, "How do you do archaeological palynology?" I was amazed he even knew the words, after all most college kids don't know or care about either archaeology or palynology! So this email perked my curiosity.

I decided that the email certainly deserved a reply so I sat down and tried to explain the basics of archaeological palynology and then attached pdf copies of several articles and sent the email off into cyberspace. I guessed that Ian must be some kid who was doing a class project and selected some bizarre-sounding science he had heard about somewhere. I then went off to teach a class believing I had done my good deed for the day and believing I would never hear from the kid again.

Two days later I got another email from the same kid saying he had read the articles and had some questions! What! He actually read the articles?? I couldn't believe it! I can't even get my grad students to read articles; and this is a 16-year-old high school kid doing this for some type of extra credit? I looked over his questions and answered each one in simple terms hoping that it would not confuse him. However, I must say I was impressed. A few days later he writes back again and wants to know how he can get pollen out of soils! My God, this kid is serious about all this, I thought! Now I was really getting curious but decided that there was no way he could find a way to extract pollen from archaeological soils in a high school in Salem, Oregon!

Nevertheless, I sent him another email and attached my 24-page, single-spaced laboratory extraction guide that I make my grad students memorize and follow so they don't blow up the lab or injure themselves permanently. A few days later he sent another email and thanked me again for the procedures and then wanted to know how he could recognize the pollen grains once he found them. Wow! This kid doesn't give up I thought, so I sent him an email copy of our AASP publications and recommended he purchase a copy of our "Guide to Pollen and Spores." The next day I got an email from his father with a credit card number asking me to send the book to his son air mail, which I did.

About a month later I emailed the kid asking how things were going. He responded that they were doing fine and that he was working on the project in Mr. Dey's high school science class. He thanked me again for all the help and for sending the copy of the Kapp book, which he said was very useful for his project.

That was the last I heard from him until his email yesterday saying that he and his friend Ashley Wiens (18 years old) (see photo) had won First Prize in the field of geology at the Intel International Science and Engineering Fair held in Reno, Nevada, during the middle of May. They were both awarded a \$1,000 scholarship from the American Geological Institute and a first place trophy for their presentation called, "Archeological Palynology of the Willamette Valley."

So what did they do or say to win first place? Right now I don't know but it must have been impressive because there were only 26 winners from among the 1,500 exceptional high-school science students from more than 50 countries who submitted projects for the final competition and judging in Reno. I have asked Ian and Ashley for a copy of their report, which they said they would send me. Hopefully, I can share that with you in the next newsletter!



MASTER CLASS

ConocoPhillips

“Terrestrially-Derived Fossil Palynoflora: Subsurface Application to Petroleum Geology”

August 2010 Utrecht, The Netherlands



Course Outline:

General Pollen/Spore Morphology and Taxonomy

Concepts and Applications

Paleozoic Spore Chronostratigraphy and Paleoecology

(with special focus on Middle East plays)

Mesozoic Spore/Pollen Chronostratigraphy and Paleoecology

(Australia, N.W. Europe, North America)

Cenozoic Pollen Chronostratigraphy and Paleoecology

(North and South America)

Special Focus on Neogene Pollen Chronostratigraphy and Paleoecology

(West Africa, Southeast Asia)

Quaternary/Holocene Palynostratigraphy and Paleoecology

Fieldtrip: Type-Maastricht

List of Potential Instructors:

**Charles Wellman, Michael Stephenson, Doug Nichols, Carlos Jaramillo,
Robert Morley, Thomas Demchuk, Henry Hooghiemstra, Timme Donders,
Andy Lotter, Oscar Abbink, Roel Verreusel, Dirk Munsterman, Jim Riding**

The Aims and Deliverables of the Class will be:

- * Provide instruction on basic pollen/spore/algal taxonomy as an aid in identifying and classifying varied terrestrially-derived palynoflora
- * Provide a general background into terrestrial palynomorph morphology, taxonomy, chronostratigraphy, paleoecology and paleoclimate through the Phanerozoic.
- * Provide case studies of standard and innovative Industrial applications of terrestrially-derived pollen/spore/algae to subsurface problem solving, including calibration to sequence stratigraphic modeling (systems tracts):
Middle East - Paleozoic; Southeast Asia - Cenozoic; Offshore Nigeria - Neogene

This week long course will also include a half-day fieldtrip to the Type-Maastricht in the southern Netherlands, an opening evening Icebreaker, and mid-week Dinner

Maximum enrollment will be 35 participants.

Course fees are anticipated to be: 500Euros (Students), 800Euros (Academic), 1200Euros (Industry)

- * It is hoped that sufficient corporate funding will be obtained to reduce these fees, especially for students

For additional information regarding this course, please contact either:

Thomas D. Demchuk (Thomas.D.Demchuk@conocophillips.com)

or James Eldrett (James.Eldrett@Shell.com)

**Please visit the AASP website (www.palynology.org) and read future issues of the
AASP Newsletter for additional information**



MANAGING EDITOR'S REPORT

In the last Newsletter, I reported that all paid-up members should have received their copy of Volume 32 of *Palynology*. Unfortunately however we have experienced problems with the distribution, and a substantial number of members from outside North America did not get their copy. We have spoken at length with the shipping company and replacement copies have been sent out during late May. This means that, if you were among those who did not receive their copy, one will be with you very soon. We apologise profusely, and will ensure that this does not happen again.

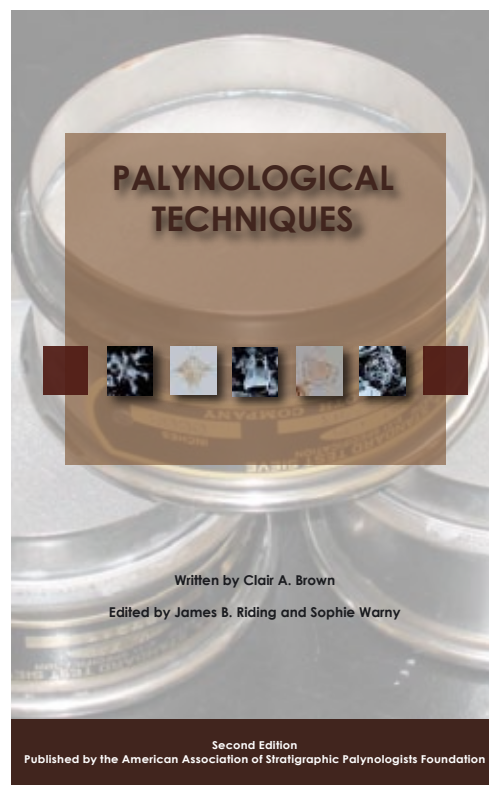
Volume 33 (2009) of *Palynology* is looking in great shape. We have one manuscript typeset, and four others with Bob Clarke for typesetting. I have four manuscripts for final editing, five back with the authors for revision, and seven with referees. Typeset manuscripts awaiting publication will be placed on the website, provided that the authors agree.

Copies of the second edition of the book *Palynological Techniques*, originally privately published in 1960 by Clair A. Brown are available at US\$15 plus postage and packing via the website.

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4 June 2009



Palynological and Related Publications

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Moscow, ID 83844 (sarah.delarue@vandals.uidaho.edu)

Please email me your citations for book reviews, books, and in press and/or published articles. Thanks!

Special Journal Issues

Palaeogeography, Palaeoclimatology, Palaeoecology 273 (3-4) March 2009. Organic-carbon-rich sediments through the Phanerozoic: Processes, progress, and perspectives.

Review of Palaeobotany and Palynology 155 (3-5) June 2009. Late Palaeozoic palaeobotany and palynology in Central Europe: New contributions from the Czech Republic

Topics

Acritarchs-Dinoflagellates:

Bouimetarhan, I., Marret, F., Dupont, L., Zonneveld, K., 2009. Dinoflagellate cyst distribution in marine surface sediments off West Africa (17–6°N) in relation to sea-surface conditions, freshwater input and seasonal coastal upwelling. *Marine Micropaleontology* 71 (3-4): 113-130.

Brutemark, A., Lindehoff, E., Graneli, E., Graneli, W., 2009. Carbon isotope signature variability among cultured microalgae: Influence of species, nutrients and growth. *Journal of Experimental Marine Biology and Ecology* 372 (1-2): 98-105.

de la Puente, G.S., Rubinstein, C.V., 2009. Late Tremadocian chitinozoans and acritarchs from northwestern Argentina (Western Gondwana). *Review of Palaeobotany and Palynology* 154 (1-4): 65-78.

Figueroa, R.I., Bravo, I., Fraga, S., Garces, E., Llaveria, G., 2009. The Life History and Cell Cycle of *Kryptoperidinium foliaceum*, A Dinoflagellate with Two Eukaryotic Nuclei. *Protist* 160 (2): 285-300.

Ghasemi-Nejad, E., Head, M.J., Zamani, M., 2008. Dinoflagellate cysts from the Upper Triassic (Norian) of northeastern Iran. *Journal of Micropaleontology* 27 (2).

Ghasemi-Nejad, E., Head, M.J., Naderi, M., 2009. Palynology and petroleum potential of the Kazhdumi Formation (Cretaceous: Albian–Cenomanian) in the South Pars field, northern Persian Gulf. *Marine and Petroleum Geology* 26 (6): 805-816.

Gonzalez, F., 2009. Reappraisal of the organic-walled microphytoplankton genus *Maranhites*: morphology, excystment and speciation. *Review of Palaeobotany and Palynology* 154 (1-4): 6-21.

Helenes, J., Carreno, A.L., and Carrillo, R.M., 2009. Middle to late Miocene chronostratigraphy and development of the northern Gulf of California. *Marine Micropaleontology* 72 (1-2): 10-25.

Marret, F., Mudie, P., Aksu, A., Hiscott, R.N., 2009. A Holocene dinocyst record of a two-step transformation of the Neoeuxinian brackish water lake into the Black Sea. *Quaternary International* 197 (1-2): 72-86.

Matsuoka, K., Kawami, H., Nagai, S., Iwataki, M., Takayama, H., 2009. Re-examination of cyst–motile relationships of *Polykrikos kofoidii* Chatton and *Polykrikos schwartzii* Bütschli (Gymnodinales, Dinophyceae). *Review of Palaeobotany and Palynology* 154 (1-4): 79-90.

Molyneux, S.G., 2009. Acritarch (marine microphytoplankton) diversity in an Early Ordovician deep-water setting (the Skiddaw Group, northern England): Implications for the relationship between sea-level change and phytoplankton diversity. *Palaeogeography, Palaeoclimatology, Palaeoecology* 275 (1-4): 59-76.

Murray, S., Ip, C. L.-C., Moore, R., Nagahama, Y., Fukuyo, Y., 2009. Are Prorocentroid Dinoflagellates Monophyletic? A Study of 25 Species Based on Nuclear and Mitochondrial Genes. *Protist* 160 (2): 245-264.

Rochon, A., Lewis, J., Ellegaard, M., Harding, I.C., 2009. The *Gonyaulax spinifera* (Dinophyceae) “complex”: Perpetuating the paradox? *Review of Palaeobotany and Palynology* 155 (1-2): 52-60. Schnyder, J., Baudin, F., Deconinck, J.-F., 2009. Occurrence of organic-matter-rich beds in Early Cretaceous coastal evaporitic setting (Dorset, UK): a link to long-term palaeoclimate changes? *Cretaceous Research* 30 (2): 356-366.

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Paleobotany and Land Plant Evolution:

Bosma, H.F., Van Konijnenburg-Van Cittert, J.H.A., Van der Ham, R.W.J.M., Van Amerom, H.W.J., Hartkopf-Froder, C., 2009. Conifers from the Santonian of Limburg, The Netherlands. *Cretaceous Research* 30 (2): 483-495.

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Schwendemann, A.B., Taylor, T.N., Taylor, E.L., Krings, M., Dotzler, N., 2009. *Combresomyces cornifer* from the Triassic of Antarctica: Evolutionary stasis in the Peronosporomycetes. *Review of Palaeobotany and Palynology* 154 (1-4): 1-5.

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Zhou, Z.-Y., 2009. An overview of fossil Ginkgoales. *Palaeoworld* 18 (1): 1-22.

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Aucour, A.-M., Faure, P., Gomez, B., Hautevelle, Y., Michels, R., Thevenard, F., *in press*. Insights into preservation of fossil plant cuticles using thermally assisted hydrolysis methylation. *Organic Geochemistry*.

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Yang, H., Leng, Q., *in press*. Molecular hydrogen isotope analysis of living and fossil plants—*Metasequoia* as an example. *Progress in Natural Science*.

Palynology and Archeology:

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IN MEMORIAM

William R. Evitt

December 9, 1923 - March 22, 2009

by Sarah Pierce Damassa and Harry Leffingwell



It is with deep sadness that we write this memorial to Professor William R. Evitt, who died in March following several years of illness with prostate cancer. Bill will be remembered for his intellectual curiosity, his innovative and enthusiastic approach to research, the excellence of his teaching and mentoring of hundreds of students and colleagues, and his devotion to his family.

Born in Baltimore, Maryland, Bill was educated at Johns Hopkins University, ultimately receiving his Ph.D. in geology in 1950. Between degrees, he served with the U. S. 14th Air Force during World War II as an aerial photo-interpretation specialist in China. His research career in paleontology began with a dissertation on the silicified trilobites of Tumbling Run, Virginia. He was the first to apply stereo-photographic techniques he had used during the war to the study of trilobites, and was highly regarded for his contributions to the study of the morphology and evolution of these organisms.

Early in his career, Bill established a reputation for meticulous work with careful attention to detail. He insisted on working only with superbly preserved material—a requirement he passed on to his students (initially at the University of Rochester and later at Stanford University). In his research on silicified Ordovician trilobites he was aided by his wife, Gisela Cloos Evitt, whom he had met at Rochester and married in 1950. Bill and Gisela enjoyed a deeply committed relationship, and eventually were blessed with nearly 59 years of marriage, three sons and five grandsons!

In 1956, Bill accepted a research position in the relatively new field of palynology at the Carter Oil Research Center in Tulsa, Oklahoma (then a division of what has become Exxon Mobil Corporation), in spite of the fact that he warned his interviewers that he didn't care if he ever found a drop of oil. Ironically, Bill's new research interest—fossil dinoflagellates—was so transformative that he indirectly contributed to the discovery of much oil by many others. In a 2004 interview, Bill commented, "It was my absorption in morphologic differences that led the way. Certainly many experiences I had had---from childhood observations under my first microscope, to identifying anti-aircraft revetments under the stereoscope, to dealing with minute trilobite structures under a stereoscopic dissecting 'scope---contributed to the fascination and ability I had for this new exploration."

A few years later (1962), Bill was invited to join the Geology Department at Stanford University, where he enjoyed a career spanning nearly twenty-five years, until his retirement in 1986. There he returned to the teaching he loved, and was able to pursue his research on fossil dinoflagellate morphology, using specimens sent by colleagues from around the world. Thirteen graduate students had the privilege to work in his lab during those years, sharing Bill's sense of delight and wonder at each new discovery. Nothing was better than to see the twinkle in Bill's eyes as

he entertained a new idea—or encountered a new species of dinoflagellate.

In the early 1960s, Bill solved the “riddle of the hystrichospheres,” demonstrating conclusively that these “spiny balls” were also fossil dinoflagellate cysts, and separated the group which became known as acritarchs from those forms which were obvious dinoflagellates. In 1967, Bill Evitt published his benchmark paper on the archeopyle in fossil dinoflagellates, based largely on research begun while he was at Carter Oil. In the introduction to that paper he wrote, “In the sense that a hole is the absence of material, this paper, which might be subtitled ‘—a study of holes,’ is about nothing, for it deals with holes in the walls of dinoflagellate cysts.” Bill’s recognition of the “holes” as excystment apertures formed the basis of a quantum leap in our understanding of fossil dinoflagellates. His classification scheme, which emphasized the morphology of the holes (called archeopyles), in addition to the surface tabulation (“plates”), resulted in fossil species being more closely aligned with natural species, thus shortening their stratigraphic ranges and greatly increasing their value for precise age determination.

Innovative laboratory techniques were among Bill’s many trademarks of excellence. His use of zinc chloride, and later zinc bromide, for heavy liquid separation of palynomorphs from sediment residues upgraded many preparations from being too thinly populated to use to providing productive and often critical samples which were then used to solve vexing geologic or stratigraphic problems. In one of the most remarkable feats of single-specimen dinoflagellate manipulation ever achieved, Bill actually made “microcasts” (diminutive, 150-micrometer equivalents of paleobotanical peels) of the *inside* of fossil dinoflagellate walls, and then scanned the samples with an SEM to reveal the “details of the vanished thecal surface in reconstituted positive relief” (Evitt, *et al.*, 1998).

Beginning in 1971, in summers and on sabbaticals, Bill taught a total of 36 two-week courses on dinoflagellates, on a consulting basis both at Stanford and elsewhere in the U.S. and Europe. These courses reinforced the nearly universal acceptance of his scheme for the classification of archeopyle types. In addition, Bill’s courses enabled participants to apply a “tutored eye” to the interpretation of dinoflagellate tabulation. Another Evitt legacy began in 1978 with the Penrose Conference on Modern and Fossil Dinoflagellates. The first such gathering—at which the two groups of scientists scarcely understood their counterparts’ objects of study—was so successful that subsequent “DINO” conferences are still going strong. Thirty years on, DINO 8 was convened in Montreal, Quebec.

The arc of Bill’s career in dinoflagellate research and the time span covered by his short courses coincided with what might be considered the “golden age” of industrial palynology. He was extremely fortunate in his choice of career, and he knew it. He treasured the many colleagues with whom he was able to collaborate, and was deeply gratified that he had had the good fortune to pursue his passion for paleontology. In the same way, he rejoiced in his family. Bill’s death leaves a considerable hole in the fabric of our scientific community, and an even larger one in the lives of his wife, Gisela, and their family.

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POLLEN AND SPORES

Applications with Special Emphasis on
Aerobiology and Allergy



Shripad N. Agashe
Eric Caulton

POLLEN AND SPORES APPLICATIONS WITH SPECIAL EMPHASIS ON AEROBIOLOGY AND ALLERGY

Reviewed by
Vaughn M. Bryant
Texas A&M University

For those palynologists who work in academia, finding the best textbook to use for an undergraduate or graduate palynology course can become a daunting task. I have been teaching palynology courses for nearly 40 years and I have used a wide variety of textbooks in an effort to find the best “fit” for what I want to teach the students and also a text that is easy for the novice students to comprehend. Over the years I have used three different editions of Faegri and Iversen’s, *Textbook of Pollen Analysis*. In between using those three different editions, I sometimes used two different editions of the Moore, Webb, and Collinson text called, *Pollen Analysis*. Other years I have used Al Traverse’s book, *Paleopalynology*. Once, for two years in a row I used the three volume AASP book set called, *Palynology: Principles and Applications*, by Jansonius and McGregor. Frankly, I have never been totally happy using any of those books. Each of them has many strengths but each also omits certain types of key information. Some of those texts are best suited for teaching about Quaternary paleoenvironmental reconstructions, while some of the others offer the best information for teaching pre-Quaternary palynology. I have also found that some of the textbooks include detailed information

on laboratory processing methods whereas others have useful pollen keys and pages of pollen photos useful for those working with Quaternary age samples. None of them spend much time discussing some of the lesser-known applications in palynology in fields such as archaeology, aerobiology, melissopalynology, or forensics.

The next textbook we can add to this list is, *Pollen and Spores: Applications with Special Emphasis on Aerobiology and Allergy*, which was just released this year. In the book’s preface the authors say, “...it is expected that this present comprehensive book on pollen studies and their applications will be useful to graduate, postgraduate, and research students...” Certainly this new text I am reviewing does have a number of strong points, but like all of its “relatives” it also has its failings; it is, however, a viable addition to the current list of textbook offerings in palynology mentioned above.

The first 125 pages of this 400 page book are devoted to the basics of palynology. Important topics covered in this first part include a brief history of the discipline, the basics of pollen and spore morphology, a brief discussion of some basic extraction techniques, a brief discussion of some of the other acid-resistant fossil microfossils (i.e., dinoflagellates, acritarchs, chitinozoans, colonial algal forms, etc.), and a final chapter on

pollen chemistry and physiology. The discussions in each of these first ten chapters are accurate and the illustrations and drawings are comparable to similar chapters in other introductory palynology textbooks. In reading through each of these early chapters I found myself sometimes hoping for more information on some topic, or wondering why certain important references of recent publications were not cited. Although I would give this text passing marks on these chapters, I believe the current Faegri and Iversen textbook edition has better discussions and more extensive lists of pertinent citations. The rest of the book (275 pages) has 11 more chapters that cover a wide variety of information. One chapter focuses on "Minor applications of pollen studies," and devotes one long paragraph or in some cases a page to each topic such as pollen studies in ecology, pollen and evolution, pollen studies in agriculture, pollen in plant breeding, pollen studies in copropalynology (coprolite studies), and pollen in medicine (other than allergy). Another chapter of 30 pages is devoted to melissopalynology but the coverage is spotty. Although the information in that chapter is informative and would be useful for students, it misses much of the current research being done in that discipline. Because I am very active in melissopalynology research, perhaps I have expected too much on this topic from two authors who are both retired and are, admittedly, aerobiologists.

As one might expect over one-third of the book is devoted to an in-depth look at the field of aerobiology. Their treatment of that topic is excellent and includes an extensive history of the discipline and biographies of most of the early leaders in that field. Those chapters also include detailed discussions and illustrations about sampling devices, how to sample, and how the sampling data can be used to construct pollen calendars and predict peak periods of pollen distribution for major regions around the world. There are also extensive discussions on the medical causes of pollen and spore allergies, how these affect the body, and even a section explaining how to collect fresh pollen and then prepare it for producing pollen antigens needed for intradermal testing. As one might expect, this is the most detailed and comprehensive portion of the book.

The last three chapters also drew my interest.

The first of these is called "applications of aerobiology," and includes discussions of working with the media to publicize reliable pollen forecasting and pollen calendars, and a section detailing how palynologists should work with doctors and veterinarians to help them develop antigens for testing people and animals for pollen allergies. At this point I must digress for a minute to relate a story directly related to this topic. I have a small Yorkshire terrier who suffered from skin rashes so I took him to the Texas A&M Veterinary Clinic, one of the finest veterinary hospitals in the United States. They diagnosed my dog's rashes as coming from airborne allergies, most probably pollen. They suggested doing skin patch tests using various pollen antigens to find which pollen types were the culprits. I asked to see their list and noticed that 17 of the pollen types on their test list were insect-pollinated! I asked how those pollen types could be causing allergies since they are not airborne! When they had no answer, I picked up the dog and left.

The last two chapters focus on forensics and on fossil pollen studies. The forensic chapter was accurate and I noticed that most of what was written came directly from several articles that Dallas Mildenhall and I had published. However, one of their comments certainly must be in error. They said, "Forensic palynology has been extensively used for the last 30 years or so. During that period more than 200 case histories have been established where palynology has been used." There was no citation for this entry and most of the citations in this forensic chapter refer to pages in newspapers, not original journal, or book sources. In addition, Ed Stanley is cited twice in the forensic chapter for his work. However, when I questioned whether Ed had really printed those statements, I couldn't find those citations listed in this book's bibliography. I have asked each of the world's leading forensic palynologists, who are currently active in this field, about the statements in this forensic chapter. None agreed and most said they would be very interested to find out more about the "200 cases cited and also learn where forensic palynology has been so extensively used during the past 30 years." Of the cases that have been mentioned in the media or published in journals during the past 30 years,

none of us believe there are more than a total of a dozen. Perhaps I am being a bit too critical again; after all, the book does say that it is intended as an “introductory text.” Nevertheless, missing citations and quoting newspaper stories are not the best ways to ensure the trust of the reader. The last chapter discusses how fossil pollen has proven useful in the exploration for coal and oil and how fossil pollen can be used to reconstruct paleoenvironments. Each of these topics is treated accurately, but very briefly.

Overall, I found this to be a good book and one that certainly could serve as a text for teaching an introductory pollen course. It has lots of good information, drawings, and both B&W and color illustrations similar to what one would find in many of the other textbooks choices currently available, and like all the other textbooks this one also has its weak points.

I did learn some new and interesting things, while reading the book. In the authors’ discussion of medical applications of palynology they cite the dissertation research carried out by Pannicker in 2002. According to the text, he discovered that an extract made from the pollen of mesquite (*Prosopis juliflora*) was effective in treating and also preventing the spread of the deadly *Staphylococcus aureus* microbes. Pannicker also claims that the mesquite pollen extract was effective and successful in tests against these microbes even when the powerful antibiotics of Netromycin and Vancomycin proved ineffective and useless. I would love to learn more about this topic, but the only source is an unpublished dissertation. The authors also noted that for areas of the developed world, the USA is hindered in their ability to publish national-level pollen calen-

dars because most aerobiology research is sponsored by pharmaceutical companies, which tightly control the dissemination of the recovered data. The book also states (no citation included) that the large pollen grains of *Cedrus deodara* are able to travel on air currents from their habitat in the Himalayan region to Lucknow, where they are trapped in air samplers. If so, that would be a remarkable feat since published reports by Khanduri and Sharma (2002) point out those studies of pollen distribution among *Cedrus deodara* trees reveal that the majority of pollen falls within 24 m uphill, 48 m on level ground, and 97 m in down hill areas. They also note that barely 1% of the pollen reaches a distance of even 400 m on the down slope side because of its large size and heavy mass.

Should you buy this book? Yes, I think it is worth the investment, especially if you want a good, up-to-date book on the latest advances in aerobiology. After all, even the basic textbooks used in most freshman courses at universities now cost more than this book! Would I use this book as a textbook for my pollen course? Perhaps.

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ADVANCED COURSE in Jurassic – Cretaceous – Cenozoic ORGANIC-WALLED DINOFLAGELLATE CYSTS

Morphology, Paleoecology & Stratigraphy

URBINO, ITALY, JULY 17-21, 2009

presented by

Henk Brinkhuis (Utrecht University NL)
Martin J. Head (Brock University, Canada)
Jörg Pross (Frankfurt University, Germany)
James B. Riding (BGS UK)

Special guest appearance by Appy Sluijs

With contributions by

Rob Fensholt, Graham L. Williams (GSC Atlantic, Halifax, Canada),
Martin A. Pearce (Statolith, Bergen, Norway)
and Roel Verreussel (TNO Utrecht NL)

Local coordinator:
Simone Galeotti
simone.galeotti@unurb.it

Venue address

Istituto di Geologia
Università di Urbino 'Carlo Bo'
Campus Scientifico - Località Crociocchia
61029 Urbino, Italy

A general course on aspects of Jurassic, Cretaceous and Cenozoic organic-walled dinoflagellate cyst morphology, paleoecology and stratigraphy will be held at the premises of the University of Urbino Carlo Bo, Italy, July 17-21, 2009. Detailed information on the morphology, taxonomy and stratigraphic ranges of index species will be provided, in addition to applications in paleoenvironmental analysis. Participants will be provided with a detailed manual and a CD-ROM with illustrations of key taxa. A mid-course excursion is planned to stunning outcrops e.g., along the Contessa valley (Jurassic-Cenozoic)

Fees include the course manual, CD-ROM, ice-breaker, coffee/tea breaks, on-campus lunches, excursion, transportation, field guide, and the grand social dinner:
Students: € 450.-, Senior Professional/Industry Staff: € 1250.-

Information and Registration

http://www.bio.uu.nl/~palaeo/Congressen/Dino2009/Intro_Dino2009.htm

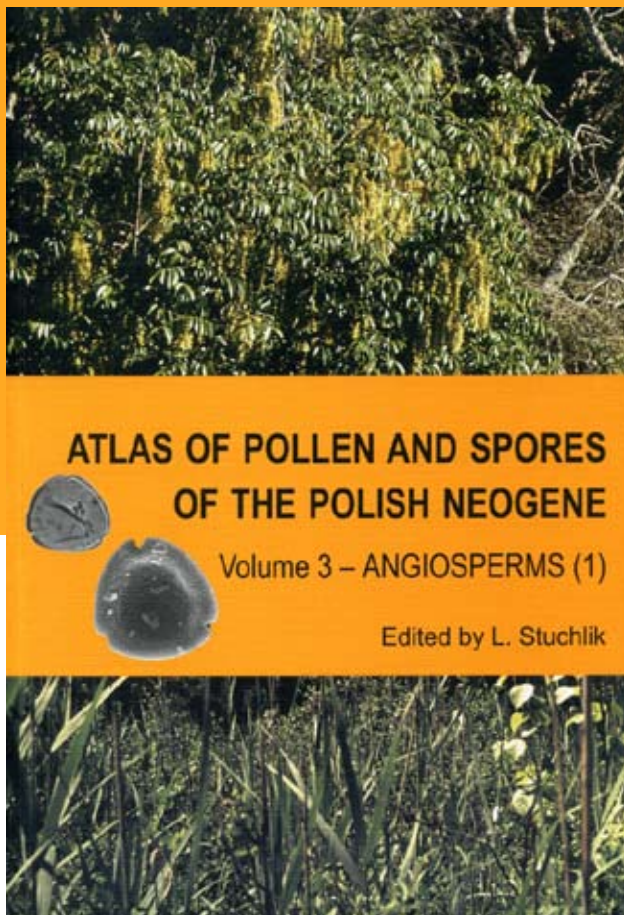
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Atlas of Pollen and Spores of the Polish Neogene Volume 3

A book review by David M. Jarzen
Florida Museum of Natural History

In 2002, I reviewed the first volume in a series of four volumes of the pollen and spores of the Polish Neogene (Jarzen, 2002). In that first volume, the editor Leon Stuchlik noted that the subsequent volumes would be published between 2001 and 2006. "...with the approximate dates of publication for volumes 1 and 2 in 2001, vol. 3 in 2003/4 and vol. 4 in 2005/6." As Robert Burns once noted, and as we are all aware, "The best-laid plans of mice and men often go awry." Be that as it may, Volume 3, the first of two volumes of angiosperm pollen from the Polish Neogene, is now in print. And what a treat it is!

This volume covers a part of the total Neogene angiosperm palynoflora, and includes the inaperturate, monoporate, diporate, triporate, zonoporate and panporate groups of pollen. Presumably Volume 4 will cover the tricolpate and tricolporate, etc. groups of pollen. Each described taxon is treated with a complete synonymy, a detailed description, remarks, botanical affinities, geographical

occurrence of corresponding recent taxa, paleofloristical element (cosmopolitan, tropical, temperate, etc.), the stratigraphic distribution worldwide, and the stratigraphic distribution in Poland. The accompanying, complete synonymy list cites all publications from Poland. As an example of the completeness of the synonymies, the entry for *Alnipollentias verus* (Potonié) Potonié includes 54 synonyms from 1931 to 2004, and the entry for *Carpinipites carpinoide* (Pflug in Thomson & Pflug) Nagy includes 57 synonyms from 1937 to 1998. A total of 108 species, representing 49 genera and 31 families are included in this volume. Verification of fossil names was done through the use of the Jansonius and Hills and Jansonius, et al. *Genera File of Fossil Spores*. Two new genera *Pteroceltipollis* and *Thalictrum-pollis*, with a combined 14 new species, are described within the text. All taxa are verified according to the rules the International Code of Botanical Nomenclature (McNeil et al., 2006).

The species described and illustrated are from 65 playnofloral localities (located on a map in figure 1) of the Polish Neogene, from various stratigraphical units (outlined in Table 1). The described taxa are illustrated in a total of 67 plates. The plates are well organized, and include light and scanning electron microscopy images. The resolution is excellent and the details of the SEM images are clear and support the LM images. The light micrographs are provided at x1000, and the SEM

images are usually from 2500 to 10000 times magnification. Often in works covering so many taxa, the illustrations within each of the plates are reduced to save space and cost. The images here are large enough to see the fine detail needed to understand the morphology of the taxa described. The editor is to be congratulated for selecting the appropriate size and clarity of the individual images.

Atlases of fossil spores and pollen, as the three volumes published to date by the W. Szafer Institute of Botany, Polish Academy of Sciences, are an invaluable source of reference for all palynologists. Frequently I am searching for descriptions of fossil pollen or spore species, or in need of a complete synonymy, and need to spend hours searching through the scattered literature to locate the taxa in question. With works as Stuchlik and colleagues (M. Ziemińska-Tworzydło, A. Kohlman-Adamska, I. Grabowska, B. Słodkowska, H. Ważyńska and A. Sadowska) have produced, the search is made so much more easily. This volume, as are the earlier volumes, is a fine addition to the libraries of those involved with Paleogene and Neogene floras, not only from Europe, but

elsewhere around the world. Considering the volume of work, and the inclusion of the numerous photographs, the cost is very reasonable.

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Atlas of Pollen and Spores of the Polish Neogene
Volume 3 – Angiosperms (1).

Leon Stuchlik (editor, pictured left).

W. Szafer Institute of Botany

Polish Academy of Sciences, Kraków

233 pp., 67 plates. ISBN: 978-83-89648-74-7, 2009. Price:
60.00 EURO (US\$ 89.00).

Darwin's Origin of Species: A Biography.

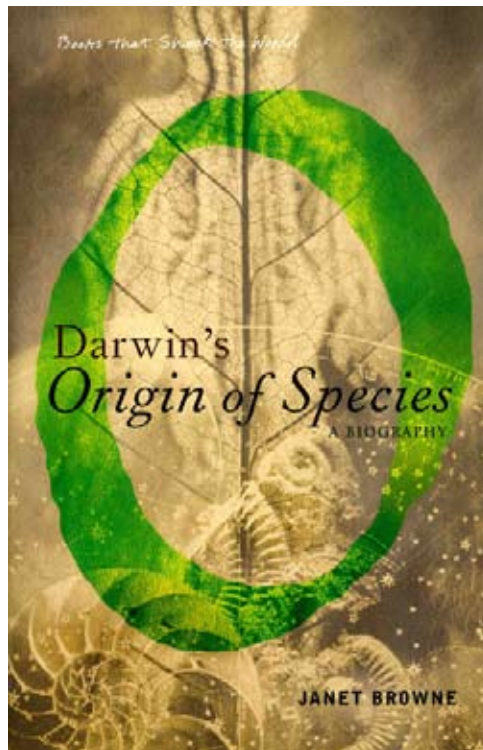
By Janet Browne

A book review by Alwynne B. Beaudoin
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There are many books that every educated person should read but few do, largely because the books are intimidating, the language is often difficult, and the ideas within them are challenging if not apparently incomprehensible. On a slightly less prescriptive level, almost any college-educated person will be able to come up with a list of books they feel that they *ought* to have read but haven't. Such books include long novels (*War and Peace*, *Remembrance of Things Past*, *Don Quixote*) as well as writings about science and ideas (*A Short History of Time*, *History of Western Philosophy*). Certainly *On the Origin of Species* falls into that category, as one of the great unread books in science. Almost all geoscientists and bioscientists will know about it, but very few will actually have read it from cover to cover, as I was surprised to find in recent discussions with some of my colleagues. From this perspective, Janet Browne's short volume, one of a series called *Books that Shook the World*, may in part demystify *On the Origin of Species* and perhaps bring new readers to that work. Her book provides a brief assessment of the significance of the *Origin* and gives some background and context on how it came to be written.

Browne is well placed to write this book, having produced a superlative two-volume life of Charles Darwin and having worked for many years on the Darwin

Correspondence project. She draws on that knowledge and those sources to pull together a succinct history of the *Origin*. Naturally, most of this focuses on the author, Charles Darwin. In fact, Browne's account falls neatly into two halves. The first (three chapters) deals with Darwin's life and how he came to write the *Origin*, while the second half (two chapters) deals with its post-publication impact and continuing influence.



In the first chapter, Browne begins the story by describing Darwin's childhood and education and his observations and experiences during the voyage of the *Beagle*. As with most Darwin biographers, she sees this voyage as the formative event in his life. She then describes Darwin's post-*Beagle* life, including his marriage, his move to Down House, his maturing as a scientist, and the slow incubation, lasting more than twenty years, of the ideas at the heart of the *Origin*. Darwin might have spent many more years assembling evidence and refining his thoughts had not his serene life of study been jolted by the arrival of the famous essay from Alfred

Russel Wallace in June 1858, containing some almost identical ideas. Encouraged by his friends, especially Charles Lyell and Joseph Hooker, and galvanized by the thought of his work being pre-empted, Darwin spent the next thirteen months feverishly writing *On the Origin of Species*, which was finally published on November 24 1859. He always regarded it as an

abstract, a short form of the more complete work that he wanted to write.

Browne describes the immediate post-publication furore in a chapter aptly named “Controversy”. Darwin’s proposal that “living beings should not be regarded as the carefully constructed creations of a divine authority but as the products of entirely natural processes” elicited a storm of debate. Darwin himself did not relish the controversy his work aroused but he had several able defenders and advocates, the most articulate of which was the biologist Thomas Henry Huxley. Of course, Browne includes an account of the verbal contest at the British Association meeting in Oxford in June 1860 between Bishop Samuel Wilberforce and Huxley in which the audience “felt they had witnessed in miniature a titanic confrontation between the church and science”.

The concluding chapter (“Legacy”) summarizes the long-term aftermath and consequences of the *Origin*’s publication, including its impact on the direction of scientific research and discovery as well as “trickle down” effects within social sciences and the wider society. Biologists concentrated especially on the search for mechanisms of inheritance. Later, the re-integration of Darwin’s ideas with the new science of genetics and with revitalized population biology culminated in the so-called “modern synthesis” and the subsequent emergence of evolutionary biology as “a recognizable scientific discipline”. This section skates over a huge amount of material at a breathless pace, with much name-dropping, including Simpson, Mayr, Dawkins, Wilson, Ardrey, Morris, and Lorenz. The discussion is, perhaps, too compressed, since these other figures are barely situated within their own time and I think it would be difficult for anyone who hasn’t already some familiarity with them to appreciate their significance to the evolution story. Browne also includes a brief discussion of the rise of social darwinism with its concomitant links to eugenics and the unfortunate political distortion of these ideas by a series of repressive and often murderous twentieth century political regimes. The book finishes with a look at the continuing impact of the *Origin* on culture, not least in the resurgence of the creationist movement in the United States, which Browne characterises as powerful because of

“the securities it offers in an increasingly turbulent world”. Overall, Browne seems much less comfortable with this material than with biographical and historical matters. This chapter, I feel, tries to do too much.

So did *On the Origin of Species* truly “shake the world”? Browne clearly believes so, since she opens her survey by describing it as “surely one of the greatest scientific books ever written” and ends by describing the *Origin* “as one of the hubs of transformation in Western thought.” In this series it is in powerful company with, among others, *The Bible*, *The Qur’an*, *Das Kapital*, Plato’s *Republic*, Adam Smith’s *Wealth of Nations*, and *The Iliad* and *The Odyssey*. With the exception of Homer’s works, these are all overtly political, religious, philosophical, or didactic works. At first glance, Browne’s focus work seems out of place in this group, as the only volume dealing with science and the natural world, whereas the rest focus on human society and culture. But deeper consideration shows that this is too restrictive. As Browne notes, in the *Origin* “Darwin seemed to be expelling the divine completely from the Western world, calling into doubt everything then believed about the human soul and our sense of morality”. In this sense, the work is as much a philosophical statement as an examination of some, at times obscure, aspects of natural history.

Browne’s introduction is especially timely in this Darwin anniversary year, which sees the 200th anniversary of his birth and marks 150 years after the initial publication of *On the Origin of Species*. Her book is no substitute for reading a more complete biography of Darwin or the work itself. Its brevity confers some inevitable limitations. For instance, I felt that the relevance of Darwin’s book to modern geoscience and biology should have been given more prominence. Yet as an introduction to Darwin and his writing, this book provides an articulate and highly readable account. Taking no more than a few hours to read, Darwin buffs will find it useful as a concise summary. Anyone interested in the history of geoscience will find it rewarding and a good investment of time. If it encourages more people to read Darwin’s work directly or to investigate the later development of thinking about evolution, Janet Browne’s book will have performed sterling service.



Janet Browne (2006)

Darwin's Origin of Species: A Biography.

Douglas and McIntyre, Vancouver. xi + 174 pages. ISBN: 978-1-55365-248-9. Hardcover. \$20.95 USD



42nd Annual Meeting of the AASP-The Palynological Society Meadowview Convention Center, Kingsport TN



The 42nd Annual Meeting of the AASP-The Palynological Society is being held in the Appalachian Mountains of east Tennessee, bordering Virginia, and North Carolina. The meeting will be held at Meadowview Resort (<http://www.bookmarriott.com/329/index.html>) at the foot of Bay's Mountain, in the Tri Cities (Bristol-Kingsport-Johnson City) and offers a stunning setting with swimming, golf (18 holes only \$45 with cart) and local tourist attractions (Barter Theatre, and all that Ashville, N.C., Pigeon Forge and Gatlinburg have to offer less than 90 minutes away). It is especially fun for children. The airport is located just a few miles from the resort (<http://www.triflight.com/>). In addition, ***the cost of the meeting is all inclusive***. This means the prices include the entire meeting package, i.e., meeting registration, resort hotel accommodations, food (outstanding Breakfast, Lunch & Dinner buffets), Icebreaker with music by *The Bearded* (<http://www.thebearded.org/mnuHome.htm>), Tuesday Evening Banquet with music by the ETSU Music Department Jazz Ensemble, transportation to and from events, the Wednesday business luncheon, and workshop (if applicable). **The costs are very reasonable for students especially for 2 or more students occupying a room and for international attendees.** Field trip or attendance at the International Story Telling Festival is separate.

The website linked to the AASP-The Palynological Society web site is open for registration, and a secure website is linked to it for online payment, follow the instructions. Continue to check the web page for updates, and if anyone has any questions contact me at zavadam@etsu.edu or 423-439-6919, I will respond within 24 hours to all queries.

Plans for the pre-meeting workshops are being finalized. Plans for the Saturday workshop (September 26, 2009): *Understanding Pollen and its Application to Forensic Palynology* are moving forward. In addition, this workshop will be open to regional teachers that may want to incorporate this aspect or some other aspect of palynology in their curriculum. The plans for a Sunday workshop (September 27, 2009): *“Working with palynodata and Palynoplots”* by Chris Jessop and James White promises to very valuable to any one that has purchased the program or is planning to purchase the program. We have room for 10 participants that have not purchased the program that wish to assess its capabilities and additional room for those that have purchased the program and wish to get the most from this software. **NOTE: If you are planning to attend one of the workshops fill out the downloadable registration form from the webpage and email it to zavadam@etsu.edu by August 10, 2009.**

Thematic sessions on forensic palynology, and in honor of R. Kapp are also being planned for the technical portion of the meeting. In addition the society will be sponsoring two general lectures open to the public featuring, David Jarzen: *Palynology and the Artist: one way to make reconstructions of past environments*, and Lucy Edwards: *Buried Surprises – A Paleontologist Tells Tales of the Largest Impact Crater in the U.S.*

I also want to remind every member and non-member whether attending the meeting or not, you are welcome to submit your best “artistic photographs” that depict any aspect of palynology (including industry, organic petrology, ultra-structure, etc.) for a display that will be presented at the Natural History Museum and Gray Fossil Site. The exhibit opens on the night of the ice breaker September 27, 2009 and will run about 2 months. We will also take suggestions for the name of the exhibit. Send an electronic version of the photograph(s) or a high quality photograph on paper to Michael S. Zavada, Department of Biological Sciences, Box 70703, Johnson City, TN 37614 or electronically to zavadam@etsu.edu. The museum will mount and label the photographs, and will be returned at the end of the public display.

We are also planning two post meeting field trips. **Field trip #1** - Appalachian Habitats / Shady Valley / Rocky Fork, Leader Fred Alsop, This field trip is primarily for people interested in the fauna and flora of Appalachia, particularly the birds. Fred is a well known ornithologist and an excellent field biologist Price includes 3 more nights at Meadowview, transportation and all field materials (\$450). **Field Trip #2** Tennessee – Dayton, TN/ Paris, TN, Leaders Chris Liu & Mike Zavada. First Stop is the Dayton, TN Courthouse location of the Scopes Monkey trials, then on to the TN Ball clays (Eocene) near Paris TN for collecting, price includes accommodations, transportation, all field materials (\$450). **NOTE: If you are planning to attend a field trip please send an email by August 10 to zavadam@etsu.edu indicating your interest.**

Immediately following the meeting is the International Storytelling Festival in nearby Jonesborough, TN. This festival annually attracts tens of thousands of people for down home fun, and includes crafts, music, and showcases the rich folklore and oral traditions of the Appalachian people. Accommodations will be available at Meadowview at \$120/night including food but all arrangements are at your discretion.

Meeting Schedule

Friday, September 25, Check-in if attending workshop

Saturday, September 26,

The Saturday Workshop: Understanding Pollen and its Application to Forensic Palynology

Sunday, Sept. 27, Check-in & Meeting Registration, Icebreaker at Museum of Natural History and Gray Fossil Site

The Sunday Workshop: Working with Palynodata

Monday, September 28, Sessions, Public Lecture

Tuesday, September 29, Sessions, Evening Banquet

Wednesday, September 30, Sessions, Business Luncheon, Public Lecture

Thursday, October 1, Field trip #1, Field Trip #2

Friday, October 2, Storytelling Festival

Saturday, October 3, Field trips return to Meadowview, International Storytelling Festival

Sunday, October 4, Check-out of hotel, Last day of Storytelling Festival

Registration

A Non-Refundable deposit of \$250 is required at Registration although you can submit the entire amount at the time of registration. Abstracts and registration is due by **August 10, 2009**. **The prices below are all inclusive.**

Note: our secure site for payment is <https://etsuaw.etsu.edu/wconnect/ace/home.htm>, click on currently scheduled courses, then biological sciences, then 42nd Annual AASP Annual Meeting. Register by logging on, or the form may be submitted online, called in, or printed and mailed or faxed. Fax the information to our secure fax at 423-439-8267. If you have any questions do not hesitate to contact Michael Zavada at zavadam@etsu.edu or call 423-439-6919.

All are per person rates

Meeting Only

Option 1 – Sunday Check in – Wednesday Checkout

Single	Double	Triple	Quad
\$875	\$775	\$650	\$625

Option 2 – Saturday Check in – Wednesday Checkout

<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quad</u>
\$1000	\$825	\$775	\$725

Option 3 - Sunday Check in – Thursday Checkout

<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quad</u>
\$1000	\$825	\$775	\$725

Option 4 – Saturday Check in –Thursday Checkout

<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quad</u>
\$1125	\$950	\$900	\$850

Saturday Workshop + Meeting

Includes cost of the workshop

(Transportation will be provided to and from Meadowview and ETSU)

Option 1 – Friday Check in – Wednesday Checkout

<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quad</u>
\$1150	\$1025	\$925	\$875

Option 2 – Friday Check in –Thursday Checkout

<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quad</u>
\$1275	\$1100	\$1050	\$1000

Meeting + Field Trip

Add the approximate cost of the field trip or event to Options 3 or 4 for Meeting Only

Field Trip #1--Appalachian Habitats: Flora, Bears, and Birds, Organizer: Fred Alsop (add approximately \$450) This includes food, transportation, and accommodation, guides and materials. *Minimum 10 participants*

Field Trip #2--Tennessee Ball Clays, Collecting the Clairborne, Organizers: Liu and Zavada (add approximately \$450) Includes transportation, accommodations, light breakfast, a visit to the Courthouse and Museum in Dayton, TN, the site of the Scopes Monkey Trial (<http://www.law.umkc.edu/faculty/projects/FTrials/scopes/scopes.htm> or <http://www.bryan.edu/1990.html>), and fossil collecting near Paris, TN. Does Not include lunch and dinner Thursday-Saturday. *Minimum 10 participants*

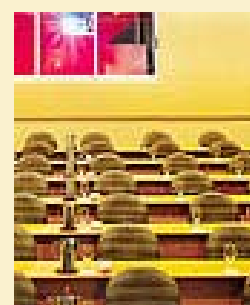
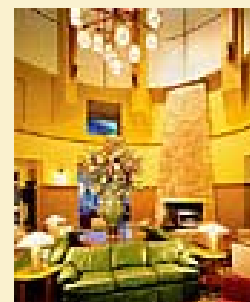
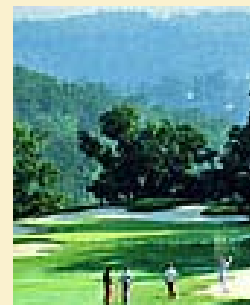
Field Trip #3--International Storytelling Festival, Jonesborough, TN (\$120 each additional night at Meadowview (all inclusive) + (the cost of the ISF Tickets see <http://www.storytellingcenter.net/festival/about-fest.htm> pay on your own). Meeting participants can stay on at Meadowview for this international event that begins on Friday October 2 and ends Sunday October 4 in the oldest town in Tennessee, Jonesborough and attend one, two days or all of the festival.

Saturday Workshop + Meeting + Field Trip

Add approximate cost of the field trip to the following if you want to participate in the Workshop and the field trip for the best value. Those attending the International Storytelling Festival (ISF) should add \$120 for each additional night at Meadowview and pay for their own ISF tickets. **NOTE: During the International Story Telling Festival local Motels double their prices and most are booked well in advance.**

Friday Check in – Thursday Checkout

<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quad</u>
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\$1275 \$1100 \$1050 \$1000

NOTE: That accompanying persons NOT attending the meeting, but staying at Meadowview, will receive the following credits:

NOT Attending the meeting \$215

NOT attending the Saturday Workshop, but taking the Workshop + Meeting option \$25

NOT attending the Banquet, but can still eat at the hotel restaurant \$10

NOT attending the Luncheon, but can still eat at the hotel restaurant \$10

ALL are welcome to attend the Icebreaker

For example, if a spouse is coming but not attending the meeting and chooses the Meeting Only-Sunday check in and Thursday checkout, double, the cost is \$825 for the registrant and \$590 for the spouse (\$815 -\$215 credit for registration -\$20 credit for the banquet and Luncheon = \$590), this includes registration, hotel, food, banquet, luncheon and icebreaker for the registrant and spouse's hotel, food and the icebreaker.

Attendees also have the Option of paying *a la carte* for the meeting and making their own arrangements for the hotel and food, the breakdown is as follows:

Registration (includes Icebreaker) \$250

Luncheon \$35

Banquet \$45

Saturday Workshop (Forensic) \$25

Sunday Workshop (Palynodata) Collected at the workshop \$25



2010 AASP-CAP-CPC joint meeting, Halifax Nova Scotia September 29-October 1st, 2010

Please mark you calendars and plan to attend the joint AASP-CAP-CPC meeting in Halifax, Nova Scotia, September 29-October 1st. The meeting will be held at the Harbourview Holiday Inn, just minutes from the ferry terminal and with spectacular views of the Halifax Harbour.

Rob Fensome, Peta Mudie and Graham Williams are the Local Organizing Committee.

We are planning exciting field trips, including one to Joggins World Heritage site where you can see some of the most spectacular fossil tree trunks and the world's earliest reptiles.

Other field trips will possibly include locations such as the Paleoindian site in Debert, the Cobequid-Chedabucto fault, the North Mountain Basalt, Arisaig, and the unique Windsor gypsum cliffs at St Croix. Impressive drumlin fields and glacial deposits are found throughout Nova Scotia, especially around Old Town Lunenburg, a UNESCO World Heritage Site.

And let's not forget that the Bay of Fundy has the largest tides in the world!



CIMP Faro'09 Second Joint Meeting of the Spores/Pollen and Acritarch Subcommissions

The second joint meeting of the spore/pollen and acritarch subcommissions will take place in Faro, Portugal, September 20-24. A two-day technical session is planned, followed by a two-day fieldtrip to the key outcrops of the Upper Devonian to Carboniferous Southwest Sector of the South Portuguese Zone.

This meeting follows the highly successful first spore and acritarch meeting in Lisbon, Portugal in 2007, and promises to be just as exciting and worthwhile as the first joint meeting. The web page with all the information for this meeting is up and running and can be accessed at:

<http://cima.ualg.pt/eventos/cimpfaro09/home.html>

We look forward to seeing many of our colleagues in Faro this September.

The Organizing Committee,
Paulo Fernandes, Zélia Pereira, Tomás Oliveira, Geoff Clayton, and Reed Wicander



The Society of Ethnobiology

The Society of Ethnobiology invites papers for our 2010 conference "The Meeting Place: Integrating Ethnobiological Knowledge", to be held 6-10 May, 2010, in Victoria, British Columbia. This year's conference theme celebrates the potential of ethnobiology to bridge disciplines, ideas, and communities, and to foster an understanding of the connections between the biological and cultural worlds. Please visit the Society of Ethnobiology website for details: <http://www.ethnobiology.org/node/249>.

Job market!

POSITIONS AVAILABLE

AASP ENDOWED CHAIR IN PALEOPALYNOLOGY:

We seek an individual that will develop a program in stratigraphic paleopalynology, particularly chronostratigraphy and/or paleoecology. The successful candidate will serve as Director of the American Association of Stratigraphic Palynologists (AASP) Center for Excellence in Palynology within the Department of Geology & Geophysics at Louisiana State University.

Candidates with significant academic and/or petroleum industry experience, along with administrative leadership skills commensurate with building and directing a research center are encouraged to apply.

Required Qualifications: Ph.D. in geological sciences or other relevant disciplines; a strong record of published research; demonstrated ability to attract funding. Responsibilities: supervises graduate student research; publishes in highly ranked journals; teaches undergraduate and graduate courses in his or her area of specialization. Chair appointments would normally be made at the rank of Full Professor. However, exceptional candidates at the Associate Professor level will be considered.

The Department of Geology and Geophysics consists of 15 tenured and tenure-track faculty members having a wide range of expertise and offers B.S., M.S., and Ph.D. degrees in geology. The Department has a strong record in research and graduate training, ongoing federal and industry funded research and teaching programs, and a large and active alumni base. Two interrelated focus areas: ³Evolution of Sedimentary Systems² and ³Earth Materials and Solid Earth Processes² have been developed within the LSU Department of Geology and Geophysics to enhance existing strengths of the Department and allow the Department to interface synergistically with other academic units at LSU. See www.geol.lsu.edu for more information regarding these focus areas, faculty, facilities, and research programs.

An offer of employment is contingent on a satisfactory pre-employment background check.

The application will remain **open until suitable candidates are selected**. Nominations or inquiries should be directed to Endowed Chair Search Committee, at 225-578-3353 or geology@lsu.edu. Applicants should send a copy of their curriculum vitae (including e-mail address), a statement of their research and teaching interests, and the names, addresses, phone numbers, and e-mail addresses of at least three references to:

Endowed Chair Search Committee
Department of Geology and Geophysics
Louisiana State University
Ref: Log #2013
Baton Rouge, LA 70803



From the desk of the Secretary-Treasurer

It's my pleasure to present to you some numbers from my Secretary-Treasurer's report presented at the mid-year Board of Directors meeting held in Houston on March 21, 2009.

Secretary's Report

As of end-February, 2009, our membership totals were 525 members. This included 403 Individual members, 54 Retired-status members and 68 Institutional members. Of the Individual members, 52 were documented as Students. At the time of the mid-year meeting, an unfortunate 121 Individual members had not renewed their AASP membership for 2009. Since that time a few members have paid up, but at the present time 94 members are still in arrears. Those of you who are guilty of not paying for 2009 have received numerous notifications, snail- and e-mail as to your membership status. If you are unsure, please check the AASP website to see if you are paid up for 2009. I will be sending out at least one more plea for renewal, so we very much look forward to your membership payment. If you have problems navigating the new secure on-line payment website, please contact me and I'll be happy to work out alternative payment methods for you.

Additional recent Secretarial duties have included updating the AASP by-laws as a result of the votes held earlier this year. I'm happy to report that the membership overwhelming voted to include the the Newsletter Editor as a permanent member of Board of Directors (increasing our numbers to 11 in total), and also to include the Cenex Committee as a permanent Committee of AASP. Thanks to all of you who took the time to turn in your ballot. Look forward to the annual election ballot, coming out very soon. The slate of candidates was presented in the March Newsletter.

Finally, in order to decrease our costs of printing and posting the Newsletter we have decided to stop sending out paper Newsletters to Individual/Retired members. There are only a few exceptions, and all members should now receive the Newsletter via announcement and website download. Additionally, we have asked Institutional members to also receive the Newsletter electronically: the response has been lukewarm, but it's a start at reducing unnecessary printing, and unnecessary postage.

Treasurer's Report

As of February 28th, 2009, AASP total assets stood at US\$69,471.24. This is down considerably from the previous Sec-T's report, and I think many of you understand why. The recent downturn has hit our mutual fund accounts, but not as hard as could be. I believe our mutual funds are in good shape to take advantage of the recent and future upturn in the stock market, and hopefully I will report some positive numbers at the Annual Meeting in Tennessee later this year. We continue to safely pay all our bills thanks to varied income, importantly our royalty payments from the journal aggregates. Next year this may change slightly, but Jim Riding and I have run all the number and we believe our future publishing and royalty agreement will be just as positive to our bottom line. In early May, past Secretary-Treasurers Gordon Wood and David Pocknall audited the AASP accounting, and passed on their findings in a report on to President Fred Rich. The audit is necessary every two years as prescribed by the by-laws.

All being said, despite the downturn in the economy we continue to sponsor palynological activities of interest to our membership. We recently awarded our two AASP Student Scholarships (US\$1500 apiece: biographies appearing in this Newsletter), we are sponsoring student travel to the Urbino Dinoflagellate Short Course (Brinkhuis, U. of Utrecht) and in the Fall we will sponsor student travel to the AASP Annual Meeting in Kingsport, TN. Earlier this year we supported student participation in the NAMS Microfossils II Conference (Houston, TX) and in late 2008 we supported student travel to the GSA Meeting, also in Houston, TX.

I am still excited to serve you as Secretary-Treasurer, and am happy to continue these duties for my 11th year. If any members have questions or concerns over any Secretarial or Treasurer issues, please feel free to drop me a note at tdemchuk@swbell.net.

Respectfully submitted,
Dr. Thomas D. Demchuk
AASP Secretary-Treasurer

Membership Updates

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