

PRISCUM

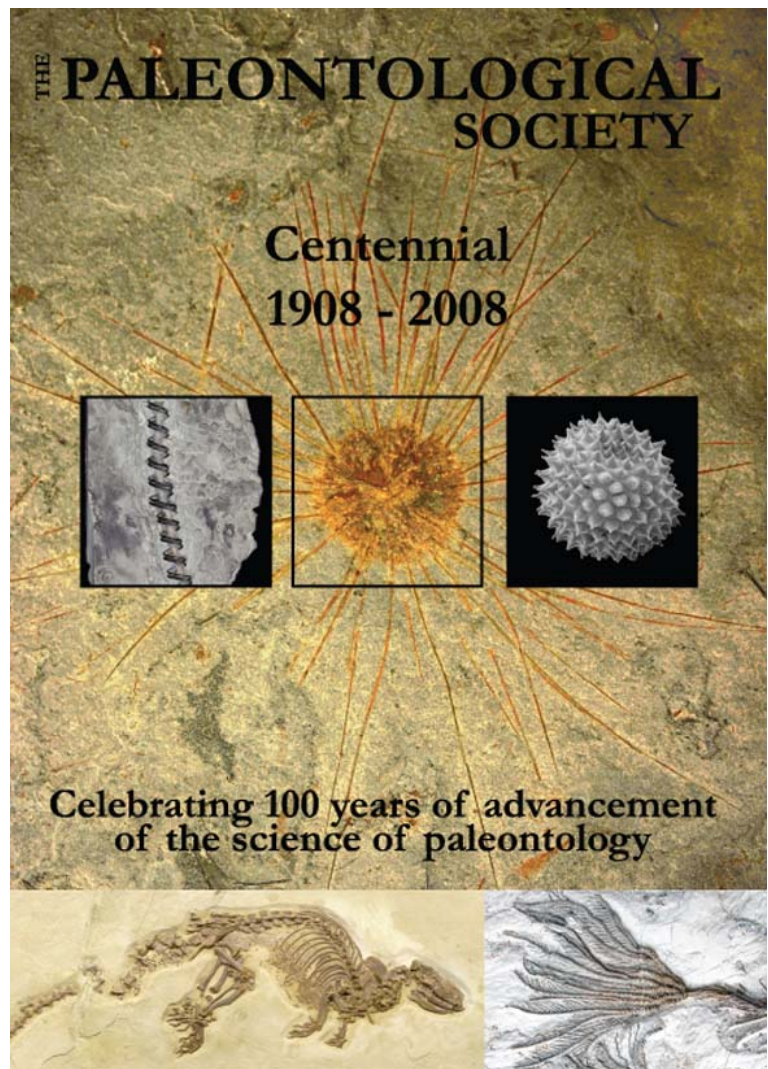
The Newsletter of the Paleontological Society

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Summer 2008

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Paleontological Society Sponsored Events Centennial Celebration GSA 2008

October 4-9th, Houston, Texas

This schedule lists only events sponsored by the Paleontological Society. A full meeting schedule is available on the meeting website: <https://www.acsmmeetings.org/>. Please note that all sessions will be held in the Brown Convention Center unless otherwise noted.

PS EVENTS BEGIN ON SATURDAY, OCTOBER 4TH AND END ON THURSDAY, OCTOBER 9TH. POSTER SESSIONS WILL BE POSTED ALL DAY, WITH PRE-SENTERS AVAILABLE FROM 4 - 6PM.

Saturday

Centennial Short Course

8am - 5pm: From Evolution to Geobiology: Research Questions Driving Paleontology at the Start of a New Century

Organizers: *Patricia H. Kelley (University of North Carolina, Wilmington) and Richard K. Bambach (Smithsonian National Museum of Natural History)*



At the centennial of the Paleontological Society, our program surveys the broad range of research topics that hold promise for the future in our profession. Rather than asking "the usual suspects" to pontificate on what we already know interests them, we have invited a group of young to

mid-career leaders to address the spectrum of research questions that are motivating their research. New approaches to issues ranging across all of paleontology, each with new results, are on the program. Geobiology, evolution, vertebrate paleontology, systematics, isotope studies, paleobiogeography, paleoecology, paleobotany and more are represented. This will be a day to connect with the "new" multidisciplinary paleontology. Join us and expand your horizons. Speakers include: Abigail Allwood, Kevin Boyce, Christopher Brochu, Andrew Bush, Gregory Dietl, Gene Hunt, Hope Jahren, Rowan Lockwood, Gordon Love, Ryosuke Motani, Shanan Peters, Kevin Peterson, David Sepkoski, Alycia Stigall, Colin Sumrall, Leif Tapanila, Peter Wilf, and Shuhai Xiao.



Paleontological Society Centennial Celebration Reception (6:30pm) and Dinner (7:30pm)

Houston Museum of Natural Science

Dinner, raffles, giveaways, live entertainment, and more! Purchase your tickets on the GSA website.



Sunday

Morning: Oral Sessions

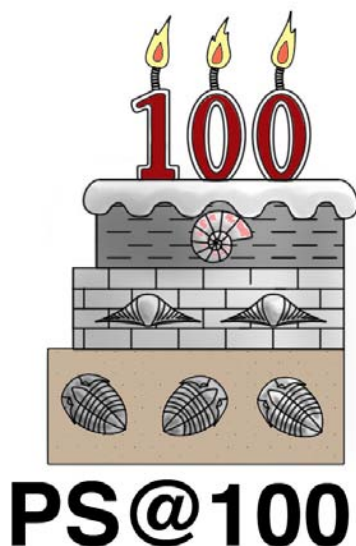
- T44 - Deep Time Earth Life Observatories (DETELOs): Focusing on Critical Transitions in the History of Life
- T49 - What Good Are (Fossil) Plants Anyway? New Methods for Investigating Old Problems
- T51 - Neontological Solutions to Paleontological Problems: Actualistic Studies of the Morphology, Behavior, and Ecology of Modern Analogs for Ancient Organisms

Afternoon: Oral Sessions

- T10 - Ancient Polar Ecosystems and Environments: Proxies for Understanding Climate Change and Global Warming
- T52 - Paleontological and Sedimentological Consequences of Calcite and Aragonite Sea Dynamics
- T55 - Phylogenetic Perspectives on Assembling the Tree of Life in Deep Time

Poster Sessions

- T49 - What Good Are (Fossil) Plants Anyway? New Methods for Investigating Old Problems
- Paleontology (Posters) I - Diversity, Evolution, and Biogeography



Monday

Morning: Oral Sessions

Pardee Symposium

Breakthroughs in Paleontology: Paleontological Society Centennial Symposium

Organizers: Jere H. Lipps (University of California, Berkeley) and J. William Schopf (University of California, Los Angeles)

This session celebrates the Paleontological Society's Centennial by highlighting the signal advances made in paleontology over the past 100 years. The presentations fall into three major themes: 1. Unveiling the Record of Life's History; 2. Paradigm-changing Breakthroughs; and 3. Paleontology's Contributions to Society and the World.

- T46 - Leaving Traces—Making Marks: In Honor of H. Allen Curran I
- Paleontology I - Macroevolution, Diversity, and Biogeography

Afternoon: Oral Sessions

- T9 - Crises on the Reefs? Anticipating the Effects of Global Warming on Reefs by Reference to the Fossil Record—Is the Past Really the Key to the Present in the New Field of Conservation Paleobiology?
- T46 - Leaving Traces—Making Marks: In Honor of H. Allen Curran II

Paleontological Society Awards Reception

4 - 6pm (no tickets required)

Hilton Hotel, Ballroom of the Americas, F

Come celebrate with the 2008 Paleontological Society award winners. Free beer and food.

Tuesday

Morning: *Oral Sessions*

- T40 - After the Last Ammonite and before the First Horse: Patterns of Ecological and Climatic Change during the Paleocene
- T42 - Breaking the Curve: Historical Development, Current State, and Future Prospects for Understanding Local and Regional Processes Governing Global Diversity I
- GC2 - Applied Micropaleontology: Tools and Techniques for the 21st Century

Afternoon: *Oral Sessions*

- T42 - Breaking the Curve: Historical Development, Current State, and Future Prospects for Understanding Local and Regional Processes Governing Global Diversity II
- T170 - From San Salvador and Beyond: A Tribute to Don and Kathy Gerace and the Development of the Gerace Research Centre
- GC15 - Gulf of Mexico Coastal Plain Paleontology
- Paleontology II - Organismal and Morphological Paleontology

Poster Sessions

- T37 - The Western Interior Seaway
- Paleontology (Posters) II - Paleocology, Taphonomy, and Traces

Understanding Evolution: A Public Forum

7 - 9pm

Wednesday

Morning: *Oral Sessions*

- T41 - Recoveries from Mass Extinction: Patterns, Processes, and Comparisons I

- T47 - Sclerochronological Archives from Rivers to the Sea: Documentation, Interpretation, and Utility

- T48 - Exploring the Role of Endobenthic Organisms in Enhancing Porosity and Permeability of Sedimentary Aquifers and Reservoirs

- Paleontology III - Paleocology, Geochronology, and Education

Afternoon: *Oral Sessions*

- T41 - Recoveries from Mass Extinction: Patterns, Processes, and Comparisons II

- T50 - Quantifying the Early Evolution of Life: Numerical Approaches to the Evaluation of Precambrian-Cambrian Animals and Ecosystems

- T144 - Geochemical and Geoarchaeological Analysis of Shell Middens: Climate, Ecology, and Culture

- Paleontology IV - Exceptional Preservation and Taphonomy

Poster Sessions

- Paleontology (Posters) III - Sclerochronology: Geoarchaeology, Climate and Environment

- Paleontology (Posters) IV - Stratigraphy and Morphology

Thursday

Morning: *Oral Sessions*

- T28 - Permian and Triassic Terrestrial Biotic Responses to Global Perturbations

- T43 - Field and Quantitative Paleontology, Micropaleontology, and Taxonomy: A Memorial to Roger L. Kaesler

- T54 - Integrative Systematic Paleontology for a New Century: Advancing Evolutionary, Phylogenetic, Biogeographic, and Ecologic Theory with Specimen-Based Studies

President's Report

by Paleontological Society President,
Derek Briggs

As you can hardly have failed to notice, it's the Centennial Year of the Society! The big celebration will be at the GSA meeting in Houston in October. A special issue of *Priscum* next month will detail the Society's activities there. Patricia Kelley and Richard Bambach will convene a Short Course *From Evolution to Geobiology: Research questions driving paleontology at the start of a new century* and Bill Schopf and Jere Lipps have put together a Pardee Symposium on *Breakthroughs in Paleontology* (The Paleontological Society Centennial Symposium). In addition, a record-breaking 22 topical and 8 discipline sessions are on offer, thanks to individual proposers (of course) and the sterling efforts of Rowan Lockwood, who organizes the technical program. If that doesn't whet your appetite, the Centennial Dinner in the Houston Museum of Natural Science surely will!

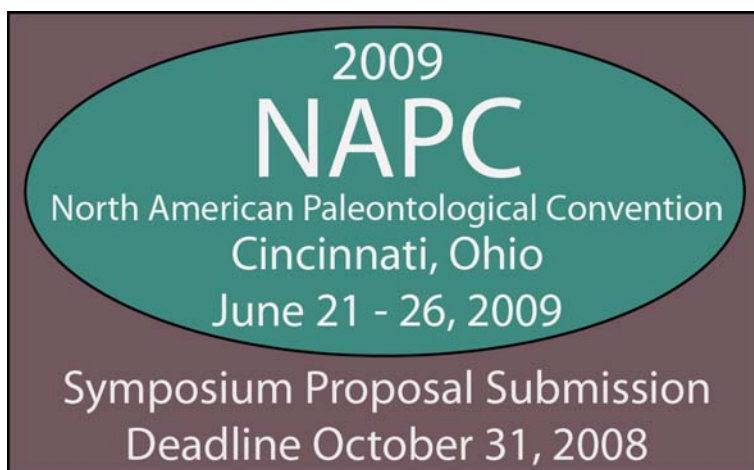


Embarking on a second century is not just about celebrating the achievements of our science and mapping the way forward. The Paleontological Society is committed to providing services for its members and leadership for the discipline as a whole. Here too there is tangible evidence that we are preparing for the next one hundred years. As you downloaded this issue of *Priscum*, you must have admired the Society's new web page. Council has taken some time to find a solution to updating our 'shop window' (efforts have been frustrated by the difficulty of find-

ing appropriate expertise and resolving issues of cost, content and accessibility). Thanks to the remarkable work of Dena Smith and her helpers we now have a website that is up-to-date, functions well and, most importantly, looks attractive. We welcome your ideas and input on the site. Please e-mail dena.smith@colorado.edu or roger.thomas@fandm.edu.

Less visible perhaps, but no less important, are the strides that Steve Westrop and Rick Lupia have made in reducing the time to publication of articles accepted by the *Journal of Paleontology*. The quality of the journal was not in question when they took it over, but a combination of circumstances, notably the number of papers submitted, had led to a lengthy delay between acceptance and publication. The editors introduced a change in font size for some sections, placed more material online, and adopted a more stringent policy on acceptance of papers. These measures, together with Council's investment in additional pages for two thick issues, have already cut the time from acceptance to publication to 10 months (the target is 8 months). Timely publication is critical to attracting the best manuscripts and maintaining the quality of the journal.

Last, but by no means least, another very important part of the Society's work is the support of young paleontologists. The Society has dedicated its Centennial Capital Campaign to raising endowment funds in support of student grants. The response has been remarkable – many of you have been extraordinarily generous. We are within about \$70,000 of our target of \$250,000 but we have only a few months to reach our goal by October. Please go online now to make your contribution – every donation, large or small, brings us nearer to our target and ensures the future of paleontology. All you have to do is click "DONATIONS" at <http://paleosoc.allenmm.com>.



Spotlight on Research

Linking Extinctions Large and Small

Shanan Peters (University of Wisconsin – Madison) has been studying the effects of sea-level on extinction rates. His research documents a direct link between sea-level fall and increased rates of extinction through geologic time, including the pre-Phanerozoic. His study is unique in that it addresses extinction rates for all of geologic history, accounts for smaller extinction events as well as the five major mass extinctions of the Phanerozoic and focuses on a common theme for extinction not just the rare, catastrophic events that may have played a role in only a few, isolated events.

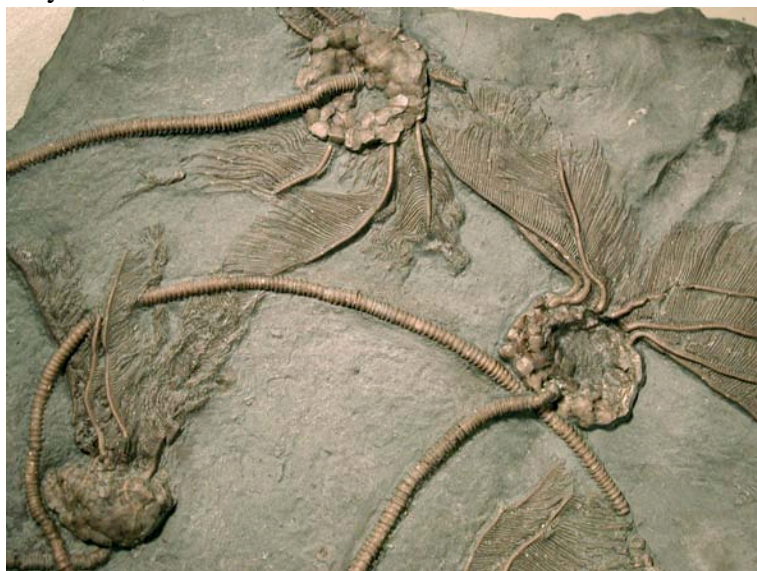


Photo courtesy of Shanan Peters

Data from both siliciclastic and carbonate dominated shelves were included and allow changes in environments associated with sea-level fall to be considered. This research provides a better understanding of fluctuations in marine diversity through time but is also important in helping us predict changes in diversity on modern shelves during the present era of climate change.

Climate Change Indicators from Insect Damage on Fossil Leaves

For her Ph.D. research, Ellen Currano has been quarrying Paleocene to Eocene leaves from the Bighorn Basin in Wyoming. She identifies the plant fossils to the species

level for analysis of plant communities and describes insect damage to the leaves for use as an indicator of insect faunal diversity and abundance. The Paleocene to Eocene transition is particularly interesting because a dramatic and rapid temperature increase documented from this time using independent sources of data correlates with high incidence of leaf damage from insects.

Currano plans to collect a sample of at least 1,000 leaves from sites ranging from 60 to 52 million years old. During her final summer of fieldwork, she will focus on collecting leaves from a relatively cool interval and expects to see a lower occurrence of leaf damage from insects.



Photo courtesy of Ellen Currano

Pigment Structures Discovered in Fossil Bird Feathers

Derek Briggs, a Yale paleontologist, and his graduate student Jakob Vinther have teamed with ornithologist Richard Prum to study carbon traces in fossil feathers. Originally thought to represent only secondary traces left behind by scavenging bacteria, SEM images reveal preserved remnants of the organelles that contain melanin, which is responsible for pigment in plants, animals and protists. In modern birds, melanin produces black and rust colors and iridescence in feathers. So far these organelles have been recognized in fossils as old as 100 million years.

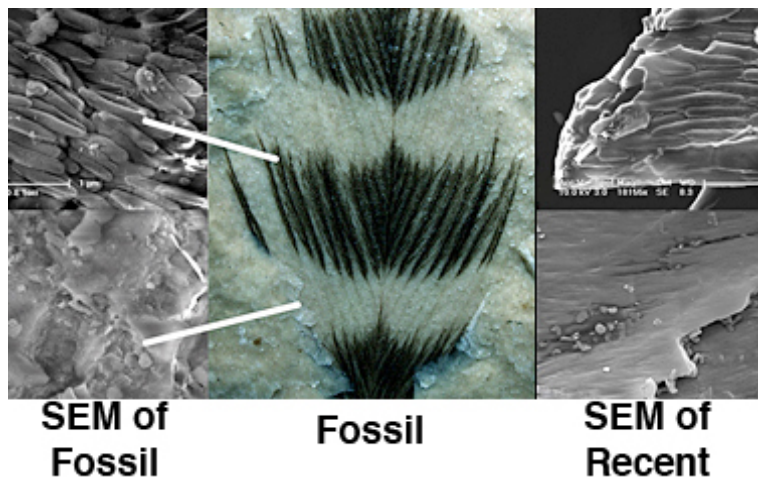


Photo courtesy of Jakob Vinther, modified by Amati

The ability to identify colors and color patterns on fossil feathers would allow interpretations of behavior in fossil birds and their ancestors the dinosaurs. This collaborative discovery has implications for other areas of paleontology including dinosaur skin and mammal fur.

2007 Paleo Society Student Awards and Grants

MAPS Outstanding Student Research Award

James Zambito (University of Cincinnati) **Winner**

Kerin Cleason (University of Texas - Austin) **First Runner-Up**

Kate Bromfield (University of Queensland) **Second Runner-Up**

Named grants are awarded annually to undergraduate and graduate students who are members of the Society. They provide \$500 of support for paleontological research in any specialty.

Caster Student Research Award

Kathleen McFadden (Virginia Polytechnic Institute and State University)

Lane Student Research Award

Melanie Hopkins (University of Chicago)

Jennifer Olori (University of Texas - Austin)

Yochelson Student Research Award

Erin Leckey (University of Colorado - Boulder)

Ellen Currano (Pennsylvania State University)

Sara Sipahioglu (University of Akron)

Gould Student Research Award

James Tapp (University of Alaska - Fairbanks)

James Shiffbauer (Virginia Polytechnic Institute and State University)

Peter Rose (University of Minnesota)

Larisa Grawe DeSantis (University of Florida)

Matt Jarrett (University of Georgia)

David Allen (Northern Illinois University)

Hillary Maddin (University of Calgary)

Mary Ellen Benson (University of Colorado - Boulder)

Jennifer Sliko (University of South Florida)

Anthony Menicucci (University of Nevada - Reno)

Celina Suarez (University of Kansas)

Kristin Hepper (University of California - Riverside)

Jill Leonard-Pingel (University of California - San Diego)

Justin Miller (University of Georgia)

Amelinda Webb (San Diego State University)

Tafline Crawford (Washington University in St. Louis)

Kristin Myshrall (University of Connecticut)

Emma Schachner (University of Pennsylvania)

Karen Koy (University of Illinois - Chicago)

Andrew McDonald (Northern Illinois University)

**We look forward to seeing
the results of your work**

at a GSA meeting sometime soon!

Paleo Society Student Poster Awards

A new tradition was started at the Fall 2007 annual meeting of the GSA. Our student representative Pheobe Cohen worked on developing the idea, designed advertising and helped organize the event. The PS would like to thank our judges Rick Lupia, Bill Ausich, Patricia Kelley, Brent Breithaupt, Arnie Miller, Peg Yacobucci, and Roger Thomas for helping to make the event a success.

Winner:

Leigh Fall (Texas A&M University) Local brachiopod diversity in the Pinery and Rader members of the Bell Canyon Formation, Guadalupe Mountains National Park, west Texas. Co-authors: Thomas Olszewski, Sara Marcus.

Runners up:

Louis Zachos (University of Texas at Austin) Spines, splines and sines: modeling the growth of living and fossil echinoids.

Thomas Schramm (SUNY New Paltz) Faunal turnover between two E.E. subunits: investigating the timing of large-scale faunal turnover in the latest Eifelian of eastern North America. Co-authors: Alex Bartholomew, Mena Schemm-Gregory.

Congratulations!

2008 Competition in Houston

All student members (including those who join at the meeting) who are presenting a poster at GSA 2008 in Houston will automatically be entered in the contest. If you do not wish to participate in the competition, please contact Lisa Amati at amatilm@potsgdam.edu or visit us at the Paleontological Society booth at GSA.

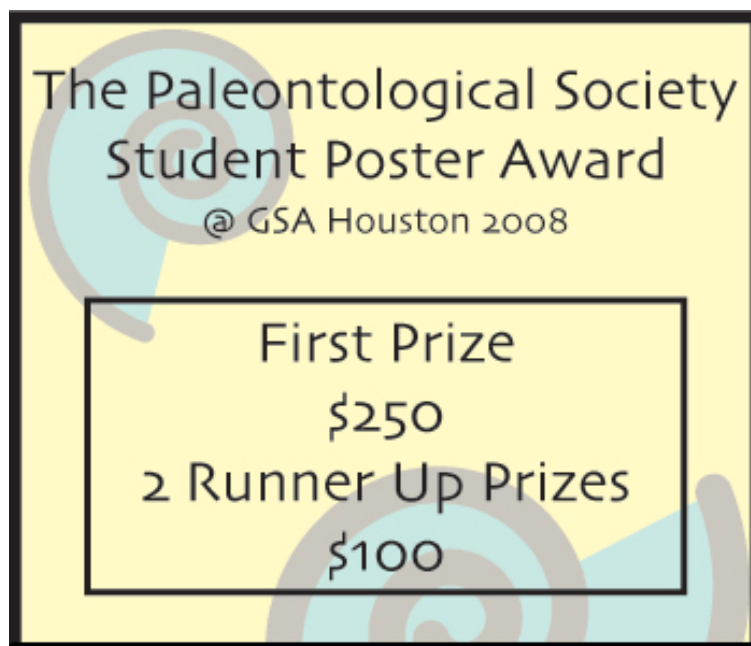
All competitors must:

- be a student member of the Paleontological Society
- be the poster presenter
- not have been granted a PhD at the time of the competition
- have published for less than 10 years in scientific journals

We are currently accepting volunteers to act as judges for the student poster contest in Houston in October! Contact Lisa Amati at amatilm@potsgdam.edu for more information or to volunteer.

Students Represented by Two Council Members

The Paleontological Society welcomes the input of its student members. To better serve the growing student community, an additional student representative was added to the PS Council. The two student representatives serve overlapping two-year terms. The Paleontological Society welcomes Christy Visaggi as its newest student representative, joining current council member Phoebe Cohen. Christy is a Ph.D. student in Marine Biology at the University of North Carolina in Wilmington working under the direction of Dr. Patricia Kelley. She completed her M.S. in Geology at Syracuse University and her B.A. in Geology at Colgate University. Her dissertation work focuses on patterns and processes affecting latitudinal variation in molluscan predation in modern communities with implications for the fossil record. Phoebe and Christy are currently working on several projects for the benefit of student members including improved online resources and new student events at meetings. Any feedback or assistance from fellow students for enhancing aspects of student membership in the Paleontological Society is greatly appreciated. Contact Phoebe at pacohen@fas.harvard.edu or Christy at ccv9261@uncw.edu.



Actions Taken by the Paleontological Society Council at the Midyear Meeting, 2008

- Council agreed to provide \$4000 in support of students' travel expenses to participate in *Walcott 2009: An International Conference on the Cambrian Explosion* in Banff, Alberta, August 3 - 7, 2009. PS will join the Palaeontological Association in sponsorship of this meeting, recognizing the 100th anniversary of the discovery of the Burgess Shale.
- Council accepted a recommendation from the treasurer that the Society's existing Financial Management and Investments Committee be reactivated.
- The treasurer's recommendation that steps be taken to identify an organization or individual to provide professional support for the secretary and treasurer in the business management of the Society was accepted. It was acknowledged that the affairs of PS are now sufficiently complex that such support is necessary to ensure that members can be recruited to fill these positions and to manage the Society effectively.
- Council approved a proposal from the editor of special publications to provide pdf files of Short Course papers to their authors, for an appropriate fee.
- Karl Flessa and Greg Dietl suggested a short course on conservation paleobiology in 2009 and Council supported the proposal. Council had previously agreed that this short course would be held on Saturday, prior to the GSA Annual Meeting, as in the past.
- A proposal from Peg Yacobucci, Councilor-at-Large, to restructure the Distinguished Lecturer/Educator program was approved. Each spring, one lecturer will be selected for a three-year term, and Council will approve a slate of potential nominees to be considered for the next spring. This spring, a slate of nominees was approved and, following the meeting, Kevin J. Peterson accepted the nomination as Distinguished Lecturer for 2008-11.
- The award for the best student poster presented at the annual meeting was amended to include two \$100 prizes for runners-up, in addition to the \$250 top prize.
- Council voted to endorse recommendations of the PS Medal Committee, the Schuchert Award Committee, and the Strimple Award Committee. The 2008 winners of these awards will be announced at the Awards Ceremony at the Annual Meeting in Houston, as is customary.

- Upon recommendations from the Committee on Nominations and acceptance by Council, the names of the following members will be placed on the ballot for election in 2008:

President-Elect: Philip Gingerich and Molly Fritz Miller

Treasurer: Roy Plotnick

Councilor-at-Large: Steven Hasiotis and Sally Walker

Editor of Special Publications: Sankar Chatterjee

- Plans for the Centennial Celebration in Houston were discussed in detail. Council voted to appropriate up to \$35,000 to underwrite student participation at a much-reduced price and also costs of facilities and equipment required for the Centennial Dinner. An additional amount of \$5000 for catering at the Awards Reception was approved. Ticket prices for the Centennial Dinner were set at \$100 (members) and \$35 (student members).
- Dena Smith, Councilor-at-Large, reported on progress in development of the new PS website. Council agreed to appropriate an additional \$5000 for this purpose.
- Council approved a proposal from Peg Yacobucci to establish an online directory of regional resource people who would be available to provide information and expert advice to the media, government officials, educators, students, and the general public.
- Council approved a proposal from Peg Yacobucci to establish a Professional Affairs Committee to advance the Society's mission through contact with government officials, private and public funding agencies, and other professional societies.
- Steps to be taken to complete the Centennial Capital Campaign were discussed.
- Council voted to maintain the same rates of individual dues for 2009 as had been established for 2007 and 2008. Institutional subscription rates were set at \$330 for the *Journal of Paleontology* and \$200 for *Paleobiology*.
- The 2008 final budget was unanimously approved, with additions as noted below:

Centennial dinner subsidy for students and fixed costs (see above): \$35,000

2008 Awards Reception, catering: \$5,000

Walcott 2009 Conference, student travel: \$4,000

Student Poster Award, prizes for runners-up: \$200

Website development, assistance to Webmaster: \$5000

- A single, joint Outgoing and Incoming Council meeting will again be held at the Annual Meeting, in Houston.

Education and Outreach

Michael Gibson, Coordinator

The Education and Outreach Committee continues to formulate activities aimed at getting Paleontological Society products to public educators in a more direct manner. We advocate a greater presence at state-level science teacher meetings as we feel that we can reach more individuals through their professional venues; however, getting university-level paleontologists to the meetings is difficult. Our university and research duties are heavy and time is limited for adding an additional trip. Additionally, workshop proposals must be arranged nearly a year in advance of these meetings and requires local contacts.

However, the Society has sponsored sessions at several state science teacher meetings and the feedback has been very positive, reinforcing our feeling that this is the most productive way for the Society to serve teachers. In November 2007, the Society and the Tennessee Earth Science Teachers (TEST) co-sponsored a workshop titled *Teaching Evolution: Using the Standards* at the annual Tennessee Science Teachers Association meeting in Nashville (co-leaders included Michael Gibson and Lionel Crews from UT Martin and Ann Holmes from UT Chattanooga). The day-long workshop covered all aspects of evolution (cosmic, geologic, and organic) with a primary lesson that evolution is pervasive, easily documented, and extends well beyond biology. With TEST's help, the teachers received a large resource box containing many activities, fossils, rocks, and other materials. The day following the primary work session five, hour-long break-out sessions were run by geologists, paleontologists, and astronomers devoted to specific topics and grade levels. The day ended with a general question-and-answer session at which teachers had the opportunity to ask questions and seek help with specific issues. As you might expect, most of the questions involved how to address issues surrounding creationism and ID. In retrospect, we feel that the two-day model outlined above was very effective and was well received according to the conference evaluations and comments to presenters. We encourage Society members to adopt this model and to organize similar workshops for their states.

On the heels of that success, the Southeastern Section of the Paleontological Society offered the same workshop for K-12 educators at the SE GSA in Charlotte, NC in April of 2008. Unfortunately, we were forced to cancel this workshop due to low pre-registration, even though the schools

in the area were on their spring break. Again, we think this underscores the need for Society members to make the effort to attend the state public education science meetings rather than rely on our professional meetings to attract teachers. Teachers are just too busy, have too little money, and do not get the support from their schools to attend GSA meetings. On the positive side, the 2008 Tennessee Science Teachers Association meeting is being held in conjunction with the Tennessee Academy of Science meeting and the academy is offering a special session on teaching evolution that will be attended by both public school science teachers and professional geologists. This cooperative effort shows the interest at the state-level among geologists and paleontologists, especially when they can combine their efforts with one of the existing professional venues.

The Paleontological Research Institute (PRI), through the efforts of Rob Ross, is planning to co-sponsor a teaching evolution session at the New Orleans NSTA meeting in 2009. A proposal has been submitted and we are awaiting notification. This is the first of a series of cooperative appearances that have been proposed by the two societies, whose education missions overlap considerably.

Elizabeth Heise and Michael Gibson attempted to organize Topical Session 180 titled *Paleontology through the Ages Teaching, Learning, or Both* for the Houston GSA Centennial. Unfortunately in this case as well, we received too few submissions for the session to run, so we have pulled it. We do plan to offer this or a similar session at a future date. We are encouraged by the proposal for a NAGT Cutting Edge workshop on teaching paleontology and wholeheartedly support that program. For more on the Cutting Edge program visit: <http://serc.carleton.edu/NAGTWorkshops/index.html>.

Updates to brochures are still proceeding, albeit slowly. Joanne Kluessendorf and Richard Davis are spearheading the Society's brochure effort. One of the committee's plans is to eventually have all of the educational materials made available on a resource disk including materials such as time scales and images.

The Education and Outreach Committee welcomes contributions and help from the Society membership. If you are organizing or are willing to organize a Society workshop or event at a teacher venue, please contact us and we will provide whatever logistical support we can.

News from the Sections

The Paleontological Society sponsored nine topical sessions at section meetings this spring. In addition, section chairs organized four paleo-themed field trips, four symposia, one short course and six additional theme sessions. It's never too early to start planning for next year! Section chairs are always looking for people to organize and chair theme sessions and lead local field trips. If you haven't attended a section meeting in a while, you might want to think about checking one out this spring. They are great places to meet with people working in the area and they provide a relaxed atmosphere in which to ease students into the process of presenting research.

2009 Section Meetings

Cordilleran Section

May 7 - 9, 2009

Kelowna, BC Canada

Chair: Stephen Schellenberg sschelle@geology.sdsu.edu

Rocky Mountain Section

May 11 - 13, 2009

Orem, UT

Chair: Forrest J. Gahn gahnf@byui.edu

North-Central Section

April 2 - 3, 2009

Rockford, IL

Chair: Benjamin F. Dattilo dattilob@ipfw.edu

South-Central Section

March 15 - 17, 2009

Dallas, TX

Chair: Cheryl L. Metz cl.metz@blinn.edu

Northeastern Section

March 22 - 24, 2009

Portland, ME

Chair: Sean R. Cornell srcornell@ship.edu

Southeastern Section

March 12 - 13, 2009

Tampa, FL

Chair: Daniel L. Frederick frederickd@apsu.edu

Eighth International Congress on Rudists

by R. W. Scott

The Rudist (not rudest) workers of the world congregated in Izmir, Turkey on June 23-25 for an exchange of research on Cretaceous paleocommunities, stratigraphy of carbonate shelves, and rudist taxonomy. Eighty-five authors and co-authors presented 56 papers on paleoecology, taxonomy, biogeography, and stratigraphy of Cretaceous rudist assemblages as well as new technologies. Dr. Sacit Özer and Dr. Bilal Sari of Dokuz Eylül University hosted geologists and paleontologists from Algeria, China, Croatia, Egypt, France, Germany, Great Britain, Iran, Italy, Jamaica, Mexico, Puerto Rico, Spain, Tunisia, Turkey, and the United States. The excellent localities of Cretaceous carbonates with rudists were displayed during three field trips. Prior to the meeting the group examined Campanian-Maastrichtian siliciclastic-carbonate sequences in eastern and southeastern Anatolia and collected spectacular rudist specimens. Following the meeting, Upper Cretaceous carbonates in southwestern Turkey and Lower Cretaceous carbonates in northern Turkey on the coast of the Black Sea were studied.

Depositional and paleoecologic models show that rudists were important elements of Cenomanian to Maastrichtian ramps and platforms in Tunisia, Puerto Rico, Croatia, Turkey, and Italy. New stratigraphic and biogeographic reports of rudists were made from Japan, Tibet, Iran, Turkey, Tunisia, Serbia, Egypt, Spain, Mexico, and California. Many rudist taxa are revised with new specimens and new data. This is in preparation for the revised Bivalve Treatise volume. The technique of computed tomographic scanning (CT x-ray) of well-preserved rudists demonstrated internal morphology and ontogeny of caprinids without destroying the specimens. Another new technology in the study of rudists that may prove to be a paleoenvironmental proxy is the measure of the calcite/aragonite ratio.

The Ninth International Congress on Rudists in 2011 will be hosted by the University of the West Indies in Kingston, Jamaica.

Book Reviews

Neptune's Ark: From Ichthyosaurs to Orcas

by David Rains Wallace

University of California Press (Berkeley), 2007,
313p.

(\$27.50 Hardcover) ISBN 0-5202-4322-6

Reviewed by Charles Monson

In 1741, naturalist G.W. Steller spotted a “very unusual and unknown” animal frolicking in the waters off Kodiak Island. The creature had a dog’s face and a shark-like tail and apparently lacked forelimbs. This “sea ape” seemed intelligent and playful, which didn’t stop Steller from firing two shots at it in an attempt to collect its body for description. Unsurprisingly, the animal retreated, and arguably nothing like it has been seen by a human being since.

In *Neptune’s Ark: From Ichthyosaurs to Orcas*, author David Rains Wallace uses the sea ape as an exemplar of the strange and obscure creatures that have populated North America’s western shores. Wallace describes the West Coast as an “ark” of marine biodiversity, an “ur-coast” which has existed in one form or another for 550 million years. Over the course of 20 chapters, he discusses the animals that have frequented the area—desmostylians and sirenians, mosasaurs and toothed birds—but he also delves into the lives of the scientists and explorers who brought these creatures to light. The result is a complex piece which doesn’t quite hang together as a seamless whole, but which contains something to interest nearly anyone.

Neptune’s Ark is a surprisingly personal work; it is an extended deep-time tour of the author’s backyard and, to a certain extent, his psyche. The book seems to have two major inspirations: Wallace’s frequent strolls in Point Reyes National Seashore, and a vivid dream he had 40 years ago. In the dream, he saw fantastic oceanic beasts coming ashore. The mythic resonance of this image helps guide the text, although Wallace focuses more on the reverse: the myriad ways that tetrapods found their way back into the water after first coming to land.

Much of Wallace’s narrative is built around significant vertebrate fossil finds from the West Coast. Rather than simply summing up our current understanding of a given clade’s membership and history, he typically explains how its fossil record has been fleshed out over time and how particular fossil discoveries have informed our understanding of that group. Wallace’s treatment is hardly exhaustive—some major taxa get only a few pages or a chapter—but it is interesting in its focus on the process of science rather than the product. This historical approach frees Wallace to discuss personalities as well as fossils. He spends considerable space on the story of Douglas Emlong (a brilliant but troubled amateur paleontologist who discovered an important Oligocene whale fossil), but he also offers fascinating asides about everyone from Mary Anning to Burgess Meredith.

Wallace’s wide-ranging interests are the book’s greatest strength. He gives attention to creatures which go overlooked in many popular-science works, such as *Kolponomos*, a coast-dwelling “oyster bear”; *Oncorhynchus*, a “saber-toothed salmon”; and even (briefly) *Thalassocnus*, an ocean-going sloth. The last chapters move away from paleontology, tackling Native American legends, dolphin intelligence, and Hoover the talking seal (a New England Aquarium captive who mimicked simple phrases with a Boston accent). You can never be sure what you’ll find in the next chapter, and that’s usually enough to keep pages turning. These shifts in subject and tone can make the book feel slightly disjointed, and Wallace’s frequent references to his personal experiences and preoccupations can be distracting. These are minor flaws, though. For the most part, it’s a good read—fluidly written, accessible without being dumbed-down, and well-illustrated (Ken Kirkland contributes handsome line drawings of beasts such as *Shonisaurus* and orcas).

Although I learned a great deal from *Neptune’s Ark*, the aspect of the book that stuck with me the most was its melancholy air. Wallace opens with the sea ape story, which he describes as an “unsurpassed” tale of “drama and atmosphere.” He’s right; it is a great story, and he paints it vividly. But “drama” implies resolution, and in many of his stories there’s just no resolution to be had. Wallace writes about “the coast’s unpredictable mix of vacancy and monstrosity” and calls it “a place where life meets limits.” It’s a place where critical fossils may be “scattered in inconvenient places like cliffs and surf-struck beaches,” vulnerable to destruction and unlikely to be found; it’s a place that apparently played a role in Emlong’s self-destruction.

By the time Wallace revisits the sea ape at the end of the book, it seems like a dispiriting symbol of all the things we'll never know about the history of life. *Neptune's Ark* has much to say about the exciting history of fossil discoveries in western North America, but it also reminds the reader that, in paleontology and in life, we are not necessarily entitled to closure.

Fabulous Fossils - 300 Years of Worldwide Research on Trilobites

Editors: D. G. Mikulic, E. Landing, J. Kluessendorf

**New York State Museum Bulletin 507, 2007, 248p.
(\$19.95 Paperback) ISBN 1-5555-7235-9**

Reviewed by John Laurie

This volume is comprised of 16 papers each dealing with some aspect of the history of study of the Trilobita. The volume commences with a short overview of the papers, written by Ed Landing. There is one rather peculiar error which indicates that the editors may not have known what the graphic designer had in mind; Ed states that the cover illustration is of Johann Walch. In fact, on the soft cover of the copy I review here are reproductions of a couple of early illustrations of the 'Dudley locust' (*Calymene blumenbachii*) as well as a modern photograph of one of Barrande's specimens of *Ormathops atavus* overlying an old map of the Tarim Basin in China. Ed also lists the countries from which contributions or topics have come. It is unfortunate that there are no papers dealing with the considerable amount of trilobite research from Russia as well as that from Poland and other eastern European or central Asian nations. I suspect this was because of the declining number of palaeontologists in some of these countries.

The first paper in the volume is by Loren Babcock who explains the role of exoskeletal malformations in understanding the palaeobiology of the Trilobita, including their response to predation, their ability to heal sub-lethal injuries and their method of molting. This paper is accompanied by illustrated examples of malformed specimens including a few reproduced from publications as old as the 1840s and has a copious reference list which will be of use should one stumble across such a specimen.

Jan Bergström deals with the work of Johan Dalman who, despite only producing one major publication on trilobites, was immensely influential. If one studies Ordovician trilobites, his name crops up regularly (much like Jan's!). Jan reproduces some of Dalman's illustrations which for 1827 were surprisingly accurate and perceptive.

Danita Brandt and Richard Davis give an overview of the 'Cincinnati school' of palaeontology. I must admit that I had heard of only a few of these scholars (Meek, Foerste, Shaler, Schuchert, Twenhofel, Ulrich & Bassler), but given that I am from the other side of the planet, that is perhaps not surprising. Brandt and Davis detail the work of each of the major contributors to the Cincinnati school in turn. Again, a copious reference list is provided, as are a few tables listing old names and modern assignments of species.

Jana Bruthansová, the late Olda Fatka, Petr Budil and Jirí Král review 230 years of trilobite research in the Czech Republic and detail the work of Barrande and Novák, with less attention being paid to Snajdr, Marek and Chlupác and others. A massive reference list is provided (copious doesn't do it justice!), which will be invaluable to those of us who are pathological accumulators of literature.

Duck Kuen Choi outlines research in Korea during the 20th century and divides it up into six stages, noting that the most significant research was done during stages II (1934-36), IV (1960-62) and VI (1992-present). The major contribution of Kobayashi is fully acknowledged despite its less than savory political context. It is also gratifying to see the health of trilobite palaeontology in Korea, which from my limited knowledge seems largely due to the author of this paper, with a considerable number of talented young researchers hitting their straps in the last decade or so. The one major problem with this paper is the reproduction of the map (Fig. 1) showing the tectonic divisions of the Korean peninsula and the broad geology of the Taebaeksan Basin: in the latter, none of the shadings for the groups of the Chosen Supergroup have been printed. As a consequence, the geological map is meaningless, except to show the position of the (presumed) major faults.

Renato Ghilardi and Marcello Simões discuss the history of trilobite research in Brazil, something of which I was totally unfamiliar as nothing older than Silurian has been published thus far from that enormous country. The part of the world with which I am more familiar follows, as Peter Jell addresses the record of Australian trilobite stud-

ies. There has been a relatively large surge of activity in recent years, but this has been neglected, as the most recent publication listed in the references is from 2000. It makes one wonder when the paper was written. Surely it couldn't take that long to get a volume such as this published.

Every serious trilobite taxonomist knows that the Class Trilobita was described by Johan Walch in 1771. His research is the subject of the paper by Robert Kihm and James St. John. Not only do they discuss his work, but they also provide a translation of Walch's Chapter III – "On the Trilobites in the Kingdom of Petrifications, or on the wrinkled three-lobed conch (*Concha Triloba Rugosa*)."

This translation is informative, as it demonstrates how Walch's reasoning is surprisingly modern while his language is annoyingly verbose and repetitive. It should be read by any who doubt how far we have come in the nearly quarter of a millennium since its publication. In addition, Kihm & St. John provide reproductions of Walch's plates as well as translations of the plate captions.

Donald Mikulic and Joanne Kluessendorf trace the history of the 'Dudley Locust', which provided some of the material of Walch's study, as these superbly preserved specimens from England were widely available in scientific circles from the middle 1700s.

Shanchi Peng explains the study of trilobites in China, which was largely carried out by Europeans (von Richthofen, Dames, Walcott, etc.) prior to the work of Sun Yunzhu in the 1920s. Peng also relates that trilobites were known and written about (as stone silkworms or stone bats) some 900 years prior to these scientific endeavors. He then records the work of those whose names every Cambro-Ordovician trilobite worker will know: Amadeus Grabau, Lu Yanhao, as well as some of the 'younger' generation. A second paper by Peng gives some more detailed biographical notes on Sun Yunzhu and Lu Yanhao. It also makes clear the devastating impact the 'Cultural revolution' had on trilobite studies: Lu Yanhao did no research from 1966-1974.

James St. John summarizes the earliest trilobite research, mostly from the late 1600s to the 1820s, and reproduces some of their illustrations such as those by Lhwyd from 1698 and 1699.

Fred Sundberg provides a hilariously named paper "Nightmare on Resser Street-dealing with Resser's trilo-

bite taxonomy". However, the paper itself is a much more serious attempt to dissect the philosophy behind, and the effect of, the horrendous taxonomic legacy left by Charles Elmer Resser's Cambrian trilobite studies. It is unsurprising that Benjamin Howell was his friend and wrote an appreciation of Resser, as he too suffered from the same type of bizarre taxonomic affliction. In Howell's case, he lived long enough to inflict his incompetence on the first edition of the trilobite 'Treatise'.

Harry Whittington reflects on the lack of agreement on the classification of the trilobites, particularly in the Cambrian, and wonders where we go from here.

Finally, the late Ellis Yochelson relates the enormous amount of sectioning done by Walcott to elucidate the nature of the appendages based on *Ceraurus pleurexanthemus* from the Walcott-Rust quarry at Trenton Falls, New York.

There were several misspellings throughout, almost entirely restricted to worker's names (Foreste for Foerste; p. 36: Sternberk for Sternberg; p. 58: Vallence for Vallance; p. 106: Alexander Öpik for Aleksander Öpik; p. 109). These, coupled with a few other formatting errors and grammatical problems are just regular enough to provide a minor irritation. The disaster with Figure 1 in the Choi paper should have been picked up by some diligent proofing. Overall, I found this book an entertaining read although the translation of Walch's work was rather tedious in its verbosity. While a book such as this can never cover every aspect of its purported topic, it provides some interesting insights and anecdotes that make one appreciate the work of such pioneers as Walcott, Lu, Walch, Dalman and Barrande and to make one realize we do stand on the shoulders of giants.

The Chronologer's Quest – The Search for the Age of the Earth

by Patrick Wyse Jackson
Cambridge University Press, 2006, 291p.
(\$30 Hardcover) ISBN-13 978-0-521-81332-7
Reviewed by Marcus M. Key, Jr.

With the controversy raging between intelligent design and evolution, the publication of Wyse Jackson's *The Chronologer's Quest* is timely. This book reviews the his-

tory of our understanding of the age of Earth from young Earth creationist biblical scholars to modern radiometric dating-based geochronologists. In only 291 pages, the author takes us from pre-Christian cosmologies to Clair Patterson's 1956 radiometrically dated 4.55 Ga meteorites. Wyse Jackson is both a historian of science as well as a professional paleontologist, and this comes through in this painstakingly-researched book.

The book quickly moves from a concise review of pre-Christian cosmologies to biblical calculations, early stratigraphic dating attempts, thermodynamic cooling rates, and finally geochronology. Some of the highlights for me include one of the best histories that I have ever read of the evolution of the geologic time scale, the history of color in geologic maps, and the important role of Hooke in the development of biostratigraphy, including an amusing etymology of ammonia and ammonites. Wyse Jackson deftly handles the long-lived negative impact of William Thomson (a.k.a. Lord Kelvin) and his overly young dates of Earth based on the thermodynamics of cooling rates without knowledge of an internal radioactive heat source. The book makes the tension between the young age physicists and the old age geologist really come alive.

The well-written text is effectively augmented by a thorough and very useful 12 page annotated bibliography, 7 tables and 50 well-chosen black and white figures, including several from the author's own collection. Of note are the reproductions of original, historically important drawings such as Hutton's Siccar Point unconformity and Lyell's Temple of Serapis. The redrawn and well annotated figure of Steno's diagrams showing the fundamental principles of relative age dating is better than Steno's original. I especially enjoyed the detailed description of Buffon's (pre-Lord Kelvin) cooling rate experiments which even includes a figure of the plan's of Buffon's forge and a raw data table showing cooling times of various sized iron spheres. The summary table of all the various age-of-Earth estimates from sedimentation and denudation rates is also useful.

This book avoids the temptation to adopt a condescending attitude towards some early attempts to determine the age of Earth which were inherently flawed by fundamentally wrong assumptions and/or ignorance of geologic processes that would not be discovered until much later. As *The Chronologer's Quest* points out, these early efforts may seem silly based on today's knowledge, but they were cutting edge science at the time. For example, attempts to

determine the age of Earth based on the rate of salination (i.e., the rate of accumulation of soluble salts in the ocean) or the rate of sediment accumulation were flawed from the start. Not only was it impossible to adequately quantify the temporally and spatially variable input rates (i.e., transport of dissolved salts and sediments into the various oceans and basins from the chemical and mechanical weathering of rocks), but some processes were overlooked or had simply not yet been fully appreciated or even discovered (e.g., dissolution, precipitation, erosion, recycling by subduction).

Each historical figure in the book is fleshed out in rich detail, but some elaborations digress too much. In my opinion, it is not necessary to go down every side road but Wyse Jackson usually does. For example, in this book about discovering the true age of Earth, you will read about Kirwan's distaste for flies, Hutton's problem with urine retention, Buckland's study of coprolites, Williams' treatise on the anatomy of domestic cats, and Haughton's research on humane hanging practices. These asides may be appreciated more by the historian of science, but as a scientist, I found them a mix of amusing and distracting.

From my perspective, there is a slight imbalance in the number of pages spent on the various research programs that attempted to determine the age of Earth. Seventeen pages are spent on fossils and biostratigraphy, 17 on salination, 26 on sedimentation rates but only 23 on radiometric dating. I would have appreciated more on the history of how the radiometric dating pioneers overcame the technical challenges they faced.

My only other criticisms of the book are minor. *The Chronologer's Quest* has a slight Irish-centric and even a Dublin-centric tone as evidenced in some of the examples chosen, but this is to be expected based on the author's home base. The only technical error I found was the reference to the Pacific plate being subducted under the South American plate; it is actually the Nazca plate.

For a history of science book, I was surprised by how dramatic the ending was. It left me in goose bumps and with a suggestion for an alternative title for the book: Standing on the Shoulders of Giants. Our current understanding of deep time owes an immeasurable debt to the early pioneers of absolute time. If you are a historian or a scientist interested in geologic time and the history of the search for the age of Earth, this well-referenced, fast-paced book is for you.

Books for Review

Following is a list of books received by the book review editor for the Paleontological Society. Volunteered reviews will be accepted if concisely written and of general interest. Books listed may be requested for review with the understanding that the resultant review will be ready for publication in the next issue of *Priscum*. Please contact the book review editor with books for review or to volunteer to review a publication: Lisa Amati, Department of Geology, SUNY Potsdam, Potsdam, NY 13676: amatilm@potsdam.edu.

- Gasparini, Z., Salgado, L., and Coria, R.A. 2007. PATA-GONIAN MESOZOIC REPTILES. Indiana University Press, 392p.
- Hall, B.K., (ed). 2007. FINS INTO LIMBS: EVOLUTION, DEVELOPMENT, AND TRANSFORMATION. University of Chicago Press, 344p.
- Hart, D. and Sussman, R. W. 2008. MAN THE HUNTED: PRIMATES, PREDATORS, AND HUMAN EVOLUTION. Westview Press, 357.
- Hedeen, S. 2008. BIG BONE LICK: THE CRADLE OF AMERICAN PALEONTOLOGY. University Press of Kentucky, 200p.
- Holtz, T. R. 2007. DINOSAURS: THE MOST COMPLETE, UP-TO-DATE ENCYCLOPEDIA FOR DINOSAUR LOVERS OF ALL AGES. Random House, 427p.
- Kohn, M. J. (ed.) 2007. PALEOALTIMETRY: GEO-CHEMICAL AND THERMODYNAMIC APPROACHES. Reviews in Mineralogy and Geochemistry 66, 278p.
- Laurie, J. R. and J. R. Paterson (eds.). 2007. PAPERS IN HONOR OF JOHN H. SHERGOLD. Memoir 34 of the Association of Australian Paleontologists, 562p.
- Lyman, R. L. 2008. QUANTITATIVE PALEOZOOLOGY. Cambridge Manuals in Archaeology, 372p.
- McKinney, F. K. 2007. THE NORTHERN ADRIATIC ECOSYSTEM: DEEP TIME IN A SHALLOW SEA. Columbia University Press, 299p.
- Miller, W., (ed). 2007. TRACE FOSSILS: CONCEPTS, PROBLEMS, PROSPECTS. Elsevier, 632p.
- Nehm, R. H. and A. F. Budd (eds.). EVOLUTIONARY STASIS AND CHANGE IN THE DOMINICAN REPUBLIC NEOGENE. Springer, 318p.

- Poinar, G. Jr. and R. Poinar. 2008. WHAT BUGGED THE DINOSAURS? INSECTS, DISEASE, AND DEATH IN THE CRETACEOUS. Princeton University Press, 264p.
- Richet, P. 2007. A NATURAL HISTORY OF TIME. University of Chicago Press, 471p.
- Shubin, N. 2008. YOUR INNER FISH: A JOURNEY INTO THE 3.5-BILLION-YEAR HISTORY OF THE HUMAN BODY. Pantheon, 240p.
- Trewin, N. H. 2008. FOSSILS ALIVE! OR NEW WALKS IN AN OLD FIELD. Dunedin Academic Press, 211p.
- Turner, A. and M. Anton. 2007. EVOLVING EDEN: AN ILLUSTRATED GUIDE TO THE EVOLUTION OF THE AFRICAN LARGE MAMMAL FAUNA. Columbia University Press, 304p.

A scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die and a new generation grows up that is familiar with it.

~ Max Planck

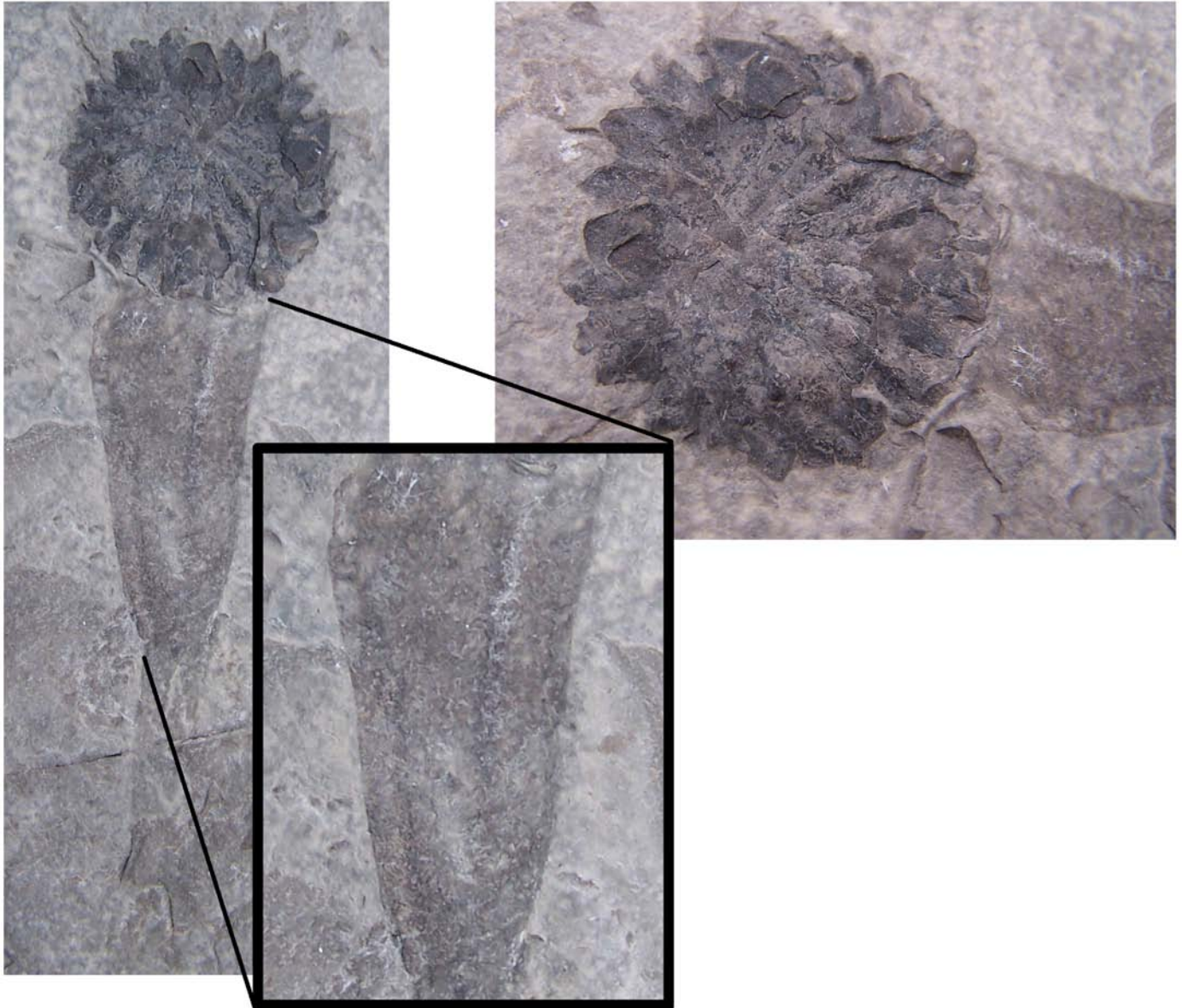


Mystery Fossil - Ezekiel's Wheel

This wonderful, enigmatic fossil is named for biblical descriptions (Ezekiel 1) of a strange object that has often been interpreted as an ancient UFO. Isolated “wheels” range from 2 - 3 cm in diameter. The specimen pictured below is 7.5 cm long and the “wheel” is 2.7 cm in diameter. As many as six specimens are known, all from the Late Silurian Williamsville Formation, Bertie Group of western Ontario and New York, which is famous for its abundant, well-preserved eurypterid material. The fauna also includes xiphosurans, phyllocarids, cephalopods and gastropods.

Fine-grained dolostone of the Williamsville occurs within an evaporite sequence of the Bertie Group and has been interpreted as a hypersaline environment. Many of the fossils, including the eurypterid molts, are thought to have been washed into lagoons during storm events. Calcite skeletons of organisms like gastropods and cephalopods are mostly dissolved, suggesting that the “wheels” are composed of chitin or phosphate.

The specimen shown below is currently housed in a private collection but will eventually be donated to the Peabody Museum or possibly to the institution of the person who can identify and study the material. It was submitted for identification by Sam Ciurca (you can visit his website at www.eurypterids.net).



If you would like to submit a fossil for the next issue or identify a previous submission, please send as much of the following information as possible to Lisa Amati at amatilm@potdams.edu.

Information for Fossil Submission

When was the fossil collected and by whom?
 Where is it housed currently?
 Formation/Member/Horizon collected from
 Age
 Facies description
 Associated taxa
 Number of specimens in collection
 Tentative identification

Information for Identification

Name
 Affiliation
 Identification
 Characteristics used for identification
 Comparison to similar and/or related taxa
 Other known specimens and their location

Time is Running Out!!!

The Paleontological Society Centennial Campaign is your chance to invest in the future of paleontology. All of the money raised by the campaign will be used to fund student research. So far, we have raised

\$210,942

and we only need

\$39,000 more
 to reach our goal of \$250,000!!

Thank you to our Grand Patrons

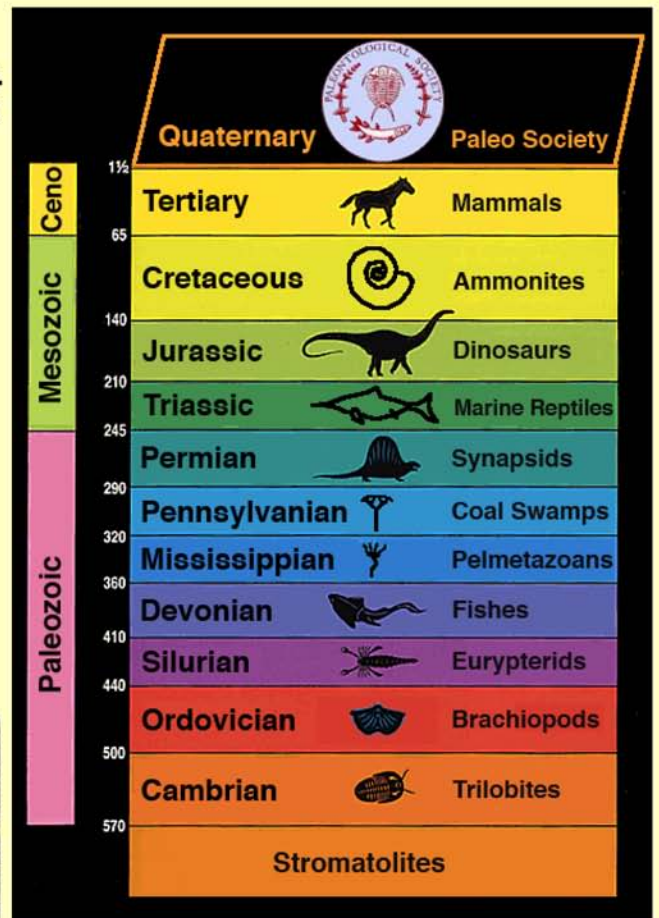
Four people have each donated \$10,000 to establish individual named funds. They are:

Art Boucot, Richard Bambach,
 Bill Schopf, and Steve Stanley

To donate, go to <http://paleosoc.allenmm.com> and click on "donations". If you would like your donation to go toward funding a named grant, please contact Roger Thomas at roger.thomas@fandm.edu

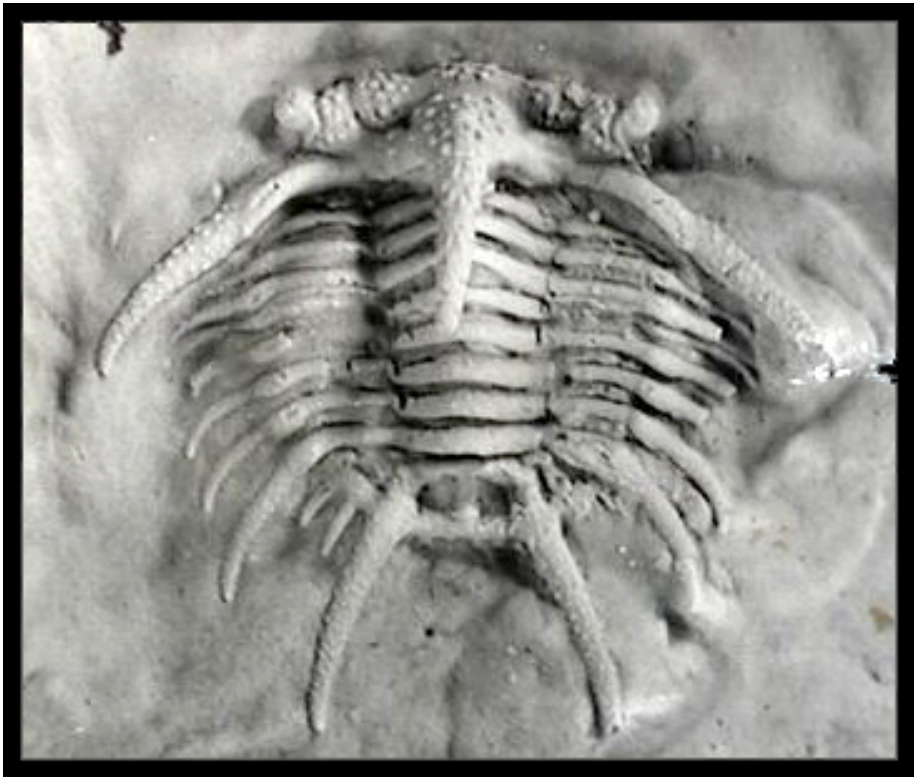


Please Help!



Mystery Fossil - Echinobite Identifications

This one was easy but we're making up for it in this issue with Ezekiel's Wheel! The highly convex, rounded posterior pair of lateral glabellar lobes and "warty" nature of the exoskeleton give it away as an Odontopleurid, and *Acidaspis* is the only member of this Order with such a stout occipital spine. It was identified as *Acidaspis cincinnatiensis* by Steve Holland (University of Georgia) and *Acidaspis anchoralis* (a synonym of *A. cincinnatiensis*) by Steve Brown (Illinois State Geological Survey). Alan Goldstein (Falls of the Ohio State Park) and Steve Westrop (University of Oklahoma) also recognized it as *Acidaspis*.



Photos by Dan Cooper, figured here courtesy of Dry Dredgers (drydredgers.org).

NOTICES

NOTICES is a “bulletin board” that allows members of the paleontological community to list events, grants, symposia and employment/internship opportunities. To place a posting, please submit a heading and short description accompanied by a web page or e-mail contact to Lisa Amati at amatilm@potssdam.edu. All submissions will be subject to verification by the editors prior to inclusion.

Second Annual Paleontological Society GSA Student Poster Award

The second annual Paleontological Society GSA Student Poster Award competition will be held this fall at GSA in Denver. All undergraduate and graduate student members of the Paleontological Society, including those who join at the meeting, will be automatically entered. Posters will be judged by a panel of professional geologists including representatives from every paleontological field. Criteria used in judging include overall poster appearance, effectiveness of communicating information, professionalism of the student presenter and ability of the student to present the research. The winner will receive a \$250 prize and two runners-up will receive \$100 each. If you plan to submit a poster but would not like to be entered in the competition, please stop by the Paleontological Society booth at GSA.



Paleontological Society Distinguished Lecturers

Four of our brightest scientists are available to present research to either academic or general audiences. They have been chosen based on the broad importance of their work and their ability to spark the interest of their listeners. Our newest lecturer is Kevin J. Peterson, who uses molecular biology to better understand the origin of animals during the Cambrian Explosion. For more information, please consult the Paleontological Society website (www.paleosoc.org)

Check Out the New Website!!!

Dena Smith successfully undertook the redesign of the Paleontological Society website. Navigating with the new layout is intuitive and it also looks inviting. The site contains information about publications, programs, funding opportunities and even has a special link for students.



The Terrane Puzzle: New Perspectives on Paleontology and Stratigraphy from the North American Cordillera

Geological Society of America Special Paper 442

Edited by Robert B. Blodgett and George D. Stanley, Jr.

The Geological Society of America has recently announced the publication of this new Special Paper devoted to paleontologic and stratigraphic aspects of accreted terranes from western North America.

This volume is slated to come out in June or July of 2008 and contains 15 contributions: 1.) N. Lindsley-Griffen and others: Significance of Ediacaran Cyclomedusids within the Antelope Mountain Quartzite, Yreka terrane, eastern Klamath Mountains, California; 2.) C. M. Soja: Silurian-Bearing Terranes of Alaska; 3.) D. M. Rohr and R. B. Blodgett: Silurian Gastropoda from the Alexander terrane, southeast Alaska; 4.) A. J. Boucot and others: Devonian brachiopods of southwesternmost Laurentia: Biogeographic affinities and tectonic significance; 5.) C. M. Soja and L. Krutikov: Provenance, depositional setting, and tectonic implications of Silurian polymictic conglomerates in Alaska's Alexander terrane; 6.) P. E. Isaacson: Devonian brachiopods from N.E. Washington: evidence for a non-allochthonous terrane and Late Devonian biogeographic update; 7.) J. Frýda and R. B. Blodgett: Paleobiogeographic affinities of Emsian (late Early Devonian) gastropods from Farewell terrane (west-central Alaska); 8.) F. G. Poole and others: Significance of detrital zircons in Upper Devonian and Upper Mississippian – Lower Pennsylvanian ocean-basin strata of the Sonora allochthon, central Sonora, Mexico; 9.) D. Sunderlin: The flora, fauna, and sediments of the Mt. Dall Conglomerate (Farewell terrane, Alaska, USA); 10.) A. H. Caruthers and G. D. Stanley, Jr.: Upper Triassic silicified shallow-corals and other marine fossils from Wrangellia and the Alexander terrane, Alaska and Vancouver Island, British Columbia; 11.) G. D. Stanley and others: Stratigraphy of the Triassic Martin Bridge Formation, Wallowa Terrane – Stratigraphy and Depositional Setting; 12.) E. C. Katvala and G. D. Stanley, Jr.: Conodont Biostratigraphy and Facies Correlations in an Upper Triassic Island Arc, Keku Strait, Southeast Alaska; 13.) T. LaMaskin: Late Triassic (Carnian-Norian) mixed carbonate-volcaniclastic facies of the Olds Ferry Terrane, eastern Oregon and western Idaho; 14.) A. Fleischer and others: Early Jurassic bivalves of the Antimonio terrane (Sonora NW Mexico): taxonomy, biogeography and Paleogeographic implications; and 15.) A. R. Fiorillo: Dinosaurs of Alaska: Implications for the Cretaceous origin of Beringia.

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