



Canadian Association of Palynologists
Association Canadienne des Palynologues
NEWSLETTER

Volume 33

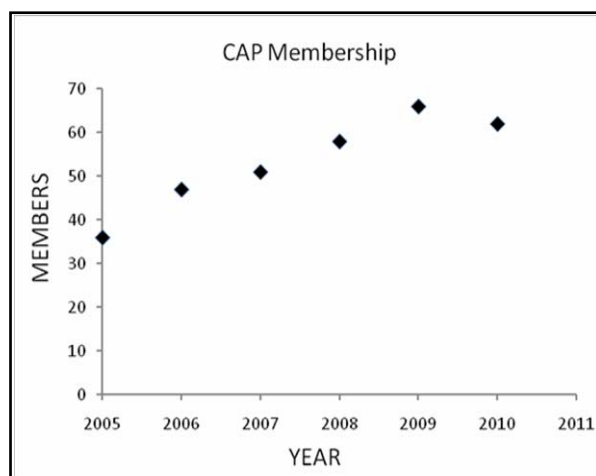
Number 2

December 2010

President's Message

As my first year as CAP President comes to a close, I would like express how much I have enjoyed serving in this capacity. One of the great joys and privileges that I have had has been to get to know so many palynology students and professionals through activities such as our Student Award, the Annual General Meeting, and involvement in conferences. I would like to thank the CAP Executive of Alwynne Beaudoin (Website Editor), Mary Vetter (Secretary-Treasurer), Terri Lacourse (Newsletter Editor), and Jean-Nicolas Haas (IFPS Councillor) for all their hard work this year. CAP would be nowhere without their efforts and dedication.

I will start with some recent news first: at our Annual General Meeting, held at the joint meeting of CAP, AASP-The Palynological Society, and the GAC Paleontology Division, Terri Lacourse was appointed



the new CAP President-Elect! Terri, an Assistant Professor in the Department of Biology at the University of Victoria, has been producing the biannual *CAP Newsletter* for several years. We are excited that someone of her experience and dedication will be assuming the presidency (on January 1, 2012). Because of this, we will need to start looking for a new Newsletter Editor to take over when she becomes President, so if anyone is interested, please do let me know.

CAP EXECUTIVE 2011

President: Matthew Peros
President-Elect: Terri Lacourse
Secretary-Treasurer: Mary Vetter
Newsletter Editor: Terri Lacourse
Website Editor: Alwynne Beaudoin
Councillor to IFPS: Jean Nicolas Haas

This year CAP was also busy with student awards. As the May newsletter announced, our Annual Student Research Award went to Matt Batina of the University of Southern Mississippi (you can read more about his work on page 5 of this Newsletter). In addition, at the Halifax meeting CAP teamed up with AASP-The Palynological Society to offer one-time joint student poster awards to Laura May (University of Victoria) and

Robby Marrotte (McGill University). Furthermore, it was our pleasure to be able to sponsor a coffee-break at the meeting, which was very well attended.

You will also find the annual reports from the Executive in this Newsletter. Based on information provided by Mary Vetter, I am happy to say that our membership has seen solid growth over the last six years. Our goal is to maintain growth by continuing to sponsor activities such as our Student Award and other initiatives. In fact, as was discussed at the AGM, we are considering developing a new CAP logo, and we will be seeking input from the membership on this. Details about this will follow in the New Year.

Best wishes for 2011,

Matthew Peros

CAP President, 2010-2011

mperos@uottawa.ca

More information about the Canadian Association of Palynologists and other material relevant to Canadian palynology can be found on the CAP website:

www.scirpus.ca/cap/cap.shtml

Editor's Notes

Thank you to all who contributed material for this edition of the *CAP Newsletter*: Matt Batina, Alwynne Beaudoin, Konrad Gajewski, Simon Goring, Rob Fensome, David Mazzucchi, Francine McCarthy, Matthew Peros, André Rochon, and Mary Vetter.

Deadline for Next CAP Newsletter

Please submit items for the next issue of the *CAP Newsletter* (Volume 34, Number 1, May 2011) by April 15, 2011. Conference reports, announcements, field trip reports, notices of new books, dissertation abstracts, book reviews, news, and essays on topics relevant to Canadian palynology are all welcome. Please send contributions to:

Terri Lacourse

CAP Newsletter Editor

tlacours@uvic.ca

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Nova Scotia 2010

From September 29th to October 2nd, 2010, palynologists from around North America—and a few from farther afield—gathered in Halifax, Nova Scotia, for the first ever joint meeting of the Canadian Association of Palynologists, AASP-The Palynological Society, and the Geological Association of Canada Paleontology Division. The conference consisted of three days of outstanding presentations and posters followed by a day of fieldtrips to sites around Nova Scotia.

The first full day of presentations saw two concurrent sessions, one devoted to Canadian and Arctic Paleontology, and the other to a celebration of the career of Jock McAndrews, who has been so influential in Canadian (and indeed, international) palynology. The former session included talks on a range of topics, including the Burgess Shale and Eocene paleoclimatology. The latter session, organized by Brock's Francine McCarthy, brought together many of Jock's current and former students and colleagues, including his former postdoc, Jean-Nicolas Haas, and former Ph.D. student, Zicheng Yu, as well as Roger Byrne, who worked with Jock at Crawford Lake in the early 1970s. The topics of the presentations in the session ranged from the Neotropics to the Arctic, and included methodological contributions as well as multi-proxy studies. Jock's session was capped by dinner at a lovely Italian restaurant (attended by about two dozen of his colleagues and friends), where he and his wife Sharon retold stories from his career, including the time Jock took Sharon sediment coring on their honeymoon in Grenada. Who said romance and palynology don't mix?



Pennsylvanian lycopsid tree trunk preserved in the cliffs at Joggins UNESCO World Heritage site in the Bay of Fundy, taken during a Nova Scotia 2010 field trip. (Photo courtesy of Rob Fensome)

The next day of the meeting saw sessions devoted to “*Paleobotany and all its aspects*”, “*New Frontiers in Paleobiology*”, and a general session, which included research covering a range of timescales and geographic locations. This day also saw the judging of the posters. Approximately 30 posters were displayed, 12 of which were by students. In the spirit of collegiality, CAP teamed up with AASP-The Palynological Society to offer student poster awards to Laura May



Nova Scotia 2010 field trip participants at Joggins Fossil Cliffs - home of the world's earliest known reptiles and land snails, and spectacular fossil tree trunks. (Photo courtesy of Rob Fensome)

(University of Victoria) and Robby Marrotte (McGill University), who both produced outstanding posters highlighting important methodological contributions to pollen identification. In addition to these awards, Carlos Avendaño (University of Toronto) won an AASP Award for best student presentation for his palynological research in Guatemala.

This conference was a wonderful opportunity for old friends and colleagues to reconnect, and for new contacts and friendships to be made. We thank the organizers for hosting a superb meeting, and look forward to the next time a joint meeting like this will be held.

Matthew Peros
CAP President

Special Session in Honour of John McAndrews

As was agreed at the Annual General Meeting of CAP in Bonn (in conjunction with the IPC), I convened a special session at the Nova Scotia 2010 meeting to honour the contributions of Jock McAndrews to Quaternary palynology. Seventeen talks and several posters were presented on Thursday, September 30 at the Harbourview Holiday Inn in Dartmouth. In keeping with the title, "*The Amazingly Diverse World of Quaternary Palynology: A Celebration of the Career of Jock McAndrews*", the presentations covered

an impressively wide range of topics in Quaternary palynology, dealing not only with pollen and embryophyte spores, but with a wide range of non-pollen palynomorphs such as dinoflagellate cysts and insect mandibles. Presenters included several former students from the old Palynology Lab in the Botany Department of the Royal Ontario Museum, and they came from as far away as Austria (thanks, Jean Nicolas, former post-doc in the lab!) to attend the session. The session started with an interesting retrospective of Jock's career, presented by Kam-biu Liu, and Roger Byrne gave the keynote talk on prehistoric agriculture. Several former and current University of Toronto students gave talks, in addition to me -Zicheng Yu, Matt Peros, Calvin Chan, and Carlos E. Avendaño, from Sara Finkelstein's lab, who gave an award-winning talk. Other long-time colleagues, such as Vaughn Bryant, Dave Scott, and Rolf Mathewes presented papers, and best wishes were sent from several others who could not attend, such as Pierre Richard, Thane Anderson and Sarah Finkelstein. A number of other presentations by young Quaternary palynologists rounded out the program, which resulted in a very well-attended session. Jock's wife, Sharon Hick, accompanied him to the meeting, and the day ended pleasantly as 25 people joined them for dinner at a nearby restaurant, La Perla, where the evening tuned into a bit of a roast of our crusty honouree! Long-time colleague Charlie Turton read a congratulatory letter from the Crawford Lake Conservation Authority lauding Jock's contributions to that famous archeological site, and numerous funny and touching reminiscences produced a memorable night, capping off a terrific day of Quaternary palynology, and a fitting tribute to one of Canada's leading palynologists.

Francine McCarthy
Dept. of Earth Sciences
Brock University

Matt Batina Receives 2010 CAP Student Research Award

Matt Batina received the 2010 CAP Student Research Award, which was established in 2009 to recognize students' contributions to research in palynology. Matt received the award for his research project

"Comparative, High-Resolution Pollen Analysis of a Stratigraphic Bat Guano Deposit and Proximate Lake Record to Evaluate Guano's Potential as a Paleoenvironmental Archive".

I am Matt Batina, a Ph.D. student in the Department of Geography and Geology at the University of Southern Mississippi. Among the department's several specialty areas, I am concentrating my studies in biogeography, more specifically palynology. Using pollen in a traditional sense to study long-term ecological patterns and processes, as well as its utility for climatology research are both of interest to me. I am also intrigued by new ways that pollen can be applied within these areas, or combined with tools from other disciplines, to conduct novel research.

The research project I am working on under the direction of my advisor, Dr. Carl Reese, investigates the potential for pollen in cave guano piles to be used for the study of past environments, or possibly even of bats. This project builds upon a pollen-guano study at Round Spring Cavern, Missouri which I produced for my master's research in 2008-2009. A comparison of pollen records from this preliminary study and another lake pollen study conducted in southern Missouri revealed notable discrepancies between the

two pollen assemblages. Our objective is to develop a better understanding of these differences by comparing higher-resolution pollen records from guano at Round Spring Cavern and several sediment cores from basins near Eminence, which are closer to the cave and within the bats' foraging range. Altogether, this research is expected to contribute baseline information on the relationships between fossil pollen, vegetation, the bats, and their guano to further pollen in guano deposits as a viable proxy for paleoecological study.

In June, two students and I visited the Eminence area to survey potential basins for coring. After a couple of reconnaissance trips were made, several candidate sites were selected. With Dr. Reese's assistance, two cores were extruded from the Sunklands Conservation Area using a Vibra corer that was generously loaned to us from Louisiana State University's Global Paleoecology Lab. A third core was also obtained from a nearby pond on private property with a Livingstone piston corer. At this time, the cores are being processed for organic samples to send off for AMS radiocarbon dating. I am currently completing loss-on-ignition results, will soon begin processing the cores for pollen, and anticipate having preliminary results early this spring.

I am quite thankful for the generous support that I have received for this research through the Canadian Association of Palynologists Student Research Award.

Matt Batina

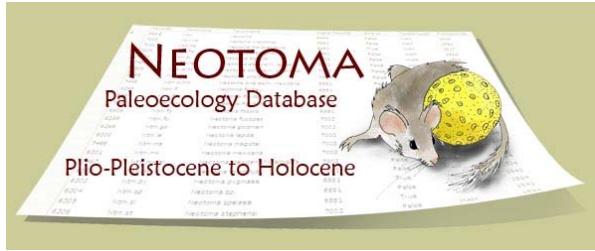
Dept. of Geography and Geology
University of Southern Mississippi

2011 CAP ANNUAL STUDENT RESEARCH AWARD

The Canadian Association of Palynologists Annual Student Research Award was established in 2009 to recognize students' contributions in palynological research. The award is open to any undergraduate or graduate student who is a member, in good standing, of CAP, regardless of their nationality or country of residence. The intent of the research award is to support student research with a strong palynological component. The award consists of a three-year membership in the Association and \$200 CDN, to be put toward some aspect of the student's research.

The award application should consist of: 1) a one-page statement outlining the nature of the research project, its scientific importance, the approximate timeline to completion of the project, and the aspect of the research the funds would be directed toward; (2) a CV; and, (3) a letter of support from the student's supervisor. Applications should be submitted (in French or English) by email to the CAP President-Elect by March 1st, 2011.

Only one award will be given per year and there is no limit to the number of times a student can submit an application. Applications and questions concerning the award should be sent to the CAP President-Elect, Terri Lacourse (tlacours@uvic.ca).



The Neotoma Database Workshop

In September, we attended a Workshop organized to discuss and advance the Neotoma database initiative. This project is intended to provide a portal and archive for data sources across various palaeoecological fields (www.neotomadb.org). The data can be accessed through this website with the Neotoma Explorer web application. Neotoma is focused on data from the last 5 million years, and hence captures Quaternary and Pliocene data streams. Access into this combined archive will improve our ability to ask complex questions that can only be answered by using multi-proxy datasets. At the moment, the only data types of the Neotoma database that are populated are fossil vertebrates and pollen. These data types were incorporated from earlier data archiving efforts under the auspices of FAUNMAP for vertebrate fossil material (www.ucmp.berkeley.edu/faunmap/about/index.html) and the NAPD or North American Pollen Database (www.ncdc.noaa.gov/paleo/napd.html). Neotoma aims to provide high quality data from many other proxies as well, but also to provide content for educators and researchers by including tools, teaching modules, derived data, and sample projects from the various data groups that could be used for teaching or as starting points for additional research.

The Principal Investigators of the Neotoma

project (Allan Ashworth, Russ Graham, Eric Grimm, Steve Jackson, and Jack Williams) invited a group of about 50 researchers to Madison for a three and a half day Workshop to launch the second phase of the project. Participants were mainly from the US but the group also included representatives from the research community in Canada (including us!), Japan, South America, and Europe. The Workshop was organized by Jack Williams, Jessica Blois, and Julie Niesen. It was held at the University of Wisconsin-Madison and was sponsored by grants from the National Science Foundation (NSF) and the World Universities Network (WUN). Participants represented many proxy data and user communities. Data types represented included pollen, plant macrofossils and peatlands, insects, ostracodes, diatoms, fossil vertebrates, rodent middens, geochemistry and isotopes, and age-depth chronologies. The Workshop also benefited from input from educators, web developers and other potential user groups.

Following a day of plenary sessions, during which the background to the Neotoma initiative was explained in more detail, participants were divided into twelve working groups, focussed either on specific datasets (e.g., pollen, packrat middens) or on technical matters and applications (e.g., web interfaces, development of application programming interfaces). During the breakout sessions, each group discussed how data would be maintained, what specific needs that data community had that were not currently met by the Neotoma platform, governance structure for the user group, data acquisition plans, and potential projects that would highlight Neotoma's capabilities. We participated in the working groups on pollen datasets (Simon), data tools and visualizations (Simon), plant macrofossils (Alwynne), and pollen data entry with Tilia (Alwynne).



Standing on an overlook, Lou Maher (front centre) explains the palaeoecological record from Devil's Lake to Workshop participants. Among this group, Dick Baker (standing, with green ball cap) will be well-known to palynologists in North America for his work in Yellowstone National Park. (Photo courtesy of Simon Goring)

Of interest to CAP members is the potential acquisition of data from the Latin American Pollen Database that has yet to be collated elsewhere and the addition of data from many published pollen records across North America that have not yet been incorporated in the North American Pollen Database. Although Neotoma is targeting published records, unpublished and “grey literature” data may also be included. Many Workshop attendees expressed concern at the loss of valuable data as senior researchers retire or as graduate students move on. Raw data are often not included in theses, for example, and many studies are not published or remain in the grey literature (e.g., reports of fossil finds in various kinds of government or consultant reports). Nonetheless, information from both published and unpublished

studies may be of great interest to the wider user community. Institutional repositories are often not available for such primary raw data nor are these data necessarily compiled in a way that makes them usable. A simple spreadsheet of raw pollen counts, for example, also needs the associated metadata, such as the name of the site, location, researcher's name, sample interval, details of chronologic control, etc., before it can be fully used by others. In fact, the value of Neotoma for archiving such “orphaned” data was widely commended by many participants. Several senior attendees expressed considerable relief at the thought that their data would not be “lost” but could continue to be of value to science beyond the time-frame of their career. In addition, Eric Grimm let us know that the newest version of Tilia (due very



And here's what Lou was talking about! Devil's Lake from the overlook on East Bluff, looking southwest. Devil's Lake occupies a valley that was cut through the Precambrian quartzite of the Baraboo syncline. We are standing on top of this syncline with steep quartzite cliffs below. Devil's Lake was formed when ice from the Green Bay Lobe blocked the valley. See www.geology.wisc.edu/~maher/air/air14.htm (Photo courtesy of Simon Goring)

soon!) would assist with data entry and upload to the Neotoma database, reducing the workload required to get data into the system. We were also told that the North American Pollen Database has staff specifically hired to input data into the database so contributors with pollen data that has yet to be uploaded can send it in any format - Tilia files, spreadsheets, even photocopied count sheets - and it will be added. We feel that this is a powerful and welcome endeavour and hope that many members of the Canadian pollen community will take advantage of it. Contact Eric Grimm (grimm@museum.state.il.us) if you'd like your data included.

The Workshop also included an afternoon fieldtrip to Devil's Lake State Park, Wisconsin, led by Lou Maher. This was an enjoyable outing on a beautiful fall day. We looked at some billion year old quartzite, saw a bald eagle and a rock that looked like an elephant, and had a great time at a barbecue afterwards.

Alwynne Beaudoin
Royal Alberta Museum
Edmonton, Alberta

Simon Goring
Dept. of Biological Sciences
Simon Fraser University



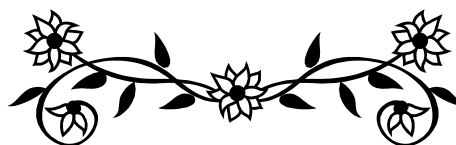
Dissertation Abstract

David Mazzucchi. 2010. *Postglacial Vegetation History of Mountainous Landscapes on Vancouver Island, British Columbia, Canada*. Ph.D. Thesis. School of Earth and Ocean Sciences, University of Victoria.

Supervised by Dr. Richard Hebda

Five lake and one soil sediment record from six mountainous sites on Vancouver Island, British Columbia, Canada, were examined for changes in pollen, macrofossils, charcoal, and mineral clasts to reconstruct late Quaternary history of vegetation, fire and climate. The results provide insights into the history and dynamics of the Mountain Hemlock biogeoclimatic zone and highlight the role of several species and species groups not previously recognized. During the early Holocene, *Alnus crispa* expanded throughout the region following deglaciation, playing a more important role in these ecosystems than today. *Abies lasiocarpa* was the dominant *Abies* species at these sites during the late glacial and early Holocene until it was replaced by *Abies amabilis* between about 10,500 and 7300 cal BP, perhaps due to changes in regional atmospheric circulation and greater seasonal variability in insolation than we experience today. *Abies amabilis* increased during the mid Holocene and was later replaced at the sites by increased abundance of *Tsuga mertensiana* while *Tsuga heterophylla* became much more abundant at nearby low elevations. Ericaceous-heath communities were established soon after deglaciation at the moister sites but not until

about 7000 cal BP at drier sites. These drier sites show more variation in vegetation throughout their records than the wetter sites. High charcoal and clast concentrations coincident with rapid vegetation shifts during the early Holocene suggest that these changes were probably the result of large stand-clearing fires that exposed mineral soils. A peak in charcoal at several of the sites occurs at ca. 4000 cal BP suggesting more frequent fire at that time. During the late glacial and very early Holocene, *Pinus contorta* was an important seral species until *Alnus crispa* became well established. In the mid to late Holocene when Ericaceous-heath became established, *Alnus crispa* was unable to predominate, possibly because of reduced fire activity or because the heath communities hindered the exposure of fresh mineral soil surfaces. As a consequence, conifer-dominated stands were favoured. Basal sediments from these sites are not as old as they are at lower elevations, suggesting that deglaciation may have happened later at higher elevations.





Recent Publications — 33

Adams, J. K., and *Finkelstein, S.A. 2010. Watershed-scale reconstruction of middle and late Holocene paleoenvironmental changes on Melville Peninsula, Nunavut, Canada. *Quaternary Science Reviews* 29:2302-2301.

*Battina, M.C., and Reese, C.A. 2010. A Holocene pollen record recovered from a guano deposit: Round Spring Cavern, Missouri, USA. *Boreas*. DOI: 10.1111/j.1502-3885.2010.00186.x

Bartlein, P.J., (+ 18 others). 2010. Pollen-based continental climate reconstructions at 6 and 21 ka: a global synthesis. *Climate Dynamics*. DOI: 10.1007/s00382-010-0904-1

Cumbaa, S., Lauriol, B., Alfonso, N., Ross, M., and *Mott, R. 2010. A new whitefish from the early Quaternary of Bluefish Basin Yukon Territory, Canada, and its paleoenvironmental implications. *Canadian Journal of Earth Sciences* 47: 221-235.

De Schepper, S., and *Head, M.J. 2009. Pliocene and Pleistocene dinoflagellate cyst and acritarch zonation of DSDP Hole 610a, Eastern North Atlantic. *Palynology* 33: 179-218.

El Beialy, S.Y., *Head, M.J., and El Atfy, H.S. 2010. Palynology of the Mid-Cretaceous Malha and Galala Formations, Gebel El Minshera, North Sinai, Egypt. *Palaaios* 25: 517-526.

Fortin, M.-C. and *Gajewski, K. 2010. Holocene climate change and its effect on lake ecosystem production in northern Victoria Island, Canadian Arctic. *Journal of Paleolimnology* 43: 219-234.

Fortin, M.-C. and *Gajewski, K. 2010. Post-glacial environmental history of western Victoria Island, Canadian Arctic. *Quaternary Science Reviews* 29: 2099-2110.

Gibbard, P.L., *Head, M.J., and Walker, M.J.C. 2010. Formal ratification of the Quaternary System/Period and the Pleistocene Series/Epoch with a base at 2.58 Ma. *Journal of Quaternary Science* 25: 96-102.

Ginn, B.K., Rate, M., *Cumming, B.F., and *Smol, J.P. 2010. Ecological distribution of scaled-chrysophyte assemblages from the sediments of 54 lakes in Nova Scotia and southern New Brunswick, Canada. *Journal of Paleolimnology* 43: 293-308.

*Goring, S., *Lacourse, T., *Pellatt, M.G., *Walker, I.R., and *Mathewes, R.W. 2010. Are pollen-based climate models improved by combining surface samples from soil and lacustrine substrates? *Review of Paleobotany and Palynology* 162: 203-212.

Graf, M.-T., and Chmura, G.L. 2010. Reinterpretation of past sea-level variation of the Bay of Fundy. *The Holocene* 20: 7-11.

Hadley, K.R., Douglas, M.S.V., McGhee, R., Blais, J.M., and *Smol, J.P. 2010. Ecological influences of Thule Inuit whalers on high Arctic pond ecosystems: a comparative paleolimnological study from Bathurst Island (Nunavut, Canada). *Journal of Paleolimnology* 44: 85-93.

*Koppelhus, E.B., and *Braman, D.R. 2010. Upper Cretaceous palynostratigraphy of the

Dry Island area. *Canadian Journal of Earth Sciences* 47: 1145-1158.

*Lacourse, T., Hebda, R.J., and *Mathewes, R.W. 2010. Cultural and noncultural deposits reveal human impact on late Holocene forests on Anthony Island, Haida Gwaii. In: R.M. Dean (ed.), *The Archaeology of Anthropogenic Environments*. Center for Archaeological Investigations, Occasional Paper No. 37, Southern Illinois University, Carbondale, pp. 54-74.

Ledu, D., *Rochon, A., *de Vernal, A., and St-Onge, G. 2010. Holocene paleoceanography of the northwest passage, Canadian Arctic Archipelago. *Quaternary Science Reviews* 29: 3468-3488.

Ledu, D., *Rochon, A., *de Vernal, A., and St-Onge, G. 2010. Holocene sea-ice history and climate variability along the main axis of the Northwest Passage, Canadian Arctic. *Paleoceanography* 25 (PA2213), DOI:10.1029/2009PA001817

Lowey, G.W., Long, D.G.F., Fowler, M.G., *Sweet, A.R., and Orchard, M.J. 2009. Petroleum source rock potential of Whitehorse trough: a frontier basin in south-central Yukon. *Bulletin of Canadian Petroleum Geology* 57: 350-386.

Mertens, K.N., (+ 36 others). 2009. Determining the absolute abundance of dinoflagellate cysts in recent marine sediments: The *Lycopodium* marker-grain method put to the test. *Review of Palaeobotany and Palynology* 157: 238-252.

Munoz, S., and *Gajewski, K. 2010. Distinguishing prehistoric human influence on late Holocene forests in southern Ontario, Canada. *The Holocene* 20: 967-981.

Munoz, S., *Gajewski, K. and *Peros, M.C. 2010. Synchronous environmental and cultural change in the prehistory of the north-eastern United States. *Proceedings of the National Academy of Sciences (USA)* DOI:10.1073/pnas.1005764107.

Neville, L.A., *McCarthy, F.M.G., and MacKinnon, M.D. 2010. Seasonal environmental and chemical impact on the camobian community composition in an oil sands reclamation wetland in northern Alberta. *Palaeontologia Electronica* 13(2): 13A.

*Peros, M., *Gajewski, K., Paull, T., Ravindra, R., and Podrisky, B. 2010. Multi-proxy record of postglacial environmental change of south-central Melville Island, Northwest Territories, Canada. *Quaternary Research* 73: 247-258.

Popescu, S.-M., Dalesme, F., Jouannic, G., Escarguel, G., *Head, M.J., Melinte-Dobrinescu, M.C., Sueto-Szentai, M., Bakrac, K., Clauzon, G., and Suc, J.-P. 2009. *Galeacysta etrusca* complex: dinoflagellate cyst marker of Paratethyan influxes to the Mediterranean Sea before and after the peak of the Messinian Salinity Crisis. *Palynology* 33: 105-134.

Schulte, P., (+ 40 others). 2010. The Chicxulub asteroid impact and mass extinction at the Cretaceous-Paleogene boundary. *Science* 327: 1214-1218.

Soliman, A., *Head, M.J., and Louwye, S. 2009. Morphology and distribution of the Miocene dinoflagellate cyst *Operculodinium? Borgerholtense* Louwye 2001, Emend. *Palynology* 33: 73-84.

Srivastava, S.K., and *Braman, D.R. 2010. The revised generic diagnosis, specific description and synonymy of the Late Creta-

ceous *Rosannia manika* from Alberta, Canada: its phytogeography and affinity with family Lactoridaceae. *Review of Palaeobotany and Palynology* 159: 2-13.

Sweetman, J.N., Rühland, K.M., and *Smol, J.P. 2010. Environmental and spatial factors influencing the distribution of Cladocerans in lakes across the central Canadian Arctic treeline region. *Journal of Limnology* 69: 76-87.

Talbot, J., *Richard, P.J.H., Roulet, N.T., and Booth, R.K. 2010. Assessing long-term hydrological and ecological responses to drainage in a raised bog using paleoecology and a hydrosequence. *Journal of Vegetation Science* 21: 143-156.

Vermaire, J.C., and *Cwynar, L.C. 2010. A revised late-Quaternary vegetation history of the unglaciated southwestern Yukon Territory, Canada, from Antifreeze and Eikland ponds. *Canadian Journal of Earth Sciences* 47: 75-88.

Vitha, S., *Bryant, V. M., Amen, Z., and Holzenburg, A. 2010. 3D Confocal imaging of pollen. *Microscopy Today* 18(2): 26-28.

White, J.M., Jessop, C.M., Scotese, C.R., Lai, G., and da Roza, R.J. 2009. Depicting biostratigraphical data from palynodata: experiments and questions in data presentation and manipulation. *Palynology* 33: 157-174.

Zimmermann, C., Poulin, M., and Reinhard, P. 2010. The Pliocene – Pleistocene freshwater flora of Bylot Island, Nunavut, Canadian High Arctic. In H. Lange-Bertlot (Ed.), *Iconographia Diatomologica - Diatoms of North America*. Vol 21. Gantner Verlag. 407 p + 97 plates.

* denotes a CAP Member

Graduate Student Opportunities

I am seeking new graduate students (MSc or PhD) for palynological/paleoecological research in my lab at the University of Victoria. Ideal candidates will have previous experience in palynology and other paleoecological techniques, a strong academic record, and the ability to work independently as well as with others. Positions start May or September 2011.

Interested students should send an email for more information about potential research projects and attach a CV, unofficial transcripts, and the names and contact information of two references. Information on graduate studies at the University of Victoria can be found at:

<http://web.uvic.ca/gradstudies/>

Terri Lacourse
University of Victoria
tlacours@uvic.ca

2010 CAP ANNUAL GENERAL MEETING MINUTES

September 30 2010
Joint Meeting of AASP-CPC-CAP
Harbourview Holiday Inn, Dartmouth, NS

Present: Carlos Avendaño, Vaughn Bryant, Calvin Chan, Les Cwynar, Rob Fensome, Jancis Ford, Jean Nicolas Haas (IFPS Councillor for CAP), Terri Lacourse (CAP Newsletter Editor, Recording Secretary), Elisabeth Levac, Rolf Mathewes, John McAndrews, Francine McCarthy, Matthew Peros (CAP President, Meeting Chair), André Rochon, Arthur R. Sweet, Bert van Helden, Zicheng Yu. (17 attendees, Quorum reached).

1. Welcome, Approval of agenda
Round table introductions, M. Peros welcomed attendees and reviewed the agenda. Agenda acceptance moved by R. Mathewes, seconded by E. Levac. Agenda approved as presented.
2. Minutes from 2009 AGM
Minutes were reviewed by attendees. B. van Helden moved to accept minutes, L. Cwynar seconded. Minutes accepted as presented.
3. President's Report, Matthew Peros
M. Peros reviewed the CAP President's Report. R. Mathewes moved to accept report, F. McCarthy seconded. Report accepted as presented. (See below for report)
4. Secretary/Treasurer's Report, Mary Vetter (in absentia)
Report was reviewed by attendees. B. van Helden added that it was a nice gesture to see CAP funds support best student poster awards and a coffee break at the conference. R. Fensome moved to accept report, R. Mathewes seconded. Report accepted as pre-

sented. (See below for report)

5. Auditor's Statement, Dennis Braman (in absentia)
Report was reviewed by attendees. R. Mathewes moved to accept report, L. Cwynar seconded. Report accepted as presented. (See below for report)
6. Newsletter Editor's Report, Terri Lacourse
Report was reviewed by attendees. General discussion on Newsletter followed. T. Lacourse highlighted the ongoing difficulty of securing contributions for the Newsletter, mentioning that the Spring Newsletter is always much shorter than the Fall Newsletter. F. McCarthy volunteered to contribute a report on the AASP-CPC-CAP conference session celebrating the career of John McAndrews. E. Levac moved to accept report, B. van Helden seconded. Report accepted as presented. (See below for report)
7. Website Editor's Report, Alwynne Beaudoin (in absentia)
Report was reviewed by attendees. B. van Helden asked for a round of applause for the Newsletter Editor and Website Editor for their excellent work. L. Cwynar moved to accept report, J. N. Haas seconded. Report accepted as presented. (See below for report)
8. News from IFPS, Jean Nicolas Haas
J. N. Haas described his duties at IFPS Councillor and the importance of making contact with other palynological societies and accessing Palynos, the IFPS Newsletter. J. N. Haas is planning to highlight palynology labs in upcoming issues of Palynos and invited attendees to submit short articles on their labs. The World Directory of Palynologists is available as a PDF file from J. N. Haas or Owen Davis. In 2012, a new Councillor will be needed, as J. N. Haas will have

then served two terms. He added that it has been a pleasure to serve as IFPS Councillor for CAP despite being a non-Canadian.

9. CAP Student Research Award, Matthew Peros

M. Peros reviewed the criteria for the award and reminded attendees that undergrads are eligible for the award, but that applicants need to be members of CAP to qualify. M. Peros explained that CAP received only five applicants for the 2009 award, up from three applications the previous year. The adjudicators for the 2009 award were M. Peros, M. Vetter, and J. N. Haas. Matthew Battina, based at the University of Southern Mississippi, was the recipient of the 2009 award. General discussion of the award followed with the suggestion that perhaps the award should be limited to Canadian research, but the consensus was that all student members of CAP should be eligible for the award, regardless of the focus of their research. F. McCarthy moved to accept the report of the student award, A. Sweet seconded. Report accepted as presented. (See below for report)

10. Re-election of the CAP Executive

M. Peros reported that all CAP Executive members have volunteered to serve another year in their respective positions. This does not apply to the position of President, which has a two-year term. With no other volunteers coming forward, R. Mathewes moved to acclaim all current members of the Executive (except President) for another year, F. McCarthy seconded.

11. President-Elect Position

M. Peros reminded attendees that the position of President-Elect has been vacant since January 2010 and that the Association will need a new President in 2012. T. Lacourse volunteered to fill the position of President-Elect. T. Lacourse explained that she was

volunteering to fill the position firstly because it is important to fill the position soon with someone who is committed and familiar with the Association. T. Lacourse indicated that she had been a member of CAP for the last 15 years and Newsletter Editor for the last 4 years. She added that all of the work of the Association is reflected one way or another in the Newsletter and therefore felt she has a good sense of the Association, its members, and its goals. She further added that she would be happy to serve the Association in a new role at President-Elect; however, she expressed concern over finding a member to serve as Newsletter Editor and encouraged members to consider serving. With no other volunteers coming forward, E. Levac moved to acclaim T. Lacourse as President-Elect, F. McCarthy seconded.

12. Location for 2011 AGM

M. Peros initiated a discussion on potential venues for the 2011 AGM. The 2011 AASP meeting in Southampton, England was suggested, but concern was expressed over whether many CAP members would be in attendance and specifically whether members of the Executive would be in attendance. The same concern was expressed for the 2011 INQUA Congress in Bern. The 2011 CANQUA meeting in Quebec City was then suggested. A final decision was not made. The CAP Executive will continue this discussion in the months ahead and identify a suitable venue.

13. CAP Sessions at Future Conferences

M. Peros encouraged attendees to consider organizing CAP sessions at future conferences. No suggestions were immediately forthcoming.

14. Discussion on Priorities and Goals for CAP 2011/2012

A) T. Lacourse suggested that CAP consider



CAP AGM Attendees (from left to right, back to front): André Rochon, Jean Nicolas Haas, Rob Fensome, Arthur Sweet, Francine McCarthy, Terri Lacourse, Matthew Peros, Rolf Mathewes, Vaughn Bryant, Bert van Helden, Jancis Ford, John McAndrews, Les Cwynar, Calvin Chan, Carlos Avendaño, Elisabeth Levac, Peta Mudie, Zicheng Yu.

an update to its logo. Attendees agreed that it was time for a new and improved logo. T. Lacourse suggested that CAP hold a contest for a new logo. The Executive will discuss the process for such contest and will provide a recommendation on how to proceed, including a selection process and potential prize.

B) T. Lacourse raised the importance of finding ways to re-engage pre-Quaternary palynologists, as most CAP members are palynologists with a Quaternary focus. At times in the past, the CAP membership was composed mostly of pre-Quaternary specialists.

15. Other Business

A) B. van Helden reported that Jan Janzonius, a member of CAP, was quite ill and

asked about the possibility of sending well wishes from the Association. Attendees agreed that this was a good idea and M. Peros said he would ensure that the Association acted on this. F. McCarthy offered to purchase a card that could be signed by conference attendees.

B) Z. Yu brought the Neotoma database to the attention of attendees. Neotoma is a multiproxy database that includes fossil data for the past 5 million years. It combines the Global Pollen Database, FAUNMAP, the North American Plant Macrofossil Database, and a fossil beetle database into a single integrated database.

16. Adjournment

After a group photo, M. Peros adjourned the meeting at 5:50pm.

CAP President's Report 2010

It is my pleasure to be able to report on CAP's activities since the last AGM. I am now near the end of my first year as President of CAP, and it has been a privilege to serve so far. I would like to start by welcoming all of the new members who have recently joined our organization. And I especially want to thank the Executive—Mary Vetter, Alwynne Beaudoin, Terri Lacourse and Jean Nicolas Haas—for their valuable time and effort. Thanks also go to Dennis Braman for serving as Auditor.

This year's Annual General Meeting is taking place on September 30th, during the Joint Meeting of the AASP, CAP, and CPC in Halifax, Nova Scotia. I attended palynology meetings in St. Catharines, Ontario (2003) and Panama City, Panama (2007), and I have no doubt that this meeting will be just as stimulating and successful. CAP is proud to be sponsoring a coffer break and co-sponsoring joint student awards for best talk and best poster with the AASP and CPC.

Since the last AGM, held on May 5, 2009, CAP has been busy promoting palynological scholarship. For example, at last year's American Geophysical Union meeting in Toronto, Sarah Finkelstein, Elisabeth Levac, and I organized the session "*New Directions in the use of Pollen Analysis in Environmental and Climatic Reconstructions*", which was very well attended (especially for a Sunday morning!).

In addition, this year saw the 2nd Annual CAP Student Research Award, given to Matt Batina of the University of Southern Mississippi, for his project: "*Comparative, High-Resolution Pollen Analysis of a Stratigraphic Bat Guano Deposit and Proximate Lake Record to Evaluate Guano's Potential as a Paleoenvironmental Archive*". We were happy to have five applications for the award

(compared to three the first year), and are hoping for an even larger number of excellent applications in 2011.

Our current membership remains strong, but we are always looking for new members, especially among students. We hope that having a presence at meetings such as this will act as a vehicle for recruitment. We are also continually looking for submissions to the *CAP Newsletter*, which is an excellent way to disseminate the activities of CAP members. I also invite our members to read the website editor's report as many new items have been added to the CAP web page over the past year or two. We welcome suggestions and CAP-related contributions (please go to: www.scirpus.ca/cap/cap.shtml).

I sincerely hope that you enjoy the conference, and I look forward to meeting each and every one of you during our stay in Halifax.

Respectfully submitted,

Matthew Peros

CAP President 2010-2011

September 28, 2010

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2010 CAP Secretary-Treasurer's Report

Membership Report

As of 24 September 2010, CAP has 57 members in good standing who have paid dues for 2010. This is comparable to the 66 members we had in 2009, and of those 66 members 9 members joined during or shortly after our AGM. The recovery of our membership from the low point in 2005 appears stable.

Year	Members
2002	53
2003	54
2004	43
2005	36
2006	47
2007	51
2008	58
2009	66
2010	62

I would like to extend a special welcome to our new members:

Dr. Olusola H. Adekanmbi, University of Lagos, Nigeria

Matt Barina, University of Southern Mississippi, Hattiesburg

Eva Fischer, Brock University

Alexandre Guertin-Pasquier, University of Montréal

Matt Huntley, Simon Fraser University

Laura May, University of Victoria

It is especially wonderful to see so many graduate students among the new members!

Financial Report

For the period ending 24 September 2010, the balance in the CAP account is \$5,146.64. Of this amount, \$510 represents pre-paid memberships for future years. CAP contributed \$400 to a coffee break at the Halifax meeting.

The following items are yet to be paid:

a) IFPS dues for 2009 and 2010: Dues are \$1.50 USD per member, so the amount owed at the present time is \$192.00 USD (approximately \$193 CAD). These dues, plus the 2011 dues, will be paid in early 2011 by agreement with IFPS.

b) The student award of \$333.33 to be presented at the 2010 Halifax meeting.

Recommendations: Paying the outstanding commitments will still leave a healthy balance in our account. Our regular annual charges are IFPS dues (\$1.50 USD per member), the annual corporation renewal fee (\$25 + GST), and the CAP student award (\$200). CAP is in a good financial position to continue to support outreach initiatives at conferences (e.g. coffee breaks) and sponsor sessions as desired.

Respectfully submitted,

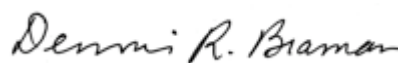


Mary Vetter
CAP Secretary/Treasurer
24 September 2010

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Statement by Appointed Auditor

I have reviewed the financial statements for CAP and it is my opinion that the financial statement represents a full and fair account of the financial affairs of the Canadian Association of Palynologists for the period April 19, 2009 to September 24, 2010.



Dennis R. Braman
September 27, 2010

CAP Newsletter Editor's Report 2010

Since my last report, three issues of the CAP Newsletter have been produced. The May 2009 Newsletter (Vol. 32, No. 1) was distributed to CAP members on May 20, 2009 and consisted of 13 pages. This issue featured an article by Simon Goring encouraging palynologists to contribute to Wikipedia.

The December 2009 Newsletter (Vol. 32, No. 2) was distributed to members on January 3, 2010. It consisted of 29 pages and included a feature on the (inaugural) 2009 CAP Student Research Award winner, Susann Stolze, and two reports on CAP-sponsored conference sessions. As per CAP Bylaws, this issue also included minutes of the 2009 CAP Annual General Meeting.

The May 2010 Newsletter (Vol. 33, No. 1) was distributed to members on May 3, 2010. It consisted of 12 pages, highlighting the 2010 Joint CAP/CPC/AASP-TPS meeting in a four-page spread.

Although the Newsletter is distributed electronically to our members, I continue to send hard copies to four libraries that access the Newsletter. Past Newsletters are available on the CAP website. Contributions for the next issue of the Newsletter will be accepted until November 15, 2010. This issue will feature an article on the recipient of the 2010 CAP Student Research Award, Matt Batina at the University of Southern Mississippi.

Respectfully submitted,

Terri Lacourse
CAP Newsletter Editor
September 9, 2010

CAP Website Editor's Report 2010

I have continued as editor for the CAP website since the last AGM. The presentation is located at www.scirpus.ca/cap/cap.shtml, under my own domain (www.scirpus.ca). There are no costs to CAP associated with this hosting. Accesses to the presentation have fallen somewhat in the last year, from around 2000/month in 2008-2009 to between 700 to 900/month. The presentation has experienced only modest growth in content in the past year; it now comprises about 94 MB of information.

The presentation provides various resources and information about CAP to the palynological community. I continue to update time-sensitive sections, such as the conference listing and various announcements. Information about the CAP Student Research Award and the application process, as well as a year-to-year record of the Award recipients, is also included. Back issues of recent CAP Newsletters (though not the latest issues) are archived, making them available to members over the long-term. I have maintained the author listing and index to past CAP Newsletter issues. As time permits, I have been scanning and adding older CAP Newsletters as PDF files to the website.

As always, I would appreciate more CAP-related material for the web site. I would be pleased to receive suggestions or content for new components to broaden its appeal. If CAP members are agreeable, I am prepared to continue as the Association's Website Editor for another year.

Respectfully submitted,

Alwynne B. Beaudoin
CAP Website Editor
August 29, 2010

Report on 2010 CAP Student Research Award

This year saw the second annual CAP student research award competition. Advertising, by way of postings to several internet listservs, began at the end of 2009 and the deadline for the award was March 1, 2010. Five applications (four from students at Canadian universities; one from a student at an American university) were received by the deadline and were adjudicated by the award committee consisting of Matthew Peros, Jean-Nicolas Haas, and Mary Vetter. Like the previous year, the committee was very impressed by the quality of the applications as well as the range palynology-related topics that they covered. After careful deliberation, the committee decided that Matthew Batina, from the University of Southern Mississippi, was the winner for his project "*Comparative, High-Resolution Pollen Analysis of a Stratigraphic Bat Guano Deposit and Proximate Lake Record to Evaluate Guano's Potential as a Paleoenvironmental Archive*". The committee was impressed by the novel approach and innovativeness of the project as well as the quality of the presentation of Matt's application. The five applications received represent an increase of two over the first competition in 2009, suggesting that the award—while still young—is becoming more widely known. We look forward to seeing the applications in the third competition in 2011!

Respectfully submitted,

Matthew Peros
CAP President
September 28, 2010



VAUGHN BRYANT KNOWS HIS POLLEN!

Foreign Honey Oozes In...

As beekeepers battle a dumping problem, a sleuth at Texas A&M tracks down where the imports come from.

Check it out!

<http://www.chron.com/disp/story.mpl/business/7008114.html>

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INTERNATIONAL SCHOOL ON FORAMINIFERA

July 13-22, 2011

Urbino, Italy

Benthic Foraminifera: 13-17 July
Planktonic Foraminifera: 18-22 July

Applications for this year's course are now being accepted. For more information and registration, please contact:

Dr. Fabrizio Frontalini
DiSUAN, Urbino University
fabrizio.frontalini@uniurb.it

2011 Conference Calendar

May 12-15: Canadian Society for Ecology and Evolution Annual Meeting

Banff, Alberta

www.ecoevo.ca/en/index.htm

May 25-27: Geological Association of Canada/Mineralogical Association of Canada Meeting

Ottawa, Ontario

Theme: Navigating Past & Future Change

www.gacmacottawa2011.ca/welcome.php

May 31 - June 4: Canadian Association of Geographers Annual Meeting

Calgary, Alberta

www.cag-acg.ca/en/

cag_annual_meeting.html

July 9-13: Botany 2011

St. Louis, Missouri, USA

www.botanyconference.org/

July 10-16: International Symposium on Antarctic Earth Sciences

Edinburgh, Scotland

www.isaes2011.org.uk/

July 20-27: XXVIII International Union for Quaternary Research (INQUA) Congress

Bern, Switzerland

www.inqua2011.ch

July 23-30: XVIII International Botanical Congress

Melbourne, Australia

www.ibc2011.com/

July 31-Aug 4: 28th Annual Meeting of The Society for Organic Petrology

Halifax, Nova Scotia

www.tsop.org

Aug 7-12: 96th Ecological Society of America Annual Meeting

Austin, Texas, USA

www.esa.org/austin/

Aug 28-31: Canadian Quaternary Association and the Canadian Chapter of the International Association of Hydrogeologists

Quebec, Quebec

<http://geohydro2011.ca>

Aug 28-Sep 2: DINO 9: 9th International Conference on Modern and Fossil Dinoflagellates

Liverpool, England

<http://pcwww.liv.ac.uk/~dino9/index.htm>

Sept 5-7: American Association of Stratigraphic Palynologists 44th Annual Meeting

Southampton, England

www.palynology.org/meetings.html

Oct 9-12: Geological Society of America 123rd Annual Meeting

Minneapolis, Minnesota, USA

www.geosociety.org/meetings/2011

Dates TBA: 63rd Meeting of the International Committee for Coal and Organic Petrology

Porto, Portugal

www.iccop.org/

CAP MEMBERSHIP FORM

Canadian Association of Palynologists / Association Canadienne des Palynologues (CAP) membership is open to all members of the palynological community in Canada and others with an interest in Canadian palynology. The Association is dedicated to the advancement and encouragement of all aspects of palynology in Canada and the promotion of co-operation between palynologists and those engaged in related fields of study. Membership dues include two issues a year of the *CAP Newsletter*, to which all members are invited to contribute. CAP is affiliated with the International Federation of Palynological Societies (IFPS) and members receive two issues of the IFPS newsletter (*PALYNOS*) each year.

CAP membership dues are \$10 per year in Canadian or US funds payable at the beginning of the year. Lapsed members are removed from the mailing list after one year, following a reminder. Members may, if they wish, pay for up to three years in advance. To join, please fill out the membership form, by hand or in Adobe Reader®, and send it with a cheque (drawn on a Canadian or US bank) or money order payable to CAP to:

Dr. Mary Vetter, CAP Secretary-Treasurer, Luther College, University of Regina, Regina, Saskatchewan, S4S 0A2 CANADA

Name: _____

Affiliation: _____

Address: _____

Tel: _____ FAX: _____

E-mail: _____

Web page URL: _____

Research interests: _____

New membership Renewal Amount enclosed: _____

May we include your name/address/research interests in the on-line "Directory of Palynologists" in the CAP World Wide Web page? Yes No