Number 50

Spring/Summer 2003



GAC-PALEONTOLOGY DIVISION EXECUTIVE 2002-2003

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EON

EON, the newsletter of the Paleontology Division, is an important avenue of communication for paleontologists in Canada. *Eon* is published twice yearly, in the fall after the Canadian Paleontology Conference and in the spring before the annual meeting of the Geological Association of Canada. Issues of *Eon* include:

- reports from the executive and the Joint Committee on Paleontological Monographs, research activities in Canada,
- activities of affiliated societies,
- calls for initiatives to further paleontology in Canada,
- book and meeting reviews,
- announcements for upcoming meetings, recent publications,
- other notices of paleontological interest. Subscription is included with the \$6

Paleontology Division membership fee; non-G. A. C. members may subscribe for \$7, which can be sent to secretary/treasurer: Keith Dewing, Geological Survey of Canada, 3303 – 33rd Street N.W., Calgary, Alberta, T2L 2A7, E-mail: <u>kdewing@nrcan.gc.ca</u>

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Submissions can be made by e-mail (preferred), mailed diskette (IBM format preferred), or hardcopy by mail or fax.

HOW TO JOIN PALEONTOLOGY DIVISION

Paleontology Division is a division of the Geological Association of Canada (GAC), so full membership requires membership in GAC. If you are already a GAC member, then you can join Paleontology Division for an extra \$6.00 per year, *free for students.* If you wish to join GAC, go to their <u>membership web site</u>. GAC membership provides, among many other things, substantial discounts on many of Paleontology Division's publications.

Non-members of GAC can subscribe and contribute to the newsletter *Eon* (see below for details) and are more than welcome to participate in all Paleontology Division activities, such as sponsored conferences and symposia.

Cover Image: A whimsical reconstruction of the Late Cretaceous ammonoid *Jeletzkytes*. If you have an drawing or photograph to grace the cover of EON, please let me know ! - *Cam Tsujita, EON editor*



By Doug Boyce

A Message From The Chair

Creationist Mischief

I've been interested in fossils since I saw my first one (a complete fossil fish) at the New Brunswick Museum during a Grade 2 or 3 school visit. It wasn't until I was twelve years old, however, that I actually collected my first fossil. I've been hooked on paleontology ever since.

I wasn't aware of creationism until high school. One day a visiting creationist (I forget his name) gave a talk to the entire student body of Saint John High School in the main auditorium: I recall that the discredited Paluxy River man-tracks were mentioned, as was the claim that evolution violated the Second Law of Thermodynamics and was therefore impossible. At the time I happened to be a member of our high school's chapter of Inter-School Christian Fellowship (ISCF). When at one meeting I indicated that I believed in evolution rather than creationism, one member led a prayer for my soul, hoping that I would "see the light". This was flattering in one sense (I was cared about), but galling in another (I knew more about fossils).

Since that time, I've had no patience for creationist nonsense. Although some may believe it's a waste of time to respond to it, I believe professional paleontologists have an ethical duty to do so, and for as long a time as the creationist camp chooses to continue its public campaign of distortions and misinformation.

On Tuesday, January 21, 2003, The Telegram (St. John's) published a letter from a Mr. David Buckna of Kelowna, BC. Among other things, the letter questioned the age of the recently described fossils from the Portugal Cove South area.

It was immediately obvious that the letter was not simply from a curious member of the public. A Google Search revealed the following information:

"David Buckna (dabuckna@awinc.com) is a public school teacher and co-author of the web article,"Should evolution be immune from critical analysis in the science classroom?" and "Cool things about being an evolutionist"" and is a young-earth creationist. As far as I am aware, he has no paleontological credentials. He has been an active anti-evolutionist since at least November, 1995 when he wrote "Do Dino Fossils Support Evolution?" At the time, Mr. Buckna was taken to task by Jeff Poling, who regarded the article as "full of halftruths and obfuscations designed to confuse the reader". It is clear from the letter below that Mr. Buckna's modus operandi has not changed in the more than seven years that have passed.

The Telegram (Tuesday, January 21, 2003, page A6) published the following in the Letters to the Editor section (it also appeared in The Telegram Online):

Base theory on evidence

On Jan. 18, Queen's University paleontologist Guy Narbonne was interviewed on CBC Radio's Quirks and Quarks concerning the discovery of "575 million-year-old" fossils in southeast Newfoundland that resemble "modern, soft corals" - said to be the "oldest, complex organisms" ever found.

Critical thinkers should be asking how Narbonne can be so certain the fossils are really that old.

Evolutionary geologists use rocks to date the fossils, and use fossils to date the rocks. This is a classic case of circular reasoning. J.E. O'Rourke recognizes the problem: "The rocks do date the fossils, but the fossils date the rocks more accurately. Stratigraphy cannot avoid this kind of reasoning if it insists on using only temporal concepts, because circularity is inherent in the derivation of timescales." (American Journal of Science, January 1976, p. 53).

Worried about fossil size

Narbonne told host Bob McDonald: "As you go back in time, fossils get simpler and simpler, and smaller and smaller, and we were concerned that if we ever did find (oldest, complex life) they'd be so simple and so small that we'd never be able to convince anyone. Instead you can imagine our surprise when we found structures two metres long with high levels of complexity and not one, but literally hundreds of these fossils."

Consider trilobite fossils. Kingston author Ian Taylor (In the Minds of Men) writes: "Thus, these creatures living at the earliest stages of life used an optimal lens design that would require very sophisticated optical engineering procedures to develop today." "If Darwin turned cold at the thought of the human eye at the end of the evolutionary cycle, what, one wonders, would he have thought of the trilobite eye near the beginning?" (p. 169, 4th edition, TFE Publishing, 1999).

So why aren't transitional fossils leading up to corals, sponges, brachiopods, trilobites, the highly complex creatures of the Burgess Shale (e.g. *Anomalocaris*, *Hallucigenia*), jellyfish, and countless other life forms found in the fossil record?

Most paleontologists would probably cite the "punctuated equilibria" model of evolution (Eldredge and Gould, 1972) which is unique.

It must be the only theory put forth in the history of science which claims to be scientific, but then explains why evidence for it cannot be found. I thought a good theory was based on evidence, not a lack of evidence.

- David Buckna, (Ke)lowna, B.C.

Narbonne's Response

The Telegram (Saturday, January 25, 2003, page A10) subsequently published Dr. Guy Narbonne's response to Buckna's letter. However, it did not appear in <u>The Telegram</u> <u>Online</u>, as had Mr. Buckna's letter, so effectively it had a less widespread distribution. To rectify this unfortunate discrepancy, Dr. Narbonne's response is reproduced below:

Dating history

In a letter to the editor Jan. 21, entitled "Base theory on evidence", David Buckna wonders how we can be sure that the newly discovered fossils from Portugal Cove South really are 575 million years old and thus represent the oldest complex fossil organisms known anywhere on Earth. This question was directly discussed in our scientific paper published in Geology Magazine (vol. 31, pp. 27-30), and in light of Mr. Bruckna's cautions against circular reasoning we would like to show readers of the Telegram how we can directly determine the age of these and other critical fossils from Newfoundland's past.

Newfoundland was a volcanically active area 575 million years ago, and the rock section from Portugal Cove South to Mistaken Point is marked by literally hundreds of beds of volcanic ash. Each of these eruptions buried the fossil community in place, and resulted in spectacular preservation of the animals in the exact position in which they lived. Each volcanic bed contains crystals of the mineral zircon, which can be dated radioactively to provide the precise age of the time of the eruption.

Memorial University of Newfoundland has one of the best uranium-lead dating facilities in the world, and using this method Dr. Greg Dunning obtained an age of 565 million years for the fossils at Mistaken Point. The fossils at Portugal Cove South are almost two kilometers lower in section and thus are older, and uranium-lead dates by Dr. Bowring at the Massachusetts Institute of Technology confirm that they are approximately 10 million years older (dates reported at the annual meeting of the Geological Society of America, Toronto, 1998).

These radiometric dates confirm that the Portugal Cove South fossils are, by far, the oldest evidence of complex life known anywhere. We would like to thank Dr. Michael Anderson (Memorial University of Newfoundland, retired) who found the first fossils in the Drook Formation and alerted us to them, and the people of Portugal Cove South and Trepassey who have been especially helpful in our research.

Indeed, our new species is named Charnia wardi in honour of the Ward family of Portugal Cove South who were instrumental in the discovery of these fossils and have been timeless guardians of their town's fossil heritage. These new fossil finds are just the tip of the iceberg, and it is likely that Newfoundland will prove to be the best place in the world to investigate the origin and early evolution of animals.

- Guy Narbonne, Professor of Paleontology Queen's University at Kingston, Ontario

Boyce's Rebuttal

The Telegram chose not to publish my detailed rebuttal of Mr. Buckna's letter. Here, however, is an updated, expanded version:

I am writing in response to "Base theory on evidence" by David Buckna (Kelowna, BC), which appeared in The Telegram (Tuesday, January 21, 2003, page A6). Mr Buckna's letter contained a number of misleading statements and blatantly false claims, which, in the interest of public education, I'd like to comment upon.

1. "On Jan. 18, Queen's University paleontologist Guy Narbonne was interviewed on CBC Radio's Quirks and Quarks concerning the discovery of "575 million-year-old" fossils in southeast Newfoundland that resemble "modern, soft corals" - said to be the "oldest, complex organisms" ever found. Critical thinkers should be asking how Narbonne can be so certain the fossils are really that old."

Dr. Guy Narbonne decisively addressed this question in "Dating history" (The Telegram, Saturday, January 25, 2003, page A10) but for more info, see "<u>Age-Dating of Mistaken</u> <u>Point Fossils</u>" and "<u>The Oldest Complex</u> <u>Animal Fossils</u>". For an excellent, readable explanation of radiometric dating, see "Numerical Ages in Million Years" in Chapter 2 of Alvarez (1997).

2. "Evolutionary geologists use rocks to date the fossils, and use fossils to date the rocks. This is a classic case of circular reasoning. J.E. O'Rourke recognizes the problem: The rocks do date the fossils, but the fossils date the rocks more accurately. Stratigraphy cannot avoid this kind of reasoning if it insists on using only temporal concepts, because circularity is inherent in the derivation of timescales." (American Journal of Science, January 1976, p. 53)."

The above section is a distortion of the facts. During the last two hundred years or so, the fossiliferous portion of the geological column has been subdivided and dated using fossils, to provide a relative time scale. The development of radiometric dating has allowed scientists to assign numeric ages to these fossiliferous intervals with ever increasing levels of precision (see "Radiometric Dating and the Geological Time Scale: Circular Reasoning or Reliable Tools").

The quote from O'Rourke (1976, page 53) is out of context (a common criticism leveled at creationists). The last paragraph of O'Rourke (1976, page 55) states: "The first step is to explain what is done in the field in simple terms that can be tested directly. The field man records his sense perceptions on isomorphic maps and sections, abstracts the more diagnostic rock features, and arranges them according to their vertical order. He compares this local sequence to the global column obtained from a great many man-years of work by his predecessors. As long as this cognitive process is acknowledged as the pragmatic basis of stratigraphy, both local and global sections can be treated as chronologies without reproach."

The chronic misuse of O'Rourke (1976) by creationists is dealt with in "<u>Are fossils</u> dated by circular reasoning?"

3. "Consider trilobite fossils. Kingston author Ian Taylor (In the Mids of Men) writes: "Thus, these creatures living at the earliest stages of life used an optimal lens design that would require very sophisticated optical engineering procedures to develop today. If Darwin turned cold at the thought of the human eye at the end of the evolutionary cycle, what, one wonders, would he have thought of the trilobite eye near the beginning?" (p. 169, 4th edition, TFE Publishing, 1999)."

Ian Taylor is an <u>Intelligent Design</u> <u>creationist</u>. Earlier editions of his book "In the Minds of Men: Darwin and the New World Order" were recently critiqued in detail by <u>Don Lindsay</u>. This provoked a notably incomplete <u>response</u> from Mr. Taylor, whose background is in metallurgical engineering (not paleontology).

According to Dawkins (1995, page 78), "serviceable image-forming eyes have evolved between forty and sixty times, independently from scratch, in many invertebrate groups. Among these forty-plus independent evolutions, at least nine distinct design principles have been discovered, including pinhole eyes, two kinds of camera-lens eyes, curved reflector ("satellite dish") eyes, and several kinds of compound eyes."

4. "So why aren't transitional fossils [leading up to corals, sponges, brachiopods, trilobites, the highly complex creatures of the Burgess Shale (e.g. Anomalocaris, Hallucigenia), jellyfish, and countless other life forms] found in the fossil record." This is a favorite phrase of Mr. Buckna's. In a Letter to the Editor in the Leader Online (Fort Hays State University, Friday 09.03.99, Volume 94, Number 4) he wrote:

"So why aren't transitional fossils [that led up to pterosaurs, mosasaurs, ichthyosaurs, dinosaurs and countless other life forms] found in the fossil record?" Mr. Buckna is incorrect. The fossil record contains many transitional fossils, a small number of which are discussed in "Intermediate and transitional forms: the possible morphologies of predicted common ancestors".

5. "Most paleontologists would probably cite the "punctuated equilibria" model of evolution (Eldredge and Gould, 1972) which is unique. It must be the only theory put forth in the history of science which claims to be scientific, but then explains why evidence cannot be found. I thought a good theory was based on evidence, not a lack of evidence."

This section originally appeared in the online Letter to the Editor in the Leader Online (Fort Hays State University, Friday 09.03.99, Volume 94, Number 4), referred to above. And this is recycled almost word for word from Mr. Buckna's November, 1995 article, "Do Dino Fossils Support Evolution?", challenged by Jeff Poling.

Mr. Buckna, of course, is wrong about the lack of evidence for punctuated equilibria. Eldredge and Gould (1972) proposed it to explain the distributions of Pleistocene snails in Bermuda and Middle Devonian trilobites in North America (Eldredge and Gould,1972, pages 98-108). See "<u>Common errors in discussion of PE</u>" for more discussion of this issue. For an excellent historical account of creationist tactics, see "Chapter 13: What about God" (Zimmer, 2001, pages 313-344).

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- Zimmer, C., 2001: <u>Evolution: The Triumph</u> of an Idea. HarperCollins Publishers, New York, 364 pages.
- For more extensive information, see also:
- "Arguments against Creationism",
- "Creationism Is Not Science", "The
- Creation-Evolution Debate", "Evolution and
- Creationism", "Evolution as Fact and
- Theory", "Evolution FAQ", "Evolution vs.
- Creationism" and "Must-Read Files".



By Cam Tsujita

Paleontology and Employment: The Greener Side

Well, here it is – my first attempt at putting together an issue of EON. I must confess that when the Paleontology Division executive first asked me if I could act as editor of the newsletter, I thought they were out of their minds. Why would they assign such a duty to a nut like me? While I'm still asking myself this question, I am flattered by their confidence in me, and will try my very best to do this newsletter justice. I think we all agree that Mike Melchin, the former editor of EON, did an amazing job, and I hope that I can scale the steep learning curve sooner than later to match the standard he set for the newsletter.

In the past several months, I have slowly dug myself out from under the pile of paper on my desk to finally reach the task of writing EON. It's amazing how long one can survive without oxygen. Well, what the hell - bacteria can do it, right? Anyway, while I was digging through the assorted detritus of a textbook manuscript, assorted notes and figures for new courses, outreach documents, and moldy research papers in progress, I couldn't help but think about how hard is paleontologists work. But while I grumble about my workload, I know that I do all this because...deep down...I like what I do ('slap' – please, sir, can I have another – 'slap')! I am also very, very lucky to have a job in which I can study (or at least talk about) fossils and rocks.

Is this column yet another pep talk for younger members preparing to look for jobs in the dismal workforce of the new millennium? Damn right it is! I will, however, avoid statements like "well, I hear that more faculty will be retiring." As a relatively young member of the Canadian paleontology community, I know better than to venture into that realm.

Many (but thankfully, not all) paleontology professors tell their students "get your Masters done, publish like hell, get a Ph.D., publish like hell, get a postdoctoral fellowship, keep publishing like hell, and *maybe* you'll find a position somewhere." Is this the only way to get a paleontology-related job? My experience says it isn't.

I recall finishing my Ph.D. in 1995, and moving to London with \$50.00 to my name. My wife was enrolled in teacher's college at the University of Western Ontario, and it looked inevitable that we would both have to survive on her student loan. I must confess at this point that I was under no illusion that I would find a paleontology-related job after completing my doctoral studies (getting the degree was just a personal goal). I was, however, determined that I was going to continue my pursuits in paleontology, whether employed or not. Safely prepared for rejection, I approached Fred Longstaffe, then Chair of the Department of Earth Sciences at Western, about the possibility of part-time work in the department. He was willing to give me a chance.

After scrounging up funds (in a way only Fred seems to be able to do) out of the department's already limited budget, Fred agreed to employ me to teach a fourth year course in petroleum geology and to use my artistic skills to make the department more aesthetically attractive. During that time, I also started bringing in school kids and other groups for department tours and workshops, and showcasing aspects of paleontology at public events. Public outreach would later become a major component of my job description, and serve as a significant tool for the promotion of the department within the university and in the London community. I would also later pick up teaching duties for some of the first-year courses – courses that older members of the department were reluctant to take, but which I found extremely fulfilling to teach. By multitasking, I managed to define a unique niche for myself in the department.

I am now an Assistant Professor at Western, and I continue to enjoy all the things I do here – every day brings completely new challenges. I'm also relatively safe, employment-wise (touch wood), because my duties are not only significant to the efficient operation of the department but are also the very tasks that the more research-minded faculty members would rather leave alone! That is not to say that I've completely abandoned research. Research is, in fact, becoming increasingly important in my job description.

As paleontologists, we are well aware that the success of a new taxon is not solely dictated by the extinction of its ancestor. In the same way, individuals trained in paleontology do not necessarily have to wait around for the incumbents to retire. There are many niches out there to be filled, and if you can't find one, you can make your own. One must seize opportunities and use these opportunities to create more opportunities. There will always be a small number of individuals brilliant and aggressive enough to rise to the top of the research tree – I wish them all the best. However, as in natural ecosystems, there are plenty of other roles of equal importance to fill in the academic workforce and elsewhere. Personally, I'm glad that my career has developed as it has. Life is always interesting, and I have some satisfaction of knowing that I established myself in the workforce more or less on my own terms and have broken a few rules in the process.

So while I continue to dig myself out from this pile of paper, and grumble about the amount of work I make for myself, deep down I'm pretty happy about where I am. These are undoubtedly hard times for paleontologists, but I think with a little ingenuity, all paleontologists have the potential to find employment they enjoy. Sure, this is easy for me to say now that I have a job, but I'm hoping the readers of EON find a little inspiration from my story. Well, back to the pile!

Awards



FIRST *PIKAIA* AWARD RECIPIENT: DR. JISUO JIN

Dr. Jisuo Jin (University of Western Ontario) was the inaugural winner of Paleontology Division's new *Pikaia* Award; it was presented to him on Saturday, September 28, 2002 at CPC-2002 (Ottawa), in recognition of his recent outstanding contributions to the paleontology of Ordovician and Silurian brachiopods.

The *Pikaia* Award is named after *<u>Pikaia</u>*, an early <u>cephalochordate</u> known from the <u>Burgess Shale</u>. It is bestowed in recognition of:

 a recent contribution to research on any aspect of Canadian paleontology, or
 a Canadian's contribution(s) to paleontology that is/are judged to constitute an outstanding accomplishment in the field. The outstanding accomplishment may be a single paper or monograph or a series of closely related papers.

The award is given biennially in evennumbered years, normally to an individual who is no more than 15 years past their last degree.

His <u>bio</u> on the NRC Research Press web site states:

"Jisuo Jin was born in 1957 in Hebei Province, China. He obtained his B.Sc. Degree in Geology (Beijing University) in 1982, M.Sc. (Laurentian University) in

1984, and Ph.D. (University of Saskatchewan) in 1988. In the following vears of postdoctoral research at the University of Western Ontario, Royal Tyrrell Musuem of Paleontology, and Laurentian University, Jisuo Jin authored and co-authored seven monographs and many research papers on the Ordovician and Silurian brachiopods from major Canadian sedimentary basins of Canada. He became an assistant professor in the Department of Geology, University of Regina, in 1997 and moved in the following year to the Department of Earth Sciences, University of Western Ontario, where he continues to teach today. Jisuo Jin's main research area includes taxonomy, biostratigraphy, paleoecology, evolution, extinction and recovery, and paleobiogeography of Ordovician and Silurian brachiopods."

As of September 14, 2002, his "<u>Publications</u>" page listed an astounding eight peer-reviewed books and monographs, twenty-seven peer-reviewed papers, four non-peer-reviewed papers and notes, three edited books and special volumes, seven technical reports, four field guides and twenty conference abstracts/posters!

The following citation from the nominating committee says it all: "Dr. Jisuo Jin is a broadly trained geologist, an unusually gifted paleontologist, and an internationally recognized specialist in the fossil Brachiopoda, their systematics, biostratigraphy, functional morphology, phyletic development, community and environmental associations, and geographic distribution."

In little more than a decade since completion of his formal studies (M.Sc. Laurentian, Ph.D. Saskatchewan), Jin has amassed a most creditable record of published scholarship that includes eight monographs on the Early Paleozoic brachiopods of Canada (collectively exceeding 1000 pages and 225 plates) and some thirty papers in the internationally recognized, archival literature of his field. The common factor in all his paleontological studies, which extend geographically from the Anticosti Basin of Quebec to the coeval carbonate platform of British Columbia and the Northwest Territories, is the Late Ordovician-Early Silurian time-slice of the stratigraphic column. This consistently constrains his investigations in a way that enables him to build a growing explanation of the various factors controlling contemporary brachiopod assemblages across the Laurentian continent during a brief interval of earth history marked by mass extinction, continental glaciation, and the global geographic and tectonic events associated with an inter-systemic boundary.



Paleontology Division Chair, Doug Boyce presents the first Pikaia Award to Jisuo Jin at the Canadian Paleontology Conference, September, 2002, Ottawa, Ontario.

As a research scientist, Jin's integrity is total. He thinks creatively and incisively about his fossils as once-living creatures; his judgment transcends his years of experience; and in his dedication and industriousness lies the key to the quality and quantity of his scholarship. The totality of Jin's paleontological contributions unquestionably warrants commendatory recognition by his peers."

One of the committee also pointed out (in March, 2002): "Letters of reference include the foremost authorities on brachiopods from three countries, including Art Boucot who many regard as the greatest brachiopod worker ever. Dr. Jin holds a position at a Canadian university where he teaches undergraduate and graduate courses and supervises graduate students in paleontology. He has been a tireless worker for the Canadian paleontological community - organizing the recent and very successful Canadian Paleontology Conference last October (2001), serving as Councillor (1997 2000) and Chair (2000-2001) of the GAC Paleontology Division, organizing paleontological symposia at GAC (1999, 2002) and organizing major international meetings in Canada (Third International Brachiopod Congress '95)."

As mentioned above, Dr. Jisuo Jin served as the 2000-2001 Chair for the division; it was in that capacity that he concocted one of the most original and amusing Eon bylines -Jin's Tonic. Finally, while it was a great pleasure serving on the executive committee with him, even better was presenting him with his richly deserved *Pikaia* Award.

Cheers, Jin!

- Doug Boyce, Paleontology Division Chair

Mike Melchin Wins GAC Past Presidents' Medal

Dr. Michael Melchin was awarded this year's GAC Past Presidents' Medal on May 26, 2003, in Vancouver, at the Geological Association of Canada (GAC) annual meeting, held jointly with the Mineralogical Association of Canada (MAC) and Society of Economic Geologists (SEG).

The Past Presidents' Medal is presented annually by the GAC, to a geoscientist who has made outstanding accomplishments in research, development, or applications during the first decade or so of his or her career.

Mike received his B.Sc. and M.Sc. degrees at the University of Waterloo in the early 1980s and his PhD from the University of Western Ontario in 1987. He is currently a Professor at St. Francis Xavier University, but is also an Honorary Adjunct Professor at Dalhousie University, and an Adjunct Professor in the Department of Earth Sciences at the University of Western Ontario.

Mike's outstanding research on graptolites has contributed significantly to the understanding of the timing and character of global events in the Early Paleozoic, particularly with respect to biotic diversification and extinction. Thus far in his brief career, he has authored over 30 papers in international scientific journals and over 50 presentations at scientific meetings. He has also played some very important administrative roles, serving as Secretary of the International Subcommission on Silurian Stratigraphy, and as an assistant coordinating author of the 3rd Edition of the *Treatise on* *Invertebrate Paleontology, Part V, Graptolithina*, among many other functions.

Melchin's diverse interests in graptolite systematics, biostratigraphy, paleobiogeography, paleobiology, evolution, and taphonomy, as well as many aspects of geology outside paleontology have contributed greatly to his reputation of being one of the most innovative geoscientists in his field. His enthusiasm for paleontology has also inspired scores of undergraduate and graduate students (and members of the general public) to gain a better understanding of Earth's history.

Congratulations, Mike, for earning this well-deserved award, and thank you for your contributions to our discipline.



Mike Melchin accepts the GAC Past Presidents' Medal from GAC past president StephenMorison of: (Photo by Otto Krauth, GSC for 2003 GAC-MAC-SEG Vancouver meeting).

Meeting Reports

Report on the Canadian Paleontology Conference 2002

The 2002 meeting of the Canadian Paleontology Conference was held on September 29-30, 2002 at the national headquarters of the Geological Survey of Canada in Ottawa, Ontario. Jean Dougherty and Sandy McCracken did a fantastic job of organizing and coordinating the meeting, which featured some twentythree oral presentations and three posters, a wonderful banquet, and some great opportunities to take in the many sights and sounds of Ottawa from a paleontological perspective. Jean and Sandy also undertook the always-stressful task of assembling the Abstracts and Short Papers volume for the meeting. Thanks to the hard work of the Ottawa dream team (including Jean, Sandy and a score of helpers), CPC-2002 was a great success. The great diversity of paleontological studies in Canada was very well represented in the talks and posters presented CPC-2002.



CPC-2002 co- organizer Jean Dougherty takes a well-deserved break from her hectic schedule (Photo by partner in crime, Sandy McCracken).

Among the several conodont-based talks were those presented by: *David M.S. Jowett* and *Christopher S. Barnes*; *Godfrey S. Nowlan* (*Paleontological contributions to understanding of the deposition and erosion of Cambrian and Ordovician strata in the subsurface of the Western Canada Sedimentary Basin*); and *Leanne J. Pyle* and *Christopher Barnes* (*Lower Paleozoic conodont biostratigraphy and regional correlations in the Canadian Cordillera*).

Graptolites were featured in talks given by: *Michael J. Melchin* (*Restudy of some Ordovician-Silurian boundary from Anticosti Island: implications for the age and correlation of the Ellis Bay Formation*), *Charles E. Mitchell, Michael J. Melchin, H. David Sheets, Chen Xu* and *Fan Jun-Xuan* (*Graptolite diversity dynamics during the end-Ordovician mass extinction: insights from multiple analytical approaches*).

Additional critters that made appearances in biostratigraphic reports were trilobites (*Michael Cuggy*; *Trilobites and the biostratigraphy of the Upper Cambrian Sullivan Formation of Alberta and British Columbia*), foraminifera (*Qiang Tu* and *Claudia J. Schroder-Adams*;

Biostratigraphic analysis of the Cretaceous Colorado Group in the Cold Lake heavy oil areas, Alberta, Canada), and ice-age mammals (**John Storer**; Advances in the ice age biostratigraphy of eastern Beringia).

Work of the Queen's University research group on the Ediacaran biota of Newfoundland continues to shed new light on some of Earth's oldest metazoan assemblages. A talk by *Marc LaFlamme*, *Guy Narbonne* and *James G. Gehling* (*Morphometric analysis of* Charniodiscus from the Neoproterozoic Mistaken Point Formation, Newfoundland) demonstrated the importance of restoring the tectonically deformed Mistaken Point fossils to their original forms prior to their identification. The Newfoundland outcrops continue to offer new surprises. Recent U-Pb dates obtained from ash beds, combined with stratigraphic considerations, have revealed that fossils of the Drook Formation (underlying the classic Mistaken Point beds by about 2 km) represent Earth's oldest known megascopic life forms. Significantly, the Drook assemblage includes a giant, and complex frond-shaped form nearly 2 metres long, suggesting that the earliest metazoans must have developed much earlier than we once thought!



The talented Catherine Boisvert, this year's winner of the of **T.E. Bolton Award** for best student presentation (Photo by Sandy McCracken).

Catherine Boisvert combined paleontological and neontological evidence to explore the notoriously obscure history of salamanders. Using data on the ossification sequence of modern amphibians, Catherine determined that a close relationship exists between *Ranodon* (a member of the most primitive family Hynobiidae) and the labryinthodonts and modern frogs, but noted that the rest of the order in question more closely resembles lepospondyls and caecilians in vertebral development. A talk by *Jean-Bernard Caron, Stuart Milliken* and *David Rudkin* on a naraoiid arthropod from the Upper Silurian Bertie Formation in Ontario, further emphasized that the game of life is less straightforward as some of us might like to believe. Imagine that! Fallout from the Cambrian explosion!

Talks on a number of paleoecological topics were also presented at the meeting. A talk by **Brian Pratt** and **Darrel Long** illustrated how fault movement influenced the establishment and development of enormous Cambrian mudmounds in northern British Columbia. Carbonate buildups also figured prominently in a presentation by *Jisuo Jin* who presented intriguing evidence that brachiopod-rich reefs of the Attawapiskat Formation of the Hudson Bay Basin lay within a equatorial "calm zone" of the Silurian world. Biogenic buildups of a more local flavour were enthusiastically described by Al Donaldson (with Ilde Munro and Abdi Hilowle), who illustrated some beautiful Cambro-Ordovician stromatolites recently exposed along the Ottawa River and led a field trip to show these impressive features first-hand to the conference participants. Perhaps as impressive as the stromatolites themselves was the ingenious method of photographing an outcrop surface, which involved the use of several helium-filled balloons and a remotely triggered camera (hmm...why am I getting flashbacks of an undergraduate keg party right now?).

Additional papers relating to the paleoecology of Paleozoic organisms included a talk by *Michel Chartier, Mario Cournoyer* and *Pierre Veilleux* on *Upper Ordovician eurypterids from the Rivière des Hurons, Southern Québec*, and a poster by *David M. Rudkin, Graham A. Young, Robert J. Elias* and *Edward P. Dobranski* entitled *On the trail of the world's biggest trilobite: giant traces from the Upper Ordovician of Churchill, Manitoba.*

Paleoecological aspects of Mesozoic life were also addressed at the meeting. David M.S. Jowett and Claudia Schroder-Adams illustrated the importance of foraminiferal assemblages in the study of paleoenvironmental and relative sea level changes recorded in the Lower Cretaceous Sikanni Formation (Liard Basin). Insights on life on land during the Cretaceous were provided in a talk by **David C. Evans** on a new Corvthosaurus skull from the Dinosaur Park Formation of southeastern Alberta. This find has apparently expanded the known geographic range of the genus and provides new data for the further investigation of sexual dimorphism in hadrosaurs.

Some organisms, such as the conodont critters, continue to perplex us in terms of what they looked like and how they lived. As indicated by a talk by Peter H. von Bitter, Mark A. Purnell, Denis K. Tetreault and Christopher Stott (Natural conodont assemblages from the Silurian Eramosa Member (Guelph Formation) of southern Ontario) and a poster by Mark A. Purnell and Peter H. von Bitter (Natural assemblages of Idioprioniodus (Conodonta, Vertebrata) and the first three-dimensional skeletal model of a prioniodinid conodont), the ongoing quest for details on how conodont elements fit into the overall anatomy of their former owners is alive and well in Canada. As indicated in a talk by Cam Tsujita (Preliminary observations on the jaw apparatus of the Late Cretaceous ammonite Placenticeras), cephalopod workers are faced with similar challenges in their attempts to reconstruct the feeding apparatus of ammonites.

Adding to the diverse range of papers presented at CPC-2002 were talks by *Nicoli Garner* and *Cam Tsujita* on the presence of sulphate-reducing bacteria in Devonian hydrocarbon reservoirs of southwestern Ontario, *Scott Taylor* and *Cam* *Tsujita* on the OGReNet (Ontario Geoscience Resource Network) outreach project, and a poster by Brian Iwama on the trials and tribulations of casting large trace fossils under cold-temperature field conditions.

In addition to the many presentations offered in the program of the Ottawa meeting, conference participants were treated to a behind-the-scenes look at the **Great Asian Dinosaurs** exhibit in the **Canadian Museum of Nature** and a tour of the new collections facility at the **Canadian Museum of Nature's** Natural Heritage Building in Aylmer, Québec. The cooperation of *Steve Cumbaa* and *Alison Murray* in accommodating the CPC group at the **Canadian Museum of Nature** is gratefully acknowledged by all participants. CPC participants were also permitted to view the GSC collections.



Paleontology Division Past Chair Paul Johnston leads the Paleojam group in a Rolling Stones cover. Although looking very content here, Paul proclaimed that he still "can't get no satisfaction" (Photo by Sandy McCracken)

The CPC banquet, as always, was a thoroughly enjoyable event. *Jean Dougherty's* eye for detail did, however, make this year's banquet especially memorable. The choice of venue was not only unique (how many people can claim to have eaten a gourmet meal in a facility where banana slugs were mating the next room), but also featured some amazing food (the desserts were to die for, by the way). The banquet also featured the presentation of the first Pikaia Award to Jisuo Jin and the presentation of student awards. The T.E. Bolton Award for best student presentation went to Catherine Boisvert (Redpath Museum) for her presentation entitled Vertebral development and its evolution in modern salamanders. Runnerup prize was awarded to Marc Laflammme (Queen's University), for his presentation (with Guy Narbonne and James G. Gehling) entitled Morphometric analysis of Charniodiscus from the Neoproterozoic Mistaken Point Formation, Newfoundland. Congratulations to Jin, Catherine and Marc!

The CPC banquet also featured the 3rd annual post-banquet **Paleojam** session that included the talents of *Catherine Boisvert* (violin), the usual odd assortment of instrument-wielding paleontologists, our legendary Irish drinking song specialist *Godfrey Nowlan*, and our Chair (and man of many hats), *Doug Boyce*. While I like to think that we made too much noise for the museum to tolerate (it is doubtful that many banana slugs mated that evening), apparently the jam session was cut short because our allotted time in the venue had expired.

Thanks again to *Jean Dougherty*, *Sandy McCracken*, and all of their assistants in an extremely successful Canadian Paleontology Conference! We all look forward to the upcoming CPC-2003 in Edmonton (September 19-21), hosted by *Brian Chatterton* and his colleagues.

- Cam Tsujita

Publication News



PALAEONTOGRAPHICA CANAD**I**ANA

Paleontographica Canadiana is celebrating its 25th anniversary with a flurry of activity: there are four monographs in the works. Brenda Hunda, Brian Chatterton and Rolf Ludvigsen's monograph on Late Ordovician trilobites from the Avalanche Lake section in the NWT is now available*. Brian Chatterton and Rolf Ludvigsen have also submitted a massive work on the Early Silurian trilobites from Anticosti Island (85 plates!!) that is back with the authors after the review process. Richard Fox's manuscript on, "Microcosmodontid multituberculates (Allotheria. Mammalia) from the Paleocene and Late Cretaceous of Western Canada" has gone out for review. A new manuscript has been

submitted by Arden Bashforth on Upper Carboniferous macroflora from southwestern Newfoundland. This is back with the author getting into Pal Can format before being sent out for review.

These manuscripts should keep the gnomes in the Pal Can office busy for a while, but don't be shy about contacting the editor if you have a large, dominantly taxonomic, work that is nearing completion:

- Keith Dewing

* Monograph citation: Hunda, B., Chatterton, B., and Ludvigsen, R. 2003. Silicified Late Ordovician Trilobites from the Mackenzie Mountains, Northwest Territories, Canada. Palaeontographica Canadiana, Number 21, 87 pages (printed January 27, 2003).

Reports From the Paleontology Division

REPORT FROM THE PALEONTOLOGY DIVISION (GAC) (February 28, 2003)

by Doug Boyce (Division Chair)

1. EXECUTIVE COMMITTEE OF THE PALEONTOLOGICAL DIVISION

The current executive committee of the division for 2002-2003 is:

Chair: Doug Boyce Vice Chair: John Storer Secretary-Treasurer: Keith Dewing Councillor, 2nd Year: Frank Brunton Councillor, 1st Year: Cam Tsujita Past Chair: Paul Johnston

2. MEETINGS

a) CPC-2002 (The 12th Canadian Paleontology Conference) was held in Ottawa from September 28-30. At the September 28 business meeting, it was proposed:

i) That the term of office of Paleontology Division Chair, Vice-Chair and Past-Chair be for two years, beginning with the current executive.

ii) That the Terms of Reference for the Awards Committee be amended such that the Past Chair will chair the Awards Committee for the Billings Medal and the 2nd Year Councillor will chair the Awards Committee for the *Pikaia* Award.

iii) That for by-law changes, postal, e-mail, fax or hand-delivery be acceptable forms of sending and receiving ballots.

Voting on the above is currently underway; it is to be completed by March 15, 2003.

b) For GAC/MAC 2003 (Vancouver), the division is sponsoring:

 Special Session — The Eocene Okanagan Highlands (British Columbia/Washington State): Paleoclimate and evolutionary response
 Symposium — Paleogeography of the North American Cordillera: Evidence for and against large-

scale displacements c) New Frontiers in the 4th Dimension: Generation,

Calibration and Application of Geological

Timescales (NUNA Meeting, Mt. Tremblant,

Québec, Canada, March 15-18, 2003 —

http://www.nunatime.ca) will see Paleontology Division participation.

d) GeoSciEd IV (Earth Science for the Global Community — <u>http://www.geoscied.org/</u>) takes place in Calgary from August 10-14, 2003. Godfrey Nowlan is Chair of the Local Organizing Committee for this international geoscience education conference.

e) CPC-2003 (The 13th Canadian Paleontology Conference) will be held in Edmonton. According to the organizer, Brian Chatterton

(Brian.Chatterton@ualberta.ca): "Current plans are to hold it at the end of the third week of September. We will probably run a field trip to Grande Cache to look at Dinosaur Trackways, and probably then on to Jasper and back down the David Thompson Highway, taking in part of the beautiful Banff-Jasper route through the Mountains (via Columbia Icefields, and a few interesting fossil localities in the parks). It would be a 2-3 day trip (Sunday through Tuesday), with the lectures restricted to Saturday". f) CPC-2004 (The 14th Canadian Paleontology

Conference) will be held at the Huntsman Marine Science Centre (<u>http://www.huntsmanmarine.ca/</u>) near St. Andrews, New Brunswick, in mid- to late August, 2004. The conference is being organized by Jean-Bernard Caron (<u>jcaron@rom.on.ca</u>) and Mairi Best (<u>mmrbest@eps.mcgill.ca</u>).

g) discussions are underway about a possible joint BC Paleontological Symposium and CPC-2005 meeting.

3. PUBLICATIONS.

Palaeontographica Canadiana

a) The following has been published:
Hunda, B., Chatterton, B., and Ludvigsen, R. 2003.
Silicified Late Ordovician Trilobites from the Mackenzie Mountains, Northwest Territories,
Canada. Palaeontographica Canadiana, Number 21.
b) There are two publications underway:
i) Chatterton, B., and Ludvigsen, R. Early Silurian trilobites of Anticosti Island, Quebec, Canada. Both reviews have been received, and the authors have received the MS back from the editor, and made appropriate revisions. The revised MS will be on its way to Keith Dewing within a few days ii) Fox, R. Microcosmodontid multituberculates (Allotheria, Mammalia) from the Paleocene and Late Cretaceous of Western Canada. Out for review

4. FINANCES

Summary of finances, 1 January to 31 December, 2002 (from Keith Dewing):

INCOME:	\$1697.05
EXPENDITURES:	\$1318.67
ASSETS: chequing acct.	\$2344.15
GICs:	\$9792.21

5. WORLD WIDE WEB

The Paleontology Division maintains a web site (<u>http://iago.stfx.ca/people/paleodiv/pd.html</u>), which contains the division's newsletter, *EON*, and paleoGallery (a series of sketches showing the work of paleontologists in Canada — <u>http://iago.stfx.ca/people/paleodiv/Gallery/Gallery.ht</u> m), Canadian paleontology publications, and web links to other paleontology-related sites.

6. OUTREACH

Members of the Paleontology Division are active in public education. Guy Narbonne (with Mr. Rodrigo Sala) led the extremely well received GAC Newfoundland Section Fall Field Trip — Life after Snowball Earth: The Mistaken Point biota and the origins of animals, October 4–6, 2002 (http://www.geosurv.gov.nf.ca/gacfield.html). This included an on-site interview of Dr. Narbonne at Mistaken Point by Jonathan Crowe, CBC Television (St. John's). According to Mr. Crowe, it aired on CBC Country Canada's "CountryWide" program, CBC Newfoundland's supper hour newscast ("Here and Now"), the supper hour newscast in Fredericton, New Brunswick; it was also translated into Inuktituk and aired on CBC North out of Yellowknife.

Cam Tsujita is heavily involved in the OGRe-Net (Ontario Geosciences Resource Network — <u>http://www.ontariogeoscience.net</u>), a web-based information gateway designed as a resource for teachers for communication of geoscience concepts.

Outreach activities of Doug Boyce since the last report have included a January 10, 2003 CBC Radio ("On The Go") interview, a January 25, 2003 CBC Country Canada ("CountryWide") interview as well as postings to the Canadian Paleontology Discussion Group (CANPALEONT —

http://www.nrcan.gc.ca/gsc/calgary/canpal/discgrp/di scgrp_e.html).

In January, 2003, Guy Narbonne and Doug Boyce both responded to "Letters to the Editor" written to St. John's, NL and Kingston, ON newspapers by a young-earth creationist.

REPORT FROM THE PALEONTOLOGY DIVISION (GAC) (May 12, 2003)

by Doug Boyce (Division Chair)

1. EXECUTIVE COMMITTEE OF THE PALEONTOLOGY DIVISION

The current executive committee of the division for 2002-2003 is: Chair: Doug Boyce

wdb@zeppo.geosurv.gov.nf.ca Vice Chair: John Storer jstorer@gov.yk.ca Secretary-Treasurer: Keith Dewing kdewing@NRCan.gc.ca Councillor, 2nd Year: Frank Brunton brunton@sciencenorth.on.ca Councillor, 1st Year: Cam Tsujita¹ ctsujita@julian.uwo.ca Past Chair: Paul Johnston Paul.Johnston@gov.ab.ca

At the September 28, CPC-2002 business meeting, three motions were made:

Motion 1.

That the term of office of Paleontology Division Chair, Vice-Chair and Past-Chair be for two years, beginning with the current executive. **Motion 2.**

That the Terms of Reference for the Awards Committee be amended such that the Past Chair will chair the Awards Committee for the Billings Medal and the 2nd Year Councillor will chair the Awards Committee for the *Pikaia* Award.

Motion 3.

That for by-law changes, postal, e-mail, fax or handdelivery be acceptable forms of sending and receiving ballots. Voting was completed on March 15, 2003. All three motions received 38 votes for, 0 against, out of 85 eligible voters. The voting results have been forwarded to GAC Council for approval.

2. THE ELKANAH BILLINGS MEDAL AND RECIPIENT

The Billings Medal is awarded to an individual in recognition of an outstanding long-term contribution to any aspect of Canadian paleontology or by a Canadian to paleontology. The medal is named in honor of Elkanah Billings, Canada's first paleontologist. It is awarded biennially, normally in uneven-numbered years.

Paleontology Division's Awards Committee chaired by Past Chair Paul Johnston — unanimously selected Dr. Brian S. Norford as the Billings Medalist for 2003. The selection further won the unanimous approval of the Paleontology Division executive. Dr. Norford's selection has been forwarded to GAC Council for approval. Given the high calibre of Dr. Norford, we hope Council sees fit to continue the unanimity.

3. MEMBERSHIP

The Paleontology Division remains one of the most active organizations within the GAC. Currently there are 170 members (75 student members, 87 regular members, 8 corporate members). Membership is down compared to 2001-2002, when there were 192 members (103 regular, 89 student). but up compared to May, 2002, when it stood at 150 (87 regular, 63 student).

4. MEETINGS

a) CPC-2002 (The 12th Canadian Paleontology Conference) was held in Ottawa from September 28-30.

b) GAC—MAC 2003 (Vancouver). The division is sponsoring:

1) Special Session — The Eocene Okanagan Highlands (British Columbia/Washington State): Paleoclimate and evolutionary response

2) Symposium — Paleogeography of the North American Cordillera: Evidence for and against largescale displacements

Regrettably, none of the executive committee are able to attend GAC—MAC 2003. Consequently our next business meeting will be at CPC-2003 (Edmonton). c) New Frontiers in the 4th Dimension: Generation, Calibration and Application of Geological Timescales (NUNA Meeting, Mt. Tremblant, Québec, Canada, March 15-18, 2003 — <u>http://www.nunatime.ca</u>) saw Paleontology Division participation.

d) 3rd International Mammoth Conference <u>http://www.yukonmuseums.ca/mammoth/seccir.html</u> — Dawson City, Yukon, Canada (May 24–29, 2003). Vice Chair John Storer has organized this meeting. e) GeoSciEd IV (Earth Science for the Global Community — <u>http://www.geoscied.org/</u>) takes place in Calgary from August 10-14, 2003. Godfrey Nowlan is Chair of the Local Organizing Committee for this international geoscience education conference.

f) CPC-2003 (The 13th Canadian Paleontology Conference) will be held in Edmonton. According to organizer Brian Chatterton

(Brian.Chatterton@ualberta.ca): "The plans are to have the talks on Saturday, September 20, two field trips running (short one will be on September 21-22; long one September 21-24), so arrival dates would be September 19th (mixer that evening) and departure on September 23rd or 25th depending on which trip is taken."

g) CPC-2004 (The 14th Canadian Paleontology Conference) will be held at the Huntsman Marine Science Centre (<u>http://www.huntsmanmarine.ca/</u>) near St. Andrews, New Brunswick, in mid- to late August, 2004. The conference is being organized by Jean-Bernard Caron <jcaron@rom.on.ca> and Mairi Best <mmrbest@eps.mcgill.ca>.

h) GAC—MAC 2004 (St. Catharines) and GAC— MAC 2005 (Halifax). Requests have been made to the organizers that space be provisionally reserved for Paleontology Division business meetings.
i) discussions are continuing about a possible joint BC Paleontological Symposium and CPC-2005 (The 15th Canadian Paleontology Conference) meeting.

5. PUBLICATIONS (from Sandy McCracken).

Palaeontographica Canadiana

a) The following has been published:

Hunda, B., Chatterton, B., and Ludvigsen, R. 2003. Silicified Late Ordovician Trilobites from the Mackenzie Mountains, Northwest Territories, Canada. Palaeontographica Canadiana, Number 21 (printed January 27, 2003).

b) There are four manuscripts in progress:

Palaeontographica Canadiana No. 22: Silurian trilobites from Anticosti Island.Chatterton and Ludvigsen. (in curation check, marking up for type setting; will be a 2003 publication).

Palaeontographica Canadiana No. 23: Microcosmodontid multituberculates (Allotheria, Mammalia) from the Paleocene and Late Cretaceous of western Canada. R. Fox. (in review, one back, one lagging review).

Palaeontographica Canadiana No. 24: Kyphophyllid rugose corals from the Frasnian (Upper Devonian) of Canada and their biostratigraphic significance. R. Mclean, A. Pedder. (\$3000 contribution from Anadarko received, ms not yet submitted).

Palaeontographica Canadiana No. 25: Received April 14, 2003. Upper Carboniferous (Bolsovian) macroflora from the Barachois Group, Bay St. George Basin, southwestern Newfoundland, Canada. Arden Bashforth. 142 p., 20 pls., 31 text-figs. The work is a mix of paleoenvironmental interpretation and taxonomy with 44 taxa described, many of which are in open nomenclature. Off to review (one out, one going). Paleontology Division Handbook Boyce has started making revisions to this 1995 document.

6. FINANCES

Summary of finances (from Keith Dewing):

ASSETS: chequing acct.	\$3473.18
GICs:	\$9835.07

7. WORLD WIDE WEB

The Paleontology Division maintains a web site (<u>http://iago.stfx.ca/people/paleodiv/pd.html</u>), which contains the division's newsletter, *EON* (edited by Cam Tsujita), and paleoGallery (a series of sketches showing the work of paleontologists in Canada — <u>http://iago.stfx.ca/people/paleodiv/Gallery/Gallery.ht</u>m), Canadian paleontology publications, and web links to other paleontology-related sites.

Obituary

Walter O. Kupsch 1919 - 2003

We are very sad to announce the death of Walter O. Kupsch. The following obituary was printed in the Saskatoon newspaper The StarPhoenix on July 10, 2003:

It is with great sorrow that we announce the death of Walter who passed away suddenly on July 6, 2003 in Saskatoon, SK at the age of 84 years. He is survived by his loving wife Emmy; daughters Helen (Don), Yvonne (Keith); son Richard; grandchildren Darcy, Dana, Graeme; and in the Netherlands, niece Doris (Erik and family). He will be deeply missed. Walter's body has been donated to medical research. There will be no Funeral or Memorial service. A full obituary will follow and a celebration of life will be held at a later date. We would like to thank the paramedics and the Royal University Hospital medical staff who provided such excellent care in Walter's final hours. For anyone wishing to remember Walter, donations to the Department of Geological Sciences, University of Saskatchewan, will be deeply appreciated.

Outreach Initiatives

OGReNet: The Ontario Geoscience Resource Network



Over the past three years, the Outreach Program of the Department of Earth Sciences at Western has, on average, reached well over 1500 members of the public (principally K-12 students) annually through our workshops, departmental tours, and special outreach events.

The Department of Earth Sciences at Western takes a major step forward in geoscience outreach in becoming the headquarters of the Ontario Geoscience Resource Network (OGReNet). OGReNet

is a web-based information gateway designed to provide K-12 teachers resources for the effective communication of geoscience-related concepts to their students, with special emphasis on topics specified in the Earth and Space Science units of Ontario Teaching Curriculum. It will also provide an effective means for users to contact organizations that provide outreach services in their region (e.g. universities, museums, industries) will further encourage interaction among geoscience-based outreach organizations in Ontario. The construction of OGReNet has been made possible by generous grants from the PromoScience (NSERC) and the Youth Science and Technology (Government of Ontario) funding programs. Although still under construction, the OGReNet website can be accessed at:

www.ontariogeoscience.net

-C. Tsujita

Meeting Calendar

Canadian Meetings

GeoSciEd IV (Earth Science for the Global Community — <u>http://www.geoscied.org/</u>), an international geoscience education conference takes place in *Calgary, Alberta* on *August 10-14*, *2003*. Contact: Godfrey Nowlan (Chair of the Local Organizing Committee)

CPC-2003 (The 13th Canadian Paleontology Conference) takes place in *Edmonton, Alberta* this year on *September 20-24, 2003*. Contact: Brian Chatterton (<u>Brian.Chatterton@ualberta.ca</u>). Registration forms included at the end of this issue of EON.

CPC-2004 (The 14th Canadian Paleontology Conference) will be held at the Huntsman Marine Science Centre (<u>http://www.huntsmanmarine.ca/)</u> near *St. Andrews, New Brunswick*, in *mid- to late August, 2004*. Organizers of the conference are Jean-Bernard Caron (jcaron@rom.on.ca) and Mairi Best (<u>mmrbest@eps.mcgill.ca</u>).

GAC—MAC 2004 is to be held on *May 12 - 14, 2004* in *St. Catharines, Ontario.* For details, visit the GAC meetings webpage at <u>http://www.gac.ca/ANNMEET/annmeet.html</u>

GAC—MAC 2005 will take place in *Halifax, Nova Scotia* on May 15-18, 2005. For details, visit the GAC meetings webpage at <u>http://www.gac.ca/ANNMEET/annmeet.html</u>

BC Paleontological Symposium and CPC-2005: Discussions are underway on a possible joint BC Paleontological Symposium and CPC-2005 meeting (details to follow).

PALEONTOLOGY DIVISION GEOLOGICAL ASSOCIATION OF CANADA THIRTEENTH CANADIAN PALEONTOLOGY CONFERENCE (CPC-2003) September 19th – 21st, 2003 UNIVERSITY OF ALBERTA, EDMONTON, ALBERTA

SECOND CIRCULAR

Welcome to Edmonton !

The 13th annual Canadian Paleontology Conference (CPC-2003) will be held in Edmonton, Alberta, on September 19th-21st, 2003, at the university's Telus Centre conference facility. The University of Alberta's departments of Earth and Atmospheric Sciences and Biological Sciences are pleased to host this years meeting and to showcase their long, vibrant, and ongoing tradition of paleontological research. The University of Alberta currently has six academic paleontologists on staff, two active professors emeriti, nearly twenty graduate students, and an Honours Paleontology undergraduate degree program boasting twenty-three registered students!

The City of Edmonton is firmly anchored to the Upper Cretaceous bedrock of the Edmonton Formation which is beautifully exposed along the scenic banks and ravines of the North Saskatchewan River. Edmonton and its Cretaceous rocks are also the source name for the dinosaur genera *Edmontosaurus* and *Edmontonia* – a hadrosaur and ankylosaur respectively. No other Canadian city can claim two dinosaur genera! On behalf of the CPC 2003 we invite you to come experience a bit our paleontological history and to glimpse a bit of our academic future.

CPC 2003 Host Committee

CO-CHAIRS: Dr. Brian D.E. Chatterton, Dept. of Earth and Atmospheric Sciences 1-01A Earth Sciences Building University of Alberta, Edmonton, Alberta, Canada, T6G 2E9 ph. 1-780-492-3983; E-mail: brian.chatterton@ualberta.ca

and

Dr. Michael W. Caldwell, Assistant Professor, Dept. of Earth and Atmospheric Sciences & Dept. of Biological Sciences, University of Alberta Laboratory for Vertebrate Palaeontology, CW-405 Biological Sciences Building, 11145 Saskatchewan Drive, University of Alberta, Edmonton, Alberta, Canada, T6G 2E9 ph. 1-780-492-3458, FAX 1-780-492-9234; E-mail: mw.caldwell@ualberta.ca

Air Travel

The Edmonton International Airport is located 35 km from the University of Alberta. The airport is serviced by a large number of commercial and regional airlines with access to all major Canadian centers.

The CPC 2003 has not made travel arrangements with any particular airline carrier, though for student attendees, discounted travel arrangements can be made through Travel CUTS Edmonton (780-492-2592), or any local Travel CUTS outlet.

Local (Ground) Transportation

Ground transportation from the Edmonton International Airport to the University of Alberta Campus can be accomplished in several ways; 1) Car rental at the airport; 2) taxi service costing approximately \$30.00 one way; 3) Airport Hotel Shuttle service; 4) Sky Shuttle Service. The final option provides efficient service directly to the university campus and is detailed below.

SKY SHUTTLE CHARTERS

Door to door service is available anywhere in the city on a prearranged basis.

ROUTES

Downtown - serves nine hotels and the Greyhound Bus Terminal Westend - serves six hotels and West Edmonton Mall University - serves six hotels and the Southside Campus Towers (University) *Note*: Service available at other select hotels on a pre-arranged basis, minimum one hour in advance. FREOUENCY University - operates on a 45 minute frequency Sunday to Friday on a 1 hour frequency on Saturdays and holidays. The schedule for travel to the university can be found online at: http://www.edmontonskyshuttle.com/SkySuttle%20Schedule/UniversitySchedule.htm **SKY SHUTTLE RATES & TICKET INFORMATION** New rates effective March 1, 2002. South of 63 Avenue \$10 One-way \$13 Open Ended Return \$20 \$6.00 (ages 3-12, one way) Children Sky Shuttle tickets are available at the airport Sky Shuttle booth, or on shuttles themselves. Cash and all major credit cards are accepted.

Parking

Parking is available on campus for either personal or rented automobiles. If conference attendees notify the organizing committee in advance, we can arrange for a reduced "Guest" daily parking fee while on campus. See the following:

Definition

Guests are defined as individuals who visit your office on an occasional basis. An individual employed by or enrolled in a course offered by the University, cannot be considered a guest. Parking reservations made for staff members are charged at the full daily rate for the area reserved. In accordance with Revenue Canada regulations, parking paid for by an office on behalf of a staff member is treated as a taxable benefit for the staff member and, in such instances, Parking Services is obligated to notify Human Resources so the appropriate tax forms can be generated.

Payment Options

Bookings can only be made for areas where there is a kiosk attendant on duty. The kiosk attendant will be provided with the names of your guests or the name of your function. We request that you advise your guests to identify themselves to the kiosk attendant or provide the name of the function they are attending, and to pay the applicable parking fee. The following payment methods are accepted: indent, Parking Services coupon, Visa or MasterCard.

Your office may choose to pay for parking for your guests, in which case the following payment methods are accepted: <u>online booking (indent)</u>, indent, Parking Services coupon or the Corporate (Visa) Credit Card.

Meeting Location

All of the CPC platform presentations, exhibits and social events (Welcoming Social and Evening Banquet) will take place at the Telus Centre for Professional Development located on the main University of Alberta campus at 87 Avenue and 111 Street. An online interactive version of a University of Alberta campus map, giving the location of the Telus Centre, the Earth Sciences Building, and a number of other relevant facilities can be viewed at: http://www.expressnews.ualberta.ca/UALBERTA/layout/.

Hotel Accomodations

Hotel accommodations are available both on and off campus. On campus accommodations include the Campus Tower Suite Hotel which has provided discounts for CPC 2003 registrants (see below), and Lister Hall hotel services, booked through Conference Services (approximately 20 ensuite hotel rooms).

Campus Tower Suite Hotel

CPC 2003 has arranged for the special rates and preferred booking status with Campus Tower Suite Hotel. This facility is situated right off the University of Alberta campus, on the corner of 87th Avenue and 112th Street (#111 on campus map), directly across the street from meeting venue at the Telus Centre. The Campus Tower Suite Hotel is located 30 minutes from the Edmonton International Airport, and is easily accessible by public and private transportation. Sky Shuttle service (see above) from the airport which stops directly in front of the hotel.

Rooms must be booked by September 1st, 2003. When booking, quote the reservation as CPC 2003 Conference in order to obtain the preferred rate. Rooms at the Tower Suite Hotel are full-ensuite facilites with multiple bedrooms/beds per suite (see below for details) and are booked on a minimum of double occupancy. Each suite has a complete kitchen (refrigerator, stove, microwave), living room (pullout sofa), dining area, and a bath. Complimentary in-room coffee and tea are available. Daily maid service is available for suites.

Rooms

Two-bedroom suite (2 available and reserved for CPC 2003)

Queen (bedroom) Two Singles (bedroom)

Queen pull-out (living room)

:\$130.00/night

Executive Suites (14 available and reserved for CPC 2003) Queen (bedroom)

Queen pull-out (living room) \$129.00/night

Reservations

Reservations can be made through the hotel office at:

Toll-Free 1-800-771-1277

Local telephone 1-780-439-6060

1-780-433-4410 Fax

E-mail: info@campustower.com; Web: www.campustower.com

Lister Hall Hotel Suites

Contact Information: Conference Services, University of Alberta 44 Lister Hall, Edmonton, Alberta T6G 2H6 Tel: 780-492-4281 Fax: 780-492-7032 Toll free: 800-615-4807 (Canada only) e-mail: conference.services@ualberta.ca

CPC-2003: CONFERENCE & PROGRAMS

The conference and programs includes a number of social events, museum tours, the opportunity for study visits to collections (daytime, Friday, September, 19th), the platform and poster presentations on the 20th of September, and the potential field trip that will depart Edmonton on the 21st of September.

Call for Papers – Saturday, September 20th.

As was noted in the First Circular, participants of CPC-2003 have the option of submitting either a short paper or an extended abstract for their presentations. Students are particularly encouraged to submit short papers for publication in the volume (short papers will not be referred).

The submission deadline for both short papers and conventional abstracts is extended to August 30th, 2003 to accommodate field seasons, etc. We encourage all contributors to submit their contributions as early as possible. Contributions may be submitted electronically any time after June 1st, 2003 (electronic submissions are preferred).

We are accepting abstracts for either platform presentations or poster presentations. Platform presentations will be given in either the morning or afternoon (schedule notices will be sent to presenters in advance), while posters will be mounted in the morning on poster stands set up in the foyer of the Telus Centre; authors are expected to be at their posters for discussion with other registrants between 3:00pm and 3:30pm.

Regular abstracts should be no more than 300 words in total length and must include a title, the names and addresses of all others, and be written as a summary of results, etc. Extended abstracts should be no more than three double spaced pages in length, have no more than two small figures, and no more than 15 references in the references list. Regarding stylistic guidelines, we are following CJES format. Improperly formatted extended abstracts will be returned to the corresponding author for corrections; neither the abstracts nor extended abstracts will be refereed, but they will be edited.

Collections Study

If anyone is interested in viewing particular specimens from the collections at the University of Alberta Laboratory for Vertebrate Paleontology, or the Paleontology Museum, Department of Earth and Atmospheric Sciences, please make advance arrangements with the relevant Curators and Collections Managers so the material will be available on that Monday.

Field Trip (Sept. 21st-24th)

Only a single field trip is being planned for CPC 2003. This trip will be co-lead by Dr.'s Caldwell and Chatterton and will *only* be undertaken if enough registrants demonstrate advance interest in participating; on-site registrations will NOT be accepted. The estimated cost is \$350.00 CDN/person – not including food.

The tentative itinerary is a round-trip excursion:

Edmonton to Drumheller - visit the Royal Tyrrell Museum and Cretaceous through Paleocene exposures and outcrops

Drumheller to the Burgess Shale – day tour to Walcott's Quarry

Burgess Shale to Grande Cache – drive the Banff-Jasper highway

Grande Cache – visit the dinosaur trackways **Grande Cache to Edmonton**

Social Events

Welcoming Social – Friday Evening, September 19th, main foyer, Telus Centre, University of Alberta. There is no charge for the food to be served at this social event; the Welcoming Social is being hosted by the Departments of Earth and Atmospheric Sciences and Biological Sciences. Alcohol will be available at a cash bar. The event, including registration, will begin at 6pm.

CPC 2003 Evening Banquet – Saturday, September 20th, Main Dining Room, Telus Centre, University of Alberta. Fees for this banquet are extra to the conference registration fee and are estimated at \$45.00/person. The banquet price provides a catered and served four-course meal including wine and bottled water.

If individuals wish to attend the banquet we highly recommend you pay for you banquet ticket well in advance as only a small number of 'late arrivals' will be allowed to purchase banquet tickets (caterers restrictions). Cocktail service (cash bar) will begin at 6pm, with dinner to follow for 7pm. The evening ceremonies will involve presentation of this year's Billings Medal winner.

Conference Registration

The registration fee includes admission to the regular programs, i.e., platform sessions, posters, other exhibits, and the Welcoming Social on Friday, September 19th. Registration fees do not cover the cost of the banquet; this cost is additional to the conference registration fee and applies to all attendees (see above).

On-site registrations will be accepted, though we encourage you to advance register so that we can better estimate the number of registration packages and account to our caterers regarding numbers of individuals attending the Friday Social and Saturday Banquet.

On-site registrations and the pickup of registration packages may be done on Friday: 6:30 pm - 10:00 pm, in the foyer of Telus Centre during the Welcoming Reception, and on Saturday, beginning at 8:00 am in the foyer of Telus Centre.

REGISTRATION FORM - 1

Advance Conference Registration Form (detach and mail with cheque or money order, made payable to CPC 2003, to Dr. B.D.E. Chatterton)

Name (as will appear on Conference ID Badge):

Title	First Name	Surname					
Institutio	n						
Mailing A	Address						
e-mail/tel	lephone/FAX						
Please cir	rcle one:	Cost					
	I will attend the Frida I will attend the Satur	-	Even N/C 45.00/per				
	Registration Fee anied by proof of stud	Conference lent status)	ce Pro \$10.00	gra _	m		
Non-Stuc	lent Registration Fee		\$40.00	_			
		Total					
Please ser	id to:						
Dept. of E 1-26 Earth University	D.E. Chatterton, Farth and Atmospheric f Sciences Building, of Alberta, Edmonton, ian.chatterton@ualber	Alberta, Canada,	T6G 2E9				

REGISTRATION FORM - 2

Field Trip – Intent to Participate (detach and mail with cheque or money order, made payable to CPC 2003, to Dr. B.D.E. Chatterton)

Name:

Title	First Name	Surname	
Institutio	n		
Mailing	Address		
e-mail/te	lephone/FAX		

Please send to:

Dr. Brian D.E. Chatterton, Dept. of Earth and Atmospheric Science 1-26 Earth Sciences Building, University of Alberta, Edmonton, Alberta, Canada, T6G 2E9 e-mail: brian.chatterton@ualberta.ca