



*ATLANTIC GEOSCIENCE SOCIETY*  
**NEWSLETTER**

Volume 36, Number 4, October 2007

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*Headlands formed of North Mountain Basalt, Cape D'Or near Advocate, Nova Scotia. The eastern margin of Cape Chignecto is visible on the horizon.*

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The deadline for submissions to the next issue is 22 December, 2007. Please send articles or feedback to:

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Production of this newsletter is by Nelly Koziel.

## PRESIDENT'S FORUM

This President's Forum comes to you from the confines of a dusty trailer at the Bralorne Gold Mine in the mountains of British Columbia. Although it has rained for most of the week, and the surrounding woods are full of hungry bears, I know that memories of these days spent in the field will help keep me going as I toil in front of the computer in the coming months. I hope that most of you also had an opportunity to get "out on the rocks" this past summer, and that you're now enjoying the beautiful weather we've had so far this fall.

The last few months have been relatively quiet for AGS, with many people off in the field or enjoying their summer vacations. With the International Year of Planet Earth (IYPE) almost upon us, however, many AGS members have also been busy contributing to some of the great IYPE initiatives: these are designed to help raise awareness of the importance of Earth Sciences here in Canada, and around the globe. In the last few weeks, some of you may have noticed your esteemed professors and colleagues starring in CBC Television's "Geologic Journey" documentary series ([www.cbc.ca/geologic/](http://www.cbc.ca/geologic/)). Various members of AGS are also heavily involved with the much-anticipated "Four Billion Years and Counting" project, a popular book on the geology of Canada set for release in 2008. For more information on these and other initiatives, and to find out how you can become involved, please visit [www.iypecanada.org/index.php](http://www.iypecanada.org/index.php).

Another group of people working hard throughout the summer were the staff of the Fundy Geological Museum, who organized the Nova Scotia Gem and Mineral Show. This year's event, held on 17-19 August at the Parrsboro Arena, attracted more than 2500 people. Unfortunately, we had difficulty finding volunteers to help run an AGS booth at the show, but we managed a modest presence between the Nova Scotia Dept. of Natural Resources and the Nova Scotia Prospector's Association. Thanks to the generous assistance of Paul Smith, Martha Grantham, Bob Grantham, Howard Donohoe, Jennifer Bates, Nelly Koziel, and Rob Fensome, we sold almost \$400 worth of AGS publications and answered a broad range of "geolog y" questions from a curious public. The Gem and Mineral Show is a well-run event that provides an excellent opportunity to raise awareness of AGS and our activities. In the next few months, Council will be considering various options for increasing our presence at this show next year, and we welcome any suggestions you may have.

With the fall now upon us some important geoscience events are taking place, including the Bedford Institute of Oceanography Open House (17-21 October), the 2007 AUGC Conference (25-27 October at St. FX), the Newfoundland and Labrador Mineral Resources Review 2007 (1-3 November), Exploration and Mining New Brunswick 2007 (4-7 November), and Mining Matters for Nova Scotia 2007 (November 13-14). Organization of the 2008 AGS Colloquium and Annual General Meeting is also well underway. The colloquium will be held at the Holiday Inn Harbourview in Dartmouth, Nova Scotia, 1-3 February 2008. Please check the First Circular in this newsletter for details, and keep your eye on the AGS website this fall for registration forms and important deadlines. I also urge all AGS members to consider nominating a deserving colleague for an AGS award this year—details on the nomination process can be found later in this newsletter.

*Michael Parsons*  
[Michael.Parsons@NRCan.gc.ca](mailto:Michael.Parsons@NRCan.gc.ca)

## AGS ACTIVITIES

### Atlantic Geoscience Society 34<sup>th</sup> Colloquium 1-2 February 2008 Dartmouth, NS

Special Session on “Earth-based Studies of Planetary Surfaces”

Conveners:

Dr. Marie-Claude Williamson, Planetary Exploration and Space Astronomy, Canadian Space Agency, St-Hubert, QC, e-mail: [Marie-Claude.Williamson@space.gc.ca](mailto:Marie-Claude.Williamson@space.gc.ca)  
Dr. Lawrence Plug, Department of Earth Sciences, Dalhousie University, Halifax, NS, e-mail: [Lplug@dal.ca](mailto:Lplug@dal.ca)  
Marianne Mader, M.Sc., MSS, Ph.D. candidate, Carleton University, e-mail: [Marianne\\_Mader@yahoo.ca](mailto:Marianne_Mader@yahoo.ca)

As a new Global Exploration Strategy unfolds over the next two decades at Space Agencies worldwide, research into the geological processes that shaped the Moon, Mars, and other planetary bodies will continue to rely on the study of terrestrial landscapes. The results of these Earth-based studies of planetary surfaces will test current models for the origin of the Moon [<http://www.lpi.usra.edu/expmoon/>]; the evolution of landscapes on Mars [<http://hirise.lpl.arizona.edu/>]; and contribute to the definition of exploration architectures by space agencies worldwide as they ready themselves for a new era of space exploration [<http://www.lunararchitecture.com/links.html>]; and contribute to the definition of exploration architectures by space agencies worldwide as they ready themselves for a new era of space exploration [[http://mepag.jpl.nasa.gov/Mars\\_Science\\_Links.html](http://mepag.jpl.nasa.gov/Mars_Science_Links.html)].

We invite presentations on Planetary Geology, and on Terrestrial Geology and Geophysics which assist the interpretation of planetary surfaces, which include but are not limited to: rifting, volcanic processes, impact structures, grabens, fluvial networks and layered deposits, dunes, permafrost, regolith, and faulting.

If you are interested in participating, please contact one or all of the conveners. Presentations and posters are welcome.

Marie-Claude Williamson  
[Marie-Claude.Williamson@space.gc.ca](mailto:Marie-Claude.Williamson@space.gc.ca)

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### 2008 Nova Scotia EdGEO Program

The Nova Scotia EdGEO Program moves back to the Halifax-Dartmouth area for 2008. The two-day workshop will be hosted by the Geological Survey of Canada (Atlantic) at the Bedford Institute of Oceanography. Field trip co-leaders Terry Goodwin and Michael Parsons are organizing a field-based workshop with an environmental bent. Participants will learn

how geology influences our modern terrestrial and marine environments. And they will discover the intricate connection between human activity and the environment. A classroom session will highlight activities for the educators. The registration form is included with this newsletter. Please spread the EdGEO word to colleagues, friends or neighbours who are educators in Nova Scotia.

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### Down in the Valley: Nova Scotia EdGEO 2007

Co-leaders Sandra Barr and Ian Spooner put on a good show for Nova Scotia educators in August. The field trip on 21-22 August in the vicinity of Wolfville focussed on how Earth history controls the human environment. Over the two days, participants visited over one dozen stops. They learned about the regional geological history and how the geology controls land use and ultimately human history. The influence of geology on day-to-day life became apparent to all. Sites such as the Grand Pré Historic Park, the Gaspereau and Cornwallis river systems, and the ancient Acadian farmlands were viewed and brought into the story. After the Tuesday evening BBQ, Ian Spooner presented a talk on climate change that enlightened the audience and generated a lot of discussion. Before venturing into the field on Wednesday morning, local high school teacher Tracy Webb led a classroom session on tried-and-true activities and distributed an armload of handouts that will be useful teaching resources.



Group photo (Blomidon Look-off).

The weather could not have been better for the two days - something that can't hurt any outdoor activity.





*Fossil footprints of labyrinthodont amphibian (Horton Bluff).*

Jennifer Bates, Chair, NS EdGEO Workshop Program  
[jbates@nrcan.gc.ca](mailto:jbates@nrcan.gc.ca)

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## CALL FOR APPLICATIONS

### Mary-Claire Ward Geoscience Award 2008

The Selection Committee for the Mary-Claire Ward Geoscience Award is now calling for applications for the Fourth Annual Presentation. Marie-Claire made many contributions to the Canadian geoscience community. She was a past-president of the Geological Association of Canada (GAC), the long-serving chair of the Prospectors and Developers Association of Canada (PDAC) Geoscience Committee, and former chairperson of Watts, Griffis and McOuatt Limited. The award involves a \$3,000 prize, a

certificate and attendance at the meeting of either the PDAC or GAC. A recipient must be a graduate student whose research has a strong emphasis on field mapping, in recognition of Mary-Claire's strong belief in the importance of this work.

**Eligibility:** Full time graduate students attending a Canadian university and undertaking a Canadian geoscience thesis that has a focus on field mapping (e.g. bedrock or surficial geology, geochemistry, geophysics) are eligible for the award. The student must have active student status until at least 30<sup>th</sup> April 2008. Previous recipients of this award are ineligible to apply.

**Selection Criteria:** Applicants will be assessed on the contribution of their work to geoscience mapping in Canada, their academic qualifications and supporting statements from sponsors.

**How to Apply:** Additional information about the award, application procedures and application forms is posted on the websites of the PDAC (<http://www.pdac.ca/pdac/programs/awards/index.html#Mary-Claire>) and the GAC (<http://www.gac.ca/awards/maryclaire.php>)

**Application Deadline:** 15 December 2007

*Reg Wilson*  
[Reg.Wilson@gnb.ca](mailto:Reg.Wilson@gnb.ca)

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## REGIONAL NEWS AND UPDATES

### New Brunswick Museum (NBM)

In 2007, the NBM awarded 'George Frederic Matthew Research Grants in Geology' to three projects. Dr. Howard Falcon-Lang of the University of Bristol examined new fossil sites and re-examined an historic fossil site, first described by G.F. Matthew, in an analysis of fossil plant-beds at Beaver Harbour. Dr. Patricia Gensel of the University of North Carolina received support for her study of early Devonian plant fossils of northern New Brunswick. A grant was also awarded to Ms. Abby Otham of the University of Bristol for her examination of Triassic fossil wood from New Brunswick. Very little is known about Triassic fossils in the province and her research could yield interesting rewards. All three researchers were in the field last summer.

One 2006 grant was awarded to Martin Brazeau of the Department of Evolutionary Organismal Biology at Uppsala University, Sweden. His research dealt with Middle Paleozoic vertebrates from southern New Brunswick. Fieldwork included revisiting several sites where he has already

conducted research, and new sites in the southern part of the province. Some of the work was presented at the Canadian Paleontology Conference in Montreal in October 2006 (see recent publications below). A second grant was awarded to Dr. John Maisey, the Division of Paleontology at the American Museum of Natural History in New York, to support research on the braincase of *Doliodus problematicus*, this is the Emsian shark fossil discovered by a New Brunswick Museum research team in the northern part of the province. One of Dr. Maisey's specialties is the evolution of shark brains, and he has examined similar sharks found in Bolivia and South Africa. The braincase of *Doliodus* was scanned at high resolution at the University of Texas CT lab in Austin in June 2007. Initial results were presented at the 40<sup>th</sup> Anniversary Symposium on Early Vertebrates/Lower Vertebrates conference in Uppsala this past August. A third grant went to Thomas Mumford, an undergraduate student in the Department of Geology at the University of New Brunswick in Fredericton, to support his B.Sc. thesis research



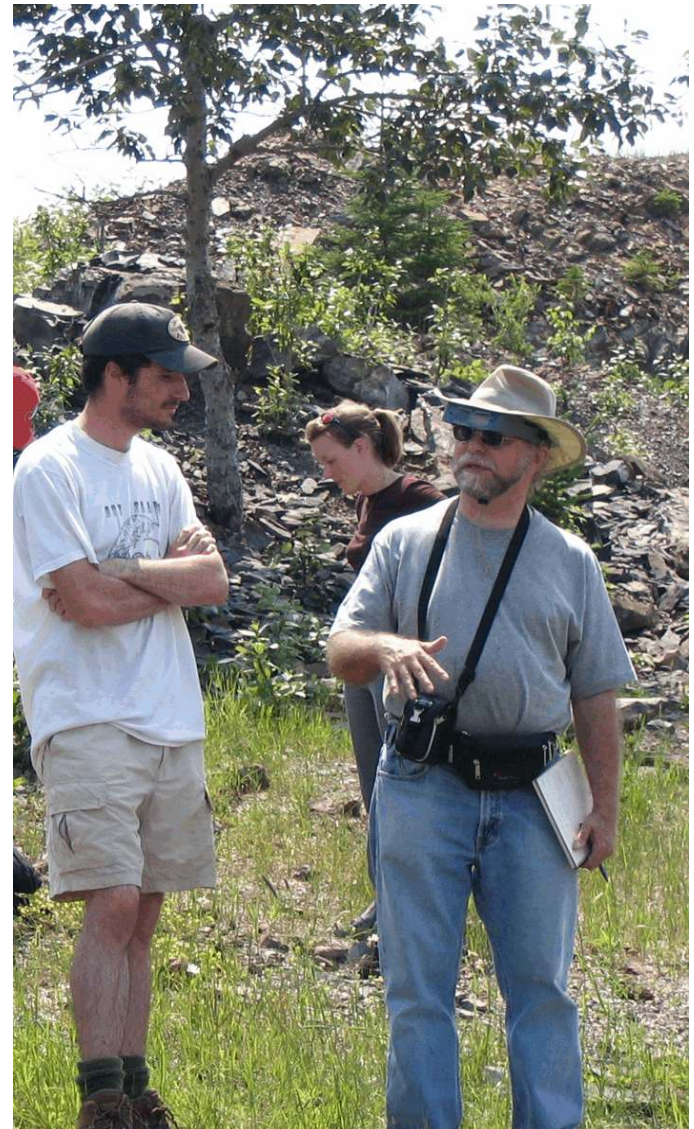
with Dr. Cliff Shaw. His focus was on the growth of clinopyroxene in a closed system.

*Patricia Gensel and colleagues taking a break from plant collecting.*

We are about to advertise the 2008 grants. Information can be found on the NBM web site ([www.nbm-mnb.ca](http://www.nbm-mnb.ca)) by going to Collections – Natural Sciences – Natural Sciences Grants. Applications are due 31 December of each year.

This past year, my aim has been to finish some long-standing projects. A paper describing giant sea scorpions, discovered in northern New Brunswick in 1995, has just been published in *Palaeontology*. Another paper describes specimens from the same formation but collected in the 1890s, has been submitted. Manuscripts in various stages of completion include a study of a Devonian fish (*Holoptychius*) from southern New Brunswick, an analysis of Mississippian vertebrate tracks from eastern New Brunswick, and some more shark-acanthodian

work in the Campbellton Formation. Collaboration with Dr. Howard Falcon-Lang of the University of Bristol has resulted in two papers concerning the 'Fern Ledges' locality in Saint John, and a paper with Dr. Jason Dunlop of the Museum für Naturkunde der Humboldt-Universität zu Berlin is in press. Two of the papers dealt with the palaeoenvironment and fauna at the site, while the third concerned the palaeobotanical work of Marie Stopes at 'Fern Ledges'. Previous Matthew Grant



recipient Dr. Robert Wagner of the Jardín Botánico de Córdoba in Spain is revising the 'Fern Ledges' flora and has published two papers on the topic.

*(Fossil) fishermen Martin Brazeau and John Maisey swapping stories.*

Some of our work over the past four years has been supported by a SSHRC-CURA grant (Community University Research Alliances), jointly held by UNBSJ and the NBM. The



geological component has been to look at 'Science Culture, Geological Investigation, and the contribution to the cultural diversity of Saint John'. In addition to documenting geological and palaeontological sites in the region, we have been conducting risk assessments of sites to examine preservation and education issues. I have been working with some of the local tour companies to explore geotourism opportunities. One company operates kayak tours that paddle past some of the most interesting fossil sites in the country. A guide, who writes for 'Adventure Kayak' magazine, published a short article in the summer issue about how I convince our Director to let me kayak on work time. Two papers and conference presentations, in collaboration with Dr. Diane Buhay at UNBSJ, have resulted from this work. One project looked at one of the Maritimes' best known geotourists, Sir Charles Lyell; another was an examination of Abraham Gesner's Museum; a third looked at the geological library of the Natural History Society of New Brunswick.

2007 is the 150<sup>th</sup> anniversary of the Steinhammer Club, founded in Saint John in 1857. The young men of the club, including C. Fred Hartt and George F. Matthew, studied the geology of the Saint John area. Their efforts helped establish the Natural History Society of New Brunswick (at Sir William Dawson's suggestion). This society's collections became the foundation for the New Brunswick Museum (Abraham Gesner's collection included). The first collections came from Steinhammer Club members and included 'Fern Ledges' specimens purchased from Fred Hartt. Fred, who went on to conduct a geological survey of Brazil (in Agassiz's footsteps), likely used the money from the sale of the collections to go to Harvard.

For additional information see:

Miller, R.F. and Buhay, D.N. 1988. The Steinhammer Club; geology and the foundation for a natural history society in New Brunswick. *Geoscience Canada* 15: 221-226.

We were pleased to lead a geological field trip for the Federation of New Brunswick Naturalists in June and assist with the Geologist's Association's tour through the Maritimes in August. The museum also had its annual fundraising dinner in September. Although not on the topic of geology, the speaker for the dinner was really interesting. Dr. Wade Davis, National Geographic Explorer-in-Residence, talked about vanishing cultures in his presentation entitled 'Light at the Edge of the World'.

#### Recent conference presentations:

Turner, S. and Miller, R.F. 2006. IGCP 491: "Spiny sharks" in Early Devonian 'non-marine' palaeoenvironments. Second International Palaeontological Congress, June 17-21, 2006, in Beijing, China. *Ancient Life and Modern Approaches, Abstracts of the Second International Palaeontological Congress*, Edited by Qun Yang *et al.* Series: International Palaeontological Congress Proceedings 2, 553 pages, Geological Publishing House.

Miller, R.F. and Buhay, D.N. 2007. The geological library of the Natural History Society of New Brunswick: supporting early scientific research in the Maritimes region. Atlantic Geoscience Society 33<sup>rd</sup> Colloquium and Annual Meeting, Program and Abstracts, Moncton, New Brunswick, February 2-3, 2007, p.27-28.

Brazeau, M.D. and Miller, R.F. 2006. Middle Paleozoic vertebrates from southern New Brunswick, in 16<sup>th</sup> Canadian Paleontology Conference. Proceedings, 2006, October 13-16, Montreal, Quebec.

#### Recent publications:

Gröcke, D.R., Schimmelmann, A., Elias, S. and Miller R.F. 2006. Hydrogen isotopes in beetle chitin: preliminary European data and reinterpretation of North American data. *Quaternary Science Reviews* 25: 1850-1864.

Miller, R.F. and Tetlie, O.E. 2007. The presumed Synziphosuran *Bunodella horrida* Matthew, 1889 (Silurian: Cunningham Creek Formation) New Brunswick, Canada is a eurypterid. *Journal of Paleontology* 81: 588-590.

Miller, R.F. 2007. *Pterygotus anglicus* Agassiz (Chelicerata: Eurypterida) from Atholville, Lower Devonian Campbellton Formation, New Brunswick, Canada. *Palaeontology* 50: 981-999.

Falcon-Lang, H. and Miller, R.F. 2007. Palaeoenvironments and palaeoecology of the Early Pennsylvanian Lancaster Formation ("Fern Ledges") of Saint John, New Brunswick, Canada. *Journal of the Geological Society, London* 164: 945-957.

Falcon-Lang, H.J. and Miller, R.F. 2007. Marie Stopes and the Fern Ledges of Saint John, New Brunswick. *In: Burek, C.V. and Higgs, B. (eds), The Role of Women in the History of Geology. Geological Society, London, Special Publication 281: 227-245.*

Miller, R.F. and Buhay, D.N. 2007. Gesner's Museum of Natural History, an Early Canadian Geological Collection. *Geoscience Canada* 34/1: 37-48.

Miller, R.F. and Buhay, D.N. 2007. Sir Charles Lyell's Travels in New Brunswick, Canada in 1852. *Atlantic Geology* 43: 36-44.

Dunlop, J.A. and Miller, R.F. (in press). The fossil arachnid genus *Eurymartus* Matthew, 1895 and the eurypterid genus *Eurypterella* Matthew, 1889 from the Late Carboniferous "Fern Ledges" of Saint John, New Brunswick, Canada. *Neues Jahrbuch für Geologie und Paläontologie*.

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### **GEORGE FREDERIC MATTHEW RESEARCH GRANTS IN GEOLOGY**

George Frederic Matthew MA, DSc, LLd, FRSC (1837-1923) was a founding member of the Natural History Society of New Brunswick, formed in 1862. He published over two hundred papers on geology, palaeontology and archaeology. Although

he maintained his career at the Custom House, he became internationally known for his studies in palaeontology. Much of his collection is now part of the holdings of the New Brunswick Museum. This grant programme recognizes his enormous contribution by supporting field and laboratory work and encourages collections-based research of a museum nature.

Proposals of high quality in the areas of palaeontology, stratigraphy, paleoecology, mineralogy and petrology are invited. All, or most, of any field research must be carried out in New Brunswick.

Research Fellowship - \$1000.00 - open to established scientists attached to universities, museums and government agencies, as well as graduate students.

Research Scholarship - \$500.00 - open to students, both graduate and undergraduate.

Application forms available at your department office or write the NBM or at <http://www.gnb.ca/0130/english00aa.html> Applicants should send research proposals, accompanied by a detailed budget and application form, by December 31, each year to: Dr. R.F. Miller, New Brunswick Museum, 277 Douglas Avenue, Saint John, NB, E2K 1E5, tel. (506) 643-2361.

*Randall F. Miller*  
[Randall.Miller@nbm-mnb.ca](mailto:Randall.Miller@nbm-mnb.ca)

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## Acadia University

On 1 July, the Department of Geology and the Environmental Science program at Acadia University were merged into a single department, now called the Department of Earth and Environmental Science. The merger did not result in any changes in the programs of the units, which offer undergraduate degrees (B.Sc. and B.Sc. with honours) in Geology, Environmental Geoscience, and Environmental Science, and the M.Sc. in Geology (and soon, Applied Geomatics). But, it did double our number of undergraduate majors. Rob Raeside had a brief return to the position of Head in the new department, before being again persuaded to take on the role of Acting Dean of Science. Professor Linda Lusby, who has taught in the Environmental Science program since its inception, took over as acting department head. So far, all is going smoothly, although we have trouble fitting around the table at the departmental meetings.

Another change over the summer was the appointment of Lynn Graves as secretary in the new Department of Earth and Environmental Science. With both her brother and husband being geologists, it was inevitable that she find herself surrounded by such folks in her work environment too. Lynn

replaced Janet Harnum, who has opened a vegetarian restaurant in downtown Wolfville.

Also over the summer, the department welcomed Dr. Nelson O'Driscoll, a Tier 2 Canada Research Chair in Environmental Biogeochemistry. Nelson is studying the impact of climate change on mercury contamination in freshwater ecosystems by analyzing the effects of temperature, precipitation, and solar radiation on the contaminant. He hopes his research will contribute to the development of effective measures to reduce exposure to this contaminant as climate change occurs.

Professors Peir Pufahl and Cliff Stanley, and M.Sc. student Gabe Nelson received a lot of publicity recently when their paper on the Sudbury ejecta was published in the September issue of the GSA journal "Geology". Together with co-authors Eric Hiatt and Cole Edwards (University of Wisconsin – Oshkosh) and Jared Morrow (San Diego State University), they reported on their discovery and investigation of a two-to-four-metre-thick layer of "ejecta", south of Lake Superior, in which they found high levels of iridium, "melt drops", and "shocked" quartz crystals, as well as evidence of reworking by a tsunami.

We welcomed three new graduate students to the department in September. Pizye Nankamba and Tamara Moss will be working on geochemistry projects with Cliff Stanley; Chris Bates will be working on a geomatics project with Ian Spooner and adjunct Professor Tim Webster. Geology and environmental geoscience Honours students this year include: Tim Cross (Lithochemical vectors toward gold mineralization in the Amaranth Vein, Union Hill Deposit, Waihi, New Zealand; supervisor Cliff Stanley); Kieran McDonald (Sedimentological records of the Holocene history of the Labrador Current; supervisors David Piper (GSC Atlantic) and Ian Spooner); and Kara-Lynn Scallion (Phosphate deposits in Cambrian rocks of Avalonia in Saint John, New Brunswick, area; supervisors Sandra Barr and Peir Pufahl).

*Sandra Barr*  
[Sandra.Barr@acadiau.ca](mailto:Sandra.Barr@acadiau.ca)

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## St. Francis Xavier University

Students and faculty at St. Francis Xavier University are busy preparing to host the 2007 Atlantic Universities Geological Conference. This year's conference will include field trips to Scotia Mine, the Greendale Complex and Cape Breton Island to see the regional environmental geology and hydrology. The conference will also feature talks by company, government, and society representatives, oral and poster presentations by students, guest speakers and a closing banquet. For further information contact Sarah Hindle ([x2004bqi@stfx.ca](mailto:x2004bqi@stfx.ca)) or Amanda Ehler ([x2004cfv@stfx.ca](mailto:x2004cfv@stfx.ca)).

Drs. Brendan Murphy and Mike Melchin have appeared in the series “Geologic Journey”, produced by CBC in association with The Discovery Channel. Dr. Murphy appears in the episode “The Atlantic Coast” while Dr. Melchin appears in the episode “The Appalachians”. Details of this series can be found at <http://www.cbc.ca/geologic/index.html>.

Grant Ferguson  
[gfergus@stfx.ca](mailto:gfergus@stfx.ca)

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## University of New Brunswick

The University of New Brunswick has added two new faculty members to the geology department staff. Dr. Adrian Park has been appointed as a Lecturer for a 3 year term position, beginning in September; as you may know Adrian has a long history here at UNB in structural research, with a strong expertise in many areas of New Brunswick. His position is linked as a curator for the Quartermain exhibits that will be housed in the Department.

Dr. Chris McFarlane joined us in July as our metamorphic petrologist. Chris did his undergraduate degree at the University of Toronto, his M.Sc. at the University in Calgary known as a powerhouse of metamorphic researchers, and his Ph.D. at the University of Texas, Austin. Then he was a post doc at the Australian National University. We are really happy to welcome such a nice guy with family roots throughout the Maritimes.

We had two defences recently. Barbara Marijana Petrunic defended her Ph.D. thesis (supervised by Tom Al) entitled “A detailed investigation of the aqueous geochemistry and mineralogy of tungsten mine tailings, Mount Pleasant, New Brunswick”. Jonathan Lafontaine also defended his M.Sc. thesis (supervised by Dave Lentz) on “The Devil Pike Brook



Gold Deposit: an Example of an Orogenic Lode Gold Deposit

in the Canadian Appalachians”. Congratulations to them both for a job very well done.

*A field photo of Adrian Park studying folds in New Brunswick.*

Also, Dr. Stefan Kruse’s Ph.D. thesis “Structural evolution of the northern Thor-Odin Culmination, Monashee Complex,



southern Canadian Cordillera” under Paul Williams’ supervision won the New Brunswick Governor Generals Medal this year for best Ph.D. thesis. Yes, we are all very proud!

*Chris McFarlane exploring moderately deformed Silurian granites that hold up the alpine region around Mt. Kosciuszko, eastern Lachlan fold belt, SE Australia.*

John Spray has recently been appointed as Science Team Member: close up imaging system (9CLUPI) for European Space Agency ExoMars rover mission to Mars (2011 launch). He has also been appointed as Science team member: Alpha-particle X-ray Spectrometer (APXS) facility for NASA Mars Science Laboratory (MSL) rover mission (2009 launch).

In September 2007, the Bailey Geological Society hosted a day long field trip to mineral deposits in south-central New Brunswick (organized by Angela Page, student president). Sites visited included: the Zealand aquamarine (blue beryl) deposit, the Sisson Brook W-Mo-Cu deposit (GEODEX), and the Burnt Hill W (Be-Mo-Sn) Mine (Noront Resources/Cadillac). The trip was led by Kay Thorne (NBDNR), Dave Martin (GEODEX), Kristy Beal (honours student, UNB), and Dave Lentz (UNB), and supported by The Prospectors and Developers Association of Canada.

The New Brunswick Branch of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM-NB) hosted the 2007 CIMNB-UNB Student - Industry Meet’ n’ Greet. There was a presentation on the story of the Thompson Ni (Cu-PGE) deposits by tagteam Rob Smith (Chief Mine Geologist-CVRD-INCO) and Ron Stewart (Manager of Exploration - CVRD-





INCO), preceded by a short overview of CIM and CIM-New Brunswick Branch by CIM-NB Branch President Paul Rennick (NB DNR-Minerals).

*Group photo of the Bailey Geological Society trippers in front of the Burnt Hill tungsten mine decline, NB.*

Dave Lentz  
[D.Lentz@unb.ca](mailto:D.Lentz@unb.ca)

## AGS AWARDS: CALL FOR 2008 NOMINATIONS

The Atlantic Geoscience Society is accepting nominations in the following categories:

**AGS Distinguished Scientist Award (Gesner Medal)**  
 and  
**AGS Distinguished Service Award**

### Criteria

**AGS Distinguished Scientist Award (Gesner Medal)**

- 1) The Award is made to a person who has, through her/his own efforts (publications, maps, memoirs, etc.), developed and promoted the advancement of geoscience in the Atlantic region in any field of geology.
- 2) The contribution of the person should be of large enough scope to have made an impact beyond the immediate Atlantic region.
- 3) The person does not have to reside in the Atlantic region nor be a member of the Atlantic Geoscience Society.
- 4) The person must be alive and active in geoscience research, although not necessarily full time in the Atlantic region.

### **AGS Distinguished Service Award**

This Award shall be given in recognition of exceptional and altruistic contributions to the Atlantic Geoscience Society over a long period of time. There are no other specific criteria.

### Nomination Procedure

- 1) A statement of between 500 and 1,000 words, succinctly explaining how the candidate meets the selection criteria (see above).
- 2) Supporting documentation from the nominator and a letter of support from the seconder. The supporting documentation could include items such as (i) selected bibliography (must consist of *no more than 20* key references; a complete bibliography including abstracts is not needed); (ii) documentation of impact of work; and, (iii) supporting letters from referees other than the nominator and seconder.
- 3) The nominator and seconder shall be members in good standing of the Atlantic Geoscience Society at the time of nomination.

Deadline for Nominations is 15 December 2007

If possible, nominations, supporting letters, and all documentation should be submitted electronically to allow easy transmission to judges. Please submit to:

David Mosher, Vice President  
 Atlantic Geoscience Society  
 Natural Resources Canada  
 Geological Survey of Canada (Atlantic)  
 1 Challenger Drive, P.O. Box 1006, Dartmouth, NS B2Y 4A2

Telephone: (902) 426-7363  
 Facsimile: (902) 426-4104  
 Email: [dmosher@NRCan.gc.ca](mailto:dmosher@NRCan.gc.ca)

## UPCOMING EVENTS

### **“Beyond the Last Billion Years” Talk Series**

The popular talks sponsored by the AGS and the Nova Scotia Museum return to their original home. This is the Auditorium of the Nova Scotia Museum of Natural History on Summer Street. Each talk starts at 7:30 p.m. We look forward to seeing you there. Admission is free but it is really appreciated if you bring a donation of canned food.

20 February 2008 - Steve Blasco, Geological Survey of Canada (Atlantic), **“The Arctic Ocean: man against frozen seas”**

As the Arctic offshore moves towards hydrocarbon production, concern for the fragile marine environment increases. Seabed geological research is playing a key role in

ensuring the protection of this extreme ice-dominated environment.

19 March 2008 - Dr. David Mosher, Geological Survey of Canada (Atlantic), **“To the Heart of Tsunamis: it’s all about geology”**

The devastating Indian Ocean tsunami of December, 2004 showed us how powerful and potentially destructive is the Ocean, but the making of tsunamis has everything to do with Earth processes. Through this presentation, we'll explore the ways tsunamis are generated and whether they are an ongoing threat by studying the 2004 Indian Ocean event and the 1929 tsunami, which wreaked destruction upon the south coast of Newfoundland.

23 April 2008 - Terry Goodwin, NS Department of Natural Resources, **“Linkages between geology, the environment and society”**

Ever wonder how geology affects your drinking water, the air you breathe or where you live? Find out how ... and much, when Terry Goodwin describes the interesting interactions between geology, your environment and you.

*Dustin Whalen*  
[dwhalen@nrcan.gc.ca](mailto:dwhalen@nrcan.gc.ca)



# First Circular

## Atlantic Geoscience Society Colloquium

**Holiday Inn Harbourview  
Dartmouth, Nova Scotia  
1-2 February 2008**

The 34<sup>th</sup> AGS Colloquium and Annual General Meeting will take place 1-2 February 2008 at the Holiday Inn Harbourview at 101 Wyse Road in Dartmouth. The program to date includes a number of special sessions, a general session, and a workshop that will run at Dalhousie University. Meetings of the AGS Council, APICS, Education Committee and Atlantic Geology are expected to run sequentially on Friday morning until the start of the afternoon session.

*Workshop:* Student Geochronology Workshop, Thursday, 31 January, Dalhousie University

*Meetings:* Morning of Friday, 1 February until the afternoon session, Holiday Inn Harbourview

*Special Sessions: as of 25<sup>th</sup> October 2007*

Climate change: presentations and panel discussion

Earth-based studies of planetary surfaces

Soil geochemistry: influences of genetic and environmental factors

Sediment dynamics, oceanography and ecology of the greater Bay of Fundy: scenarios resulting from tidal power development

*General Session:* Current Research in the Atlantic Provinces

*Social:* AGS' 35<sup>th</sup> Birthday Party to follow the Friday evening talks

*Abstract deadline:* Friday, 4 January 2008

*Contacts:* Mike MacDonald (Sponsorship)

Graham Williams (Technical Program)

Mike Parsons and Jennifer Bates (Co-chairs)

**The AGS Colloquium will be a time to celebrate ... 2008 is the  
Launch of 35<sup>th</sup> year of the Atlantic Geoscience Society and the  
International Year of Planet Earth**



The Atlantic Geoscience Society's 15<sup>th</sup> annual workshop

# EdGEO Rocks !

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**A 2-day field trip** to explore Halifax and its surrounds:

- > Learn how geology influences our modern terrestrial and marine environments
- > Discover the intricate connection between human activity and the environment

**Leaders:** Terry Goodwin, Nova Scotia Department of Natural Resources and Michael Parsons, Geological Survey of Canada

**Dates:** Wednesday & Thursday, August 20 & 21

**Local host:** Bedford Institute of Oceanography in Dartmouth, Nova Scotia

**You will receive ..**

- > Field trip guide book
  - > Geological highway map of Nova Scotia
  - > CD of hands-on activities and materials
  - > Pamphlets, booklets & posters
  - > 16 hours of professional development
- 

**Teachers' comments on previous workshops:**

*" .. a valuable contribution in facilitating learning for teachers and students in Nova Scotia "*

*"Learning by seeing and feeling and experiencing"*

*"You really brought this topic to life"*

*"Terrific atmosphere for learning."*

*"Workshop has been two of the best days experience I have had. Sorry I had to miss the previous 12!"*

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**Workshop endorsed by the Nova Scotia Association of Science Teachers and the Nova Scotia Social Studies Teachers' Association. Evaluated as a valid professional development opportunity by the Nova Scotia Department of Education.**

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**To register** please return completed form **with payment** (cheque payable to NS EdGEO Workshop Committee) to:

Jennifer Bates  
Chair, AGS Nova Scotia EdGEO Workshop Committee  
c/o Geological Survey of Canada (Atlantic)  
Bedford Institute of Oceanography  
P.O. Box 1006, Dartmouth, NS B2Y 4A2  
Ph: 902-426-4386  
FAX: 902-426-4465  
E-mail: [jbates@nrcan.gc.ca](mailto:jbates@nrcan.gc.ca)



Terry explains the granite of Peggys Cove

Name: \_\_\_\_\_

School: \_\_\_\_\_

School address: \_\_\_\_\_

Current grade level: \_\_\_\_\_

Summer mailing address: \_\_\_\_\_

\_\_\_\_\_

School phone: \_\_\_\_\_

Summer phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Please mark your choice. Fee includes lunches & breaks & Wednesday supper. If it rains, sessions will be held indoors.

Teacher: \_\_\_\_ \$95 \_\_\_\_ \$120\*

Student: \_\_\_\_ \$50 \_\_\_\_ \$75\*

\* includes a copy of the book "The Last Billion Years" listed on NS Department of Education Book Bureau



# Conjugate Margins Conference | Halifax 2008

*"Sharing Ideas – Embracing Opportunities"*

August 13 — 15, 2008 | Dalhousie University | Halifax | Nova Scotia | Canada

## Call for Papers

**For Oral and Poster Presentations Relating to:**  
**Margin Evolution & Development**  
**Basin Petroleum Systems | Productive Fields & Analogues**

IN ADDITION TO THE CONFERENCE SESSIONS, ALSO FEATURED WILL BE:

### FIELD TRIPS

#### Nova Scotia (Pre-Meeting)

- Permian to Jurassic Rift Successions
- Classic Carboniferous Sections
- Onshore Cretaceous Reservoir Equivalents

#### Morocco (Post-Meeting)

- Triassic Synrift Reservoir Facies & Architecture

#### Portugal (Post-Meeting)

- Jurassic Carbonates & Fluvio-deltaic Successions

### ABSTRACT SUBMISSION DEADLINE

**March 1, 2008**

All abstracts must be submitted through the conference website

### EXTENDED ABSTRACT DEADLINE

**May 1, 2008**

Extended abstracts for accepted papers must be submitted by this date

### WEBSITE

[www.conjugatemargins.com](http://www.conjugatemargins.com)

### COURSES

**Practical Salt Tectonics**  
**Petroleum Systems Modelling**

### CORE WORKSHOP

**Offshore Nova Scotia Reservoirs,**  
**Facies & Sequences**

### SEISMIC DATA ROOM

**Latest Central Atlantic Programs & Profiles**

### PROGRAM INFORMATION

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**Grant D. Wach**

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### LOGISTICAL INFORMATION

**Trudy D. Lewis**

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