

ATLANTIC GEOSCIENCE SOCIETY

NEWSLETTER

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Newsletter Address

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PRESIDENT'S FORUM

Where has the time gone? Christmas is fast approaching and I have already started my final quarter as President of the Atlantic Geoscience Society. The geoscience community is very active in Atlantic Canada and lots of things are happening. To bring you up to date, I have summarized here some highlights since the last news-letter in March.

Fifty-six scientists from 13 countries gathered at Acadia University, early in June, to discuss the climatic, biotic, and tectonic evolution of the Triassic to Jurassic Pangea. This event was sponsored by the International Continental Scientific Drilling Program (ICDP) and the United States National Science Foundation (NSF) for the purpose of defining specific target sites to conduct a major coring program. Acadia University was chosen for this event because of the great exposures of the Late Triassic and Early Jurassic units in the Bay of Fundy region. This group selected the Annapolis Valley region as one of the primary target areas for this drilling program.

In September, a one-day conference to commemorate the work of Sir William Dawson was held at the Fundy Geological Museum,

Parrsboro. This event, organized by Ken Adams, included a morning session of presentations on palaeontology and related topics, followed by an afternoon field trip to Joggins led by John Calder of the Nova Scotia Department of Natural Resources (NSDNR). Despite the rain, students and professors from various universities, as well as representatives from the NSDNR were impressed with the geological significance of this world renowned fossil site in our geological backyard.

The undergraduate student community is very active, as demonstrated at the annual Atlantic Universities Geological Conference (AUGC). This two-day event is an opportunity for under-graduate students to showcase their research and get feed-back and recognition. In October, students of the Department of Earth Sciences at the Memorial University of Newfoundland hosted the well-attended event. The conference is growing and diversifying - this year, a poster session was added to complement the oral presentations. As always, AGS maintained a high profile, awarding each speaker a one-year subscription to the *Atlantic Geology* journal. In addition, all speakers and poster submissions received a certificate of recognition. I encourage all professional geologists to attend this event to get a fresh perspective on a wide range of topics.

The month of November is a busy time for provincial geologists. Annual Reviews of Activities and public Open Houses occur in Nova Scotia, New Brunswick and Newfoundland and provide an opportunity to promote economic resource opportunities and highlight on-going projects. Reports on each of these events are included in this newsletter.

As you can see from the few highlights I presented here, the geoscience community is alive and well in Atlantic Canada. The challenge now facing AGS is how do we as an organization grow and evolve in order to provide a valuable and appreciated service to our membership. At the same time, AGS would like to expand its membership to better represent the changing dynamics of the present day geoscience community. As we enter the new millennium, AGS will be struggling with this dilemma. Your ideas, input or suggestions would be welcome and greatly appreciated.

Chris White, President, AGS

NEW BRUNSWICK

DEPARTMENT OF NATURAL RESOURCES AND ENERGY, MINERALS AND ENERGY DIVISION, 1999 ANNUAL REVIEW OF ACTIVITIES

On a beautiful, sunny, crisp, autumn Monday morning, more than 45 people loaded into trucks, cars and a bus at the Sheraton Hotel in Fredericton. This inaugural event of the 1999 New Brunswick Department of Natural Resources and Energy Annual Review of Activities (held November 1-3) was a field trip to the St. Stephen area of southwestern New Brunswick. Under the guidance of Sandra Barr (Acadia University) and Malcolm McLeod (Geological Surveys Branch, NBDNRE), exploration geologists, prospectors, and wanna-be prospectors were presented with a variety of geological stops to learn about and observe first-hand the St. Stephen Gabbro. Side trips to the former St. Stephen nickel mine to view recent drill core and a trip to Digdequash to look at mineralized basalts in the Eastport Formation capped off another successful Open House field trip.



Back in Fredericton, the first technical program of 1999 began on Monday evening and featured a special two-lecture session by M.P. Foose and J.F. Slack of the United States Geological Survey. The topic of their presentations was the Bald Mountain massive sulphide deposit in Maine. Following these talks, the annual Meet and Greet reception, sponsored by the Department of Economic Development, Tourism and Culture, provided an opportunity for delegates to mingle amongst the posters and commercial booths and discuss the latest field activities and research findings with the exhibitors.

On Tuesday, Steve McCutcheon and Malcolm McLeod of the Geological Surveys Branch, gave talks on the topic of A Exploration Highlights and Potential Opportunities in New Brunswick@; these continue to be two of the most popular sessions each year. The

remainder of Tuesday was scheduled with geoscience presentations by industry, university and government geologists.



Saint John prospector Emilio Doiron trying out a Beep Mat while on the 1999 Annual Review field trip to St. Stephen, New Brunswick

For the first time, the Annual Review of Activities offered the delegates a session with an economic or business focus. This Wednesday morning session included nine talks, the majority of which were given by private sector representatives. Subjects included national and international perspectives on Canadian mining, transportation issues facing the Atlantic Canada mineral industry, geotourism opportunities in New Brunswick, and what the mineral industry means to a resource-based community whose mineral industry may be facing a slowdown in the coming years.

A total of 27 presentations were given at this year's Annual Review. An integral part of any Department of Natural Resources and Energy Annual Review of Activities is the geoscience poster session, core shack and commercial exhibits; this year there were 52 exhibitors.



New Brunswick Open House registration staff posing with commercial exhibitor Blaine Phillips of BAP Equipment Limited of Fredericton

The guest speaker at the 1999 banquet was Dr. George Miller of The Industry Government Relations Group who spoke on *The Future of Mining in New Brunswick: Challenge or Opportunity*. Dr. Miller, in association with Dallas Davis of Dalmin Corporation, is currently undertaking a study related to the New Brunswick mineral industry.

Attendance at the 24th Annual Review of Activities was 250. Although this number is a 10% decrease from 1998, it still represents an above-average turnout over the lifetime of the conference. The organizers are pleased that the Review continues to attract an audience of which 50% consists of mineral exploration industry representatives.

In 2000, New Brunswick Department of Natural Resources and Energy will celebrate 25 years of hosting the Annual Review of Activities. Plans to involve many provincial mineral industry associations in the preparations will begin soon.

Don J.J. Carroll, NBDNRE

NEWFOUNDLAND AND LABRADOR OPEN HOUSE 1999

The 23rd Annual Review of Activities of the Mines Branch took place on November 4, 1999. This year it was held in conjunction with the joint annual meeting of the CIM Newfoundland Branch and the

Association of Professional Engineers and Geoscientists of Newfoundland. Some 500 delegates attended the meeting, which appeared to be marked by a more optimistic air than in recent years. A delegation of the Geological Survey of Canada representatives were also on hand, some of whom participated in planning sessions with the Geological Survey of Newfoundland and Labrador (GSNL) managers as part of the Joint Geoscience Programs Committee.

The Open House included reviews of GSNL and GSC field activities, mining and exploration activities, and student research projects at the Memorial University of Newfoundland. Technical presentations included talks on the Betts Cove Ophiolite, till geochemistry, the Grenville Province,

and the economic potential of part of the Robert's Arm - Buchans belt. Twenty-eight posters were also on display during the Open House and CIM-APEGN meeting.

There was also a Prospectors Tent, Core Shack and commercial trade show. Approximately fifty prospectors attended the meeting with about fifteen exhibiting in the Prospectors Tent. A number of Newfoundland-based junior exploration companies were also present. The Matty Mitchell Prospectors Resource room, a joint effort of the GSNL, industry and university to provide mentoring, continued training

and technical support to the local prospecting community, was dedicated in honour of the Province's most famous prospector, Matty Mitchell, who discovered the Buchans lead-zinc-copper mineralization. Finally, the CIM Newfoundland Branch used the occasion of this year's meeting to present Minister Grimes with a Certificate of Appreciation for the Department of Mines and Energy's twenty plus years of support and participation in Branch activities.

Baxter Keen, GSB, NDME

MINING MATTERS FOR NOVA SCOTIA '99

The Nova Scotia Department of Natural Resources hosted its 23rd Annual Review of Activities, "Mining Matters for Nova Scotia '99", at Halifax's World Trade and Convention Centre on November 8 and 9. This year's conference was a partnership of the Department of Natural Resources, the

Department of Economic Development, the Mining Society of Nova Scotia, the Nova Scotia Chamber of Mineral Resources and the Nova Scotia Prospectors Association. The meeting, subtitled "Opportunities for Economic Development", maintained the diverse program content initiated in 1998 as a way to demonstrate to the diverse audience, the contributions of minerals and mining to Nova Scotia.

Invitations to attend the two-day event were widely distributed to other provincial government departments, regional development agencies, schools, special interest groups and the general public, in addition to the traditional audience of local, national and international exploration companies, prospectors and producers, and other federal and provincial geological surveys. This more aggressive advertising resulted in a total registration of approximately 425.

Oral presentations were grouped into three themes: "Current Developments in Nova Scotia's Mining Industry" (a session hosted by the Mining Society of Nova Scotia), "From Geoscience to Economic Development", and "The Many Faces of the Mineral Industry". Among the highlights of these sessions were presentations on new technologies being used in coal and gypsum mines in Nova Scotia, the development of strategies to adapt to global climate change, how pro-active public relations activity can minimize difficulties in exploration and development, and two non-traditional uses of Nova Scotia's geological resources - as stone for sculpture and the potential for a "fossil trail" tourism initiative. The keynote address, "Water Resources and Economic Development in Nova Scotia", was presented to an interested and enthusiastic audience by Terry Henniger of AGRA Earth and Environmental Limited.

As usual, much of the audience spent more time in the poster session than at the talks. Although posters by DNR staff, university researchers, and the GSC dominated, displays presented by the Prospectors Association, mineral producers (gypsum, salt, aggregate), mineral and gem collectors, and several other groups made for a diverse and interesting session. This year also saw participation by several service companies in a Tradex.

Two post-conference events were held on November 10. A symposium on zinc environments in Nova Scotia attracted some 45 participants for a one-day review of the Province's potential to host polymetallic zinc deposits. Dr. Grant Garven of Johns Hopkins University presented a keynote presentation on the role of basin fluids in zinc mineralization, with examples from the McArthur Basin in Australia. Finally, some 30 participants from non-mining professions learned more about mining during a field excursion to active mining operations in central Nova Scotia.

"Mining Matters for Nova Scotia '99" was an unqualified success. Organizers are already incorporating suggestions for improvements into their planning for next year's conference, which will be held in Halifax on October 30 and 31.

Mark your Millennium calendars!

Mike Cherry, MEB, NSDNR

EDUCATION COMMITTEE REPORT

Who are we fooling? Why does a Society the size of AGS need an Education Committee and what can it hope to accomplish? These are legitimate questions. Most of the time I wonder if there are any legitimate answers.

My first concern in trying to defend the AGS Education Committee is who is it hoping to educate? Sometimes I believe that I am the one most in need of educating. At other times, I waver between helping school students, the general public, university students, or even other geologists.

Has the Committee had any successes in its life span of over ten years? I believe so but I am somewhat biased. The EdGEO Workshop Committee was an early and fruitful offspring. In its six years of existence, the Committee has held teachers workshops in Halifax-Dartmouth, Sydney, Wolfville, Bridgewater, Truro and Parrsboro. If you wonder how teachers reacted to these indoctrination sessions, ask Jennifer Bates to show you the evaluation forms. Most impressive, however, is the commitment of the Committee members. Without exception, they are dedicated to continuing the Workshops and to making each year better than the last.

But one swallow does not make a summer as one success does not justify a Committee. Wait, there are some other signs of life. The first that springs to mind is *The Last Billion Years*, the book on the geology of the Maritime provinces. This project, first mooted in 1995, is now nearing completion, thanks to the efforts of Rob Fensome and his supporting cast of about 40. The illustrations are stunning and the text can even be understood by me. Anyone who is interested in the geology of our three provinces can learn from this book.

So, is that it? There are some other ventures, either completed or in progress. An outstanding example is *Discovering Rocks, Minerals and Fossils in Atlantic Canada*, edited by Peter Wallace, with contributions by about 20 specialists. This field guide is a must for all geologists in Atlantic Canada. If you haven't bought a copy, do so as soon as possible. Other efforts include plans to produce posters, talking field guides, and CDs.

What does the future hold? Perhaps the Education Committee will become extinct, destroyed by the meteorite of indifference, but I don't believe so. A few years ago, some pessimists were forecasting the demise of AGS. Thankfully, how wrong that's turning out to be. I see some young blood rising that will instill new life into the Education Committee. And new ideas are emerging, based on new technology and insights. Why not volunteer your services and become a member of the Committee before it is too late.

Graham Williams, Chair, AGS Education Committee

HOW LONG HAS THIS BEEN GOING ON?

Six years ago I certainly did not foresee that I would be writing an article such as this one day. And, neither did I imagine the unquestionable success of the Nova Scotia EdGEO workshops. Ignorance is bliss. But, if I had stopped, for even a minute, to think about the people who volunteered to get the workshops off the ground, today's reality would have been obvious.

The NS EdGEO program is a clear example of the statement that a project is only as successful as its contributors (present company excluded). The ongoing success of the program is due to those who have freely given their time, expertise and experience to the program and ultimately to the teachers of Nova Scotia. I am grateful to Graham Williams, Howard Donohoe, Bob Grantham, Kathy Silverstein, Susan Baldwin, Henrietta Mann, Nelly Koziel, Linda Ham, Rob Fensome, John Shimeld, and Bill MacMillan. As well, my appreciation goes to Ken Adams and Marilyn Smith for their assistance in co-hosting the 1999 EdGEO workshop at the Fundy Geological Museum in Parrsboro.

What can you say about a group that cannot not leave well enough alone? I can tell you. It is wonderful group. It is composed of people who want to work together to make everything just a little bit better each year (not that the workshops don't already receive rave reviews from its participants). And who benefits? Well, the Nova Scotia teachers do, for starters ... also their students ... and perhaps the parents. But let's not forget the benefit to AGS. The Society gains a solid reputation with the community of science teachers. Also, it invests in the continuation of geology as a preferred course of study. (Like mutual funds, it is the long term outlook that counts!) Perhaps most importantly, the AGS maintains a thriving community of geoscientists willing to work together to share knowledge and experience.

I can only encourage you to talk to any of the aforementioned AGS members. But be careful, the enthusiasm is infectious. You may find yourself helping with the next workshop to be held in Antigonish on August 21-22, 2000. But, hey, that is not necessarily a bad thing.

Jennifer Bates, Chair, NS EdGEO Workshop Committee

NOVA SCOTIA DECLARES OFFICIAL GEMSTONE AND MINERAL

In a proclamation on November 17, Premier John Ham declared agate and stilbite the official gemstone and mineral for Nova Scotia. For years amethyst had been considered the provincial gemstone, but it had never been officially declared as such. In 1975, Ontario proclaimed amethyst as its official gemstone, leaving Nova Scotia without one, official or otherwise.

Agate is a banded, multicolored variety of chalcedony. It occurs in an infinite amount of colours and patterns, and no two agates are alike. The extraordinary beauty and uniqueness of agate is responsible for its great popularity.

Stilbite is a member of the zeolite group. It occurs as transparent to translucent prismatic crystals, often in sheaf-like aggregates of twinned crystals that resemble sheaves of wheat. Stilbite is sought by collectors because of its colour and the attractive crystal groups it

forms. Like other members of the zeolite group it can be used to perform ion exchange, filtering, odour removal, chemical sieve and gas absorption tasks but the most well known use is in water softeners.

In Nova Scotia, agate and stilbite are commonly found in vesicles and cavities in basaltic flows of the Triassic North Mountain Formation in the Bay of Fundy region.

Chris White, NSDNR

ATLANTIC GEOLOGY NEWS

Darlene Feener resigned as Managing Editor in May 1999, having done this important task on a part-time basis since 1985. The journal editors are grateful to Darlene for all her excellent work on the journal over the years, and we are sorry to lose her. She moved on to a full-time job in Ancillary Services at Acadia University, and we wish her all the best in her new position.

Darlene's role has been taken over by David McMullin (demonstrator in the Geology Department at Acadia University) and his wife, Andria Hill. Understandable delays have resulted as David and Andria have developed a new publication procedure - the journal can no longer be prepared through the facilities at the Acadia University Centre for Estuarine Research.

The new contact address for the journal is:

Atlantic Geology
c/o Department of Geology
Acadia University
P.O. Box 115
Wolfville, Nova Scotia
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David can be reached by e-mail at david.mcmullin@acadiau.ca, or by fax at 902-585-1816.

Sandra Barr, Co-Editor, Atlantic Geology

NEW AGS WEBSITE ADDRESS

Please note and accordingly change your WWW bookmarks for the AGS website. The new URL is:

<http://ags.earthsciences.dal.ca/ags.php>

AGS Executive and Councillors 1999-2000

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