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GEOSCIENTISTS
NOVA SCOTIA

GeoGazette

Winter 2017 Volume VII Issue I

Congratulations to James Reeves, P.Geo.

Heather Cross, P.Geo, FGC.

On November 5, 2016, Jim Reeves, a long-time member of APGNS, was awarded the **CIM Newfoundland Branch 2016 Geoscientist of the Year Award**.

This Award is presented annually to a geoscientist or team whose work in the province (Newfoundland & Labrador) is in use, and has contributed significantly to either: improved regional or detailed exploration models or techniques; a new mineral discovery; or a significant expansion to a known ore body in the province.

The St. Lawrence fluorspar vein systems have been known for over 175 years. They were mined on a commercial scale starting in the 1930s. Geological models indicated that the veins were localized within the St. Lawrence Granite with the perception that exploration should be restricted to this zone. During 2012 to 2014, Jim Reeves and the Canada Fluorspar (NL) Inc. geological group conducted regional exploration over their St. Lawrence property. It was discovered that significant fluorspar mineralization extended beyond the granite and into the nearby sedimentary rocks. Their results significantly expanded the fluorspar resources on their own property, opened a large new geological area for exploration, and added a valuable new exploration model that is widely applicable.

For this significant work, Jim Reeves received the Award (*in absentia*) at the closing banquet of Mineral Resources Review 2016, a joint conference of the Newfoundland Branch of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and the Mines Branch of the Newfoundland and Labrador Department of Natural Resources.

Jim was lead author on a paper published in 2016 on this subject:

Reeves, J.H., Sparkes, B.A. and Wilson, N. 2016. Paragenesis of fluorspar deposits on the southern Burin Peninsula, Newfoundland, Canada. CIM Journal, Vol. 7, No. 2, pp 77-86.

We offer our sincere congratulations to Jim for receiving the Award, and for his hard work and dedication over many years in the geoscience profession!

As an additional note, Jim also received the APGNS Excellence in Geoscience Award in 2008.

Inside this issue:

Mentorship is Powerful

A. Fiona Gallacher, P.Geo.

The profession of geoscience is one of amazing opportunities but can also come with some road blocks. It can be a rewarding and humbling career so it is often not for the faintest of hearts. In general though, the geoscience community is smaller than many other professional designations and therefore through the winding roads and bumps along the way, the community is often very supportive and positive to new comers that want to explore the wonderful world of geoscience.

In 2007, I started my Bachelor of Science degree in Earth Science at Dalhousie University after finishing an Arts degree in French and German. The lure of geology and getting outside was only the start of my fascination with the program but the main lure was the jobs that were promised after graduating. Whether it was hard rock geology or soft rock geology, the streams of jobs were open to young students early in our careers and that was exciting.

By 2010, I had graduated with an honours in Earth Science and had accepted my first full-time job in the energy sector with Shell Canada Ltd. I felt fortunate and one of the lucky ones to have made it! I moved out west and left behind a province of Nova Scotia I loved dearly but this was for a great experience, one that I couldn't pass up. For six years, I was able to return yearly to Dalhousie geology department to engage with students and prospective energy sector candidates. Through information sessions about our own jobs or going out to the field and getting soaked with rain while we discovered the story of the failed rifting and formation of the Fundy Basin, we engaged and had fun. The students over the years, got to know me well and I followed their paths as they went through the geology program even into their masters and PhD programs. My role as a campus ambassador was to connect with these students and give guidance to a great career. It was a role I really embraced and I knew the students embraced the mentorship too.

There is always value to continued outreach to students because as they move through their degrees and into their careers, they become part of the professional associations who will one day give back to society. In 2016, I became a professional geologist with APGNS and it was a very rewarding experience. But at the same time as I was earning my P.Geo designation, I was losing my job with Shell Canada after this two year downturn finally hit home. During this period, I went back to my school and the professors were there to help me get through this bump on my road and I went out with some of the students to let them know first hand how the downturn was affecting everyone.

It has been my most humbling year as a geologist but I am not giving up and will hopefully get another great job around the bend. If it were not for the strong mentors and even the students support, I may have wanted to change careers. **Mentorship is a wonderful thing** and now that it has been a few months since I walked out of Shell, I have met many incredible people in industry who are willing to help a young professional get back on her feet. An article was recently written about the "Pay it forward Gang" of professionals with 30 plus years experience taking the time out of their busy days to encourage young geoscientists not to get discouraged for the tides will turn again. Another senior geologist told me, "*You're not a true Geologist until you have been laid off at least once.*" Well, I guess you can call me a geologist now.

Thanks to all my mentors for your support and please for **those of you willing to mentor young professionals early into their careers in geoscience, make the time to do it.**

2017 Earth Ring Ceremony

Patrick J.C. Ryall, PhD, P.Geo, FGC.

For the attention of all APGNS Members …
the Covenant of the Earth Ring Society is pleased to announce
the 2017 EARTH RING CEREMONY

The 2017 Earth Ring Ceremony (the Ritual of the Calling) will be held **Friday, April 7, 2017** in the Dalhousie University Club. The ceremony will commence at 6:00 pm with a dinner and reception to follow.

Recent Earth Science graduates and practicing Nova Scotia Geoscientists wishing to become obligated and receive a ring are welcome to request a ring. Please contact Patrick Ryall, P.Geo at Patrick.Ryall@Dal.Ca to place your ring order. Note that the ring is to be worn on the smallest (pinkie) finger of your working hand. Please have your finger sized by a jeweller before ordering.
All Geoscientists who have received an Earth Ring are welcome to attend the 2017 Ceremony and Reception as an opportunity to welcome new graduates and practitioners into the Geoscience profession. Please R.S.V.P. to Patrick Ryall, P.Geo at Patrick.Ryall@Dal.Ca or if you want to receive a ring or if you plan to attend. Observers are not permitted to attend the ceremony, however, guests are welcome at the reception and dinner.

The cost for the ring is $75. The cost of the dinner for graduating students (subsidized by Geoscientists Nova Scotia) is $25.00, The cost for the dinner for P.Geos, observers and guests is $40.00. Payment may be made directly to Dr Ryall along with the order or can be made using a credit card and the secure link (follow payments / events / Earth Ring) at www.geoscientistsns.ca.
The deadline for ring orders / ceremony registration is March 3, 2017.

To take part in the ceremony and receive an Earth Ring, you must be an Earth Science graduate of a recognized university and/or be practicing geoscience in Nova Scotia.

The Earth Ring is a symbol of your obligation to the Geoscience profession as committed and affirmed by the professional oath you are asked to offer during the ceremony.
The only way to receive an Earth Ring is to participate in the ceremony and affirm the professional oath and therefore, attendance and participation in the ceremony is mandatory in order to receive your Earth Ring.

Continued….Earth Ring Page 5

Executive Director's and Registrar's Report

David C. Carter, P.Geo, FGC.

You may have noticed that in 2016 it was quite a challenge to bring together the GeoGazette. However, I am pleased to report that Kelsey O'Brien, MIT has volunteered to take on the role of newsletter editor. Kelsey brings a wealth of experience and enthusiasm to this role. She obtained a BSc in Earth Science from St FX, an MSc in Earth Science from Dalhousie and an Engineering Technology Diploma from NSCC and is employed as an Environmental Scientist with Stantec. She will be working closely with the Editorial Board and staff to get familiar with the Association and the newsletter and we expect that she will put her mark on future issues.

The appointment of an Editor for the GeoGazette is a significant step forward on the 2012-2017 APGNS Strategic Plan that recognized communications as a key element for the Association.

OK, it's that time of the year, so let's get the milestones and the numbers out of the way. A summary of numbers from the Official Register, as of January 31st, is shown below.

Table 1. Registration numbers, as of January 31, 2017

Members-in-good standing	163
Members with fees pending	11
Licenses to Practice in good standing	7
Licenses to Practice with fees pending	1
Members-in Training in good standing	21
Members-in-Training with fees pending	0
Certificates of Authorization in good standing	43
Certificates of Authorization with fees pending	4
Certificates of Authorization issued to sole practitioners	19
Certificates of Authorization issued to corporate bodies	24

The total number of Registrants for 2017, as shown in Table 1, is down slightly from last year and the number of retired members is up slightly over last year, probably an indication of the general downturn of the mineral industry. However, these registration numbers are still seen as relatively good and we continue to monitor the industry for trends. We note that the increased number of Members-in-Training is encouraging.

Invoices for 2017 professional registration fees were issued in November, 2016, reminders were sent out in December, 2016, and fees were due and payable on or before December 31, 2016. The percentage of Registrants who have addressed their 2017 fees, as shown in Table 2, is encouraging. We all know that APGNS is a self-regulating professional association and it is also self-funded through Members annual fees.

Table 2. Status of Registration fees, as of January 31, 2017

% of P.Geo fees paid	92%
% of LTP fees paid	88%
% of MIT fees paid	100%
% of Certificates of Authorization fees paid	88%

The Association's finances are in good shape. Preliminary

Continued….Executive Director's Report Page 7

2017 Earth Ring Ceremony (continued from page 3)

A Brief History of the Earth Ring

The tradition of the Earth Ring Ceremony began in Alberta in 1975 as a ritual of welcome for newly qualified geologists and geophysicists by senior practicing Earth Scientists. This tradition has since been adopted across Canada, including: British Columbia, Manitoba, Newfoundland, Nova Scotia and New Brunswick. In Nova Scotia, the Earth Ring Ceremony is administered by the Covenant of the Earth Ring Society and supported by Geoscientists Nova Scotia. The first Ceremony in Nova Scotia was in 2001, and since then 480 people (graduating students and P.Geos) have received an Earth Ring. Note that the Earth Ring is not a requirement for, or an indication of, registration as a professional geoscientist. Like the Iron Ring of the obligated engineer, the Earth Ring for the obligated Geoscientist is worn on the smallest (pinkie) finger of the working hand. It is intended to serve as a reminder to those who wear it of the values at the core of the profession and of the trust placed in them by society. Also, like the Iron Ring and as noted above, the Earth Ring Ceremony is conducted by a society that is independent of Geoscientists Nova Scotia.

The simple design of the Earth Ring is an alternating pattern of the crossed hammers of geology and the seismic trace of geophysics - symbolizing both the immediate, and the remote, searching out of Nature's mysteries and knowledge. Without beginning and without end, the ring represents the continuous and continuing interplay of ideas, of instrumentation and of material realities. The Nova Scotia Earth Rings are made of sterling silver.

Receiving an Earth Ring is not a requirement or condition for being registered by a professional association. The ceremony is about a calling to service. It means you are part of a profession which is dedicated to seeking the truth in Earth Science and applying this to the service of mankind.

Managing Transitions

Geoscientists Canada and Engineers Canada have published a new, planning resource guide outlining best practices for managing parental leave of engineering and geoscience professions. It is intended for employees and employers managing maternity or parental leave in Canada's engineering and geoscience professions.

Managing Transitions: Before, During and After Leave is intended to assist engineers and geoscientists who are considering maternity or parental leave, and is designed to also assist their employers. It provides extensive checklists and outlines steps that individuals, supervisors and companies can take to help smoothly off and on ramp employees taking a leave of absence.

For additional information please contact David Carter, P.Geo, Registrar at registrar@geoscientistsns.ca or 902-420-9928.

Message from the President

Jennifer McDonald, P.Geo.

Greetings fellow Geoscientists. It is hard to believe I am near the end of my term as President of Geoscientists Nova Scotia.

I'd like to take this opportunity to highlight some of the important work Council has been involved with in 2016. An item of particular importance is the pending Government of Nova Scotia's draft Policy Respecting Self-Regulated Professions.

The purpose of this policy will be to provide a clear and consistent approach for Government to follow when reviewing proposals for self-regulation of professions.

Members of the Executive Committee attended an information session and provided feedback on the draft policy. Council will continue to monitor the development of this policy, in particular the potential impact on APGNS' pending update to the **Geoscience Profession Act.**

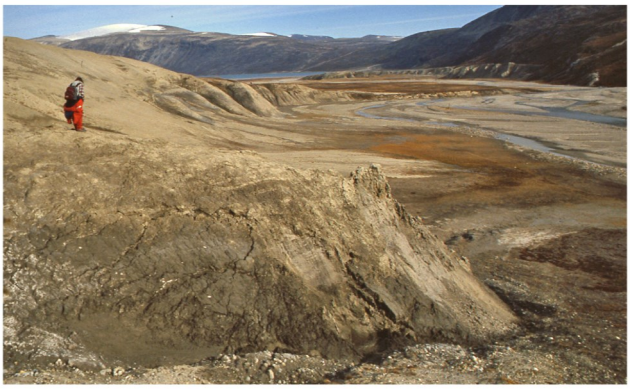
APGNS has contributed to the development of a Joint Practice Guide for Self-Declaration as a Site Professional under Nova Scotia Environment's Contaminated Sites Regulations. This is a joint project with Engineers Nova Scotia, funded by Nova Scotia Environment and has been submitted for consideration.

The Academic Advisory Committee was recently established as a sub-committee of the Admissions Board. The purpose of this Committee is to open the lines of communication with Nova Scotia universities and raise awareness of the geoscience profession and geoscience registration at the academic level.

In June, Jeff Parks (Geoscientists Canada Director), David Carter (Executive Director and Registrar) and I traveled to Calgary for the meeting of the Members of Geoscientists Canada. The meeting is an opportunity to monitor and contribute to issues of national concern, plus, it's always advantageous to learn about happenings within the geoscience community across Canada.

In October, Belinda Culgin (Vice-President) and I had the privilege of participating as Role Models during a Techsploration event, an opportunity to promote the field of geoscience to young females.

I look forward to the remainder of my term as President and I hope to see many of you at the Annual General Meeting which is scheduled for **April 27th**. Don't forget to mark your calendar.



Submitted Photo:
Uplifted Deltas (Charles Schafer, Ph.D, P.Geo.)

Executive Director's and Registrar's Report (continued from page 4)

David C. Carter, P.Geo, FGC.

indications are that the December 31, 2016 year end will show a modest net income. This is due to slightly increased revenue from membership and service fees but mostly it is through close control of expenditures. The details of the 2016 financial report will be presented to the AGM on April 27, 2017.

As you are aware, the ***Geoscience Profession Act*** (GPA) and the ***Geoscience Profession Regulations*** have been submitted to the Department of Justice with a request that it be scheduled on the government's order paper. The progress of the Act has been delayed while the government considers a new corporate policy respecting self-governing occupations and while the ***Mineral Resources Act*** (MRA) is under consideration. Once the self-regulating policy has been approved and the MRA has been proclaimed, we are hopeful that the GPA will be tabled, perhaps in the fall of 2017.

Members have recognized the **Continuing Professional Development and Competency Assurance** program, as an important value-added component of professional registration. Approximately 90% of Members have submitted CPD reports for 2016. CPD is a key goal of the 2012-2017 APGNS Strategic Plan. We all know that individual careers in Geoscience tend to evolve over time. The components of Geology, Environmental Geoscience and Geophysics evolve, merge, expand and interlock. The APGNS CPD program is a key component in documenting the Members life long commitment to education and continuing competence for independent professional geoscience practice. Plus, compliance with the home Associations CPD program is a component for the confirmation of professional registration (member-in-good standing) and mobility.

APGNS accepts a Member's compliance with the CPD requirements of another Association as acceptable for submission to APGNS. In the interest of mobility, it seems appropriate that APGNS should respect and accept the evaluation of competence, regardless of the specific program details.

APGNS continues to offer value to the Members through affinity programs and, based on our affiliations with **Geoscientists Canada** and **Engineers Canada**, this represents a significant purchasing block. For example, a discount program is available from UPS with savings of up to 30% for shipments in Canada. The Association has also been included in the **Secondary Professional Liability Insurance** program, at no additional cost to the Members, as well as the **Professional Retiree Health and Dental Plan** which also is available to self-employed Members.

The Association continues to support for the **Covenant of the Earth Ring Society**. The Society will host the annual Earth Ring Ceremony and dinner on **April 7, 2017**. This year, in addition to providing funding support, we have set up an on-line payment tag on the Association website to facilitate registration. The Ceremony welcomes recent Earth Science graduates and others to the profession of geoscience. The Ceremony stresses the professional's obligation to the public and the profession and peers (please see the report in this newsletter).

There are many opportunities for Members to get involved in the operations of the Association and I would encourage you to pick a spot. You should also note that volunteering with the Association is acceptable as a Continuing Professional Development (CPD) credit.

We will host the Annual General Meeting of the Association on **April 27, 2017**. It will be held at the Dalhousie University Club. The business meeting will be held in the morning along with a lunch and guest speaker. The afternoon will offer a Continuing Professional Development session. Details will be announced soon and we hope to see you there.

A Landslide to Remember

Charles T. Schafer, PhD, P.Geo.

If you Google the words Canadian landslides, several "hits" will appear that offer details about the St. Jean Vianney landslide that occurred on May 4, 1971 after several days of heavy rain. The village of St. Jean Vianney, that was once located on the north slope of the Saguenay River valley across the river from the towns of Arvida and Chicoutimi, was literally swallowed up by the slide which occurred at 10:45 PM creating a 30 metres deep crater (Figure 1}. It caused the loss of 40 homes and the death of 39 villagers of a total of about 1266 residents.

My story about this catastrophic event starts in April 1976 during a CSS Hudson expedition to the Saguenay Fiord (No. 76-006) with my career-long colleague Dr. John N. Smith (Dept. of Fisheries and Oceans, BIO). The aim of his part of the expedition involved the collection of a suite of Lehigh gravity cores that he was planning to use to document sedimentation rate variation within the Fiord's sedimentological setting using his Pb^{-210} dating model along with several other "fallout" isotopes (e.g., CS^{-137} and P^{-239} generated from nuclear weapons tests) that have utility for obtaining an age for particular layers in sediments deposited over the past 100 years. I was invited along on the cruise to help out and provide advice on the finer points of the core collection process. In my experience, I learned that the Lehigh corer was typically able to collect 1-2 metres of relatively fine (e.g., sandy silt) sediment in its 10 cm diameter x 2.5 metre long PVC core barrel depending on the amount of weight attached to the corer's head.

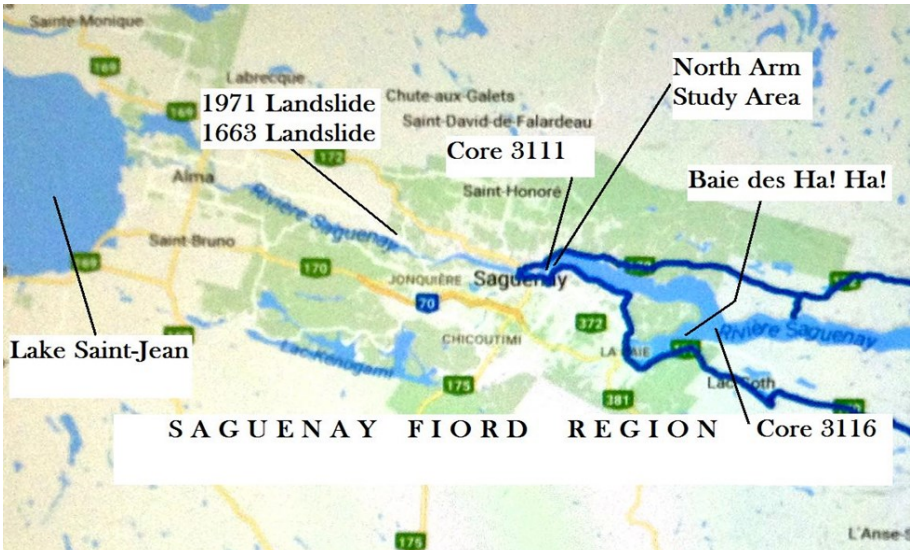


Figure 1: Map of part of the Saguenay Fiord Region showing the location of the two Lehigh gravity cores mentioned in this article and the location of the two Saint-Vianney landslides.

The seminal event that was later linked to the landslide occurred at expedition station 18 that is located near the head of the fiord's North Arm, an embayment that connects the Saguenay River to the main deep channel of the fiord. As the corer was being raised over the rail of the Hudson, I noticed that the core catcher (AKA core retainer) had failed to close completely and that sediment was slowly oozing out of the mouth of the core barrel like tooth paste. Within the blink of an eye, and without too much thought of his own safety, John proceeded across the deck of the ship while calling out for the winch to be stopped, grabbed the core barrel and placed his hand over its mouth until a core barrel cap could be fixed to retain the remaining part of the sample.

Continued….Landslide Page 9

Landslide (continued from page 8)

That core (No. 76-3111) led us to the discovery of a clay layer that we eventually verified as part of the 5.4 x 106M^3 of "Leda Clay" that the 1971 landslide had discharged as a liquified mass into the main River channel via a tributary located about 30 km upstream from Station 18. The transport of this remobilized clayey sediment to the North arm embayment of the fiord was likely enhanced by the stronger currents of the 1971 spring freshet of the Saguenay River that occurred throughout the month of May during that year.

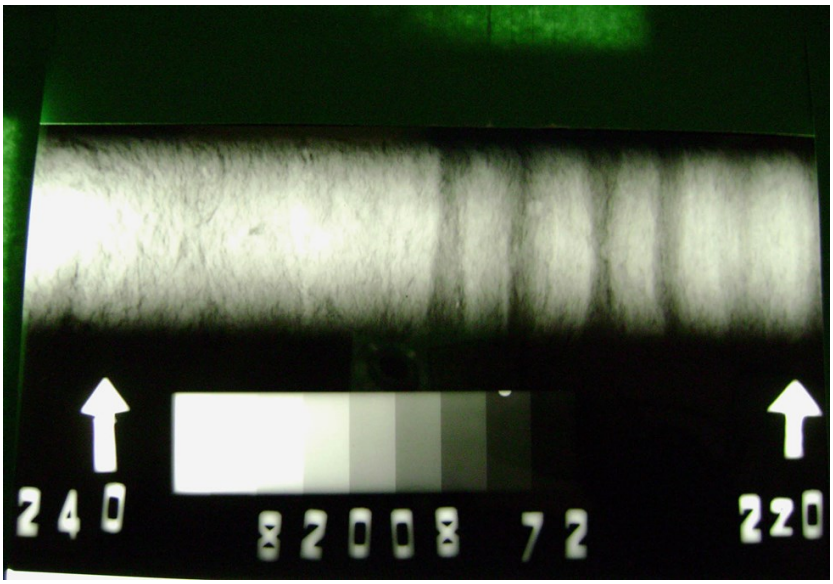


Figure 2. X-radiograph of the 220-240 cm section of piston core 82008-72 showing a transition from slightly bioturbated to unbioturbated sediments that occur in the southwest part of the North Arm of the Saguenay Fiord. The transition to unbioturbated sediment marks the 1912 horizon of the core. This was the year that several large pulp processing machines were installed at the mills near the town of Kenogami. Their organic matter discharges, in conjunction with natural sources, seem to have depleted seafloor oxygen levels to the point that made life impossible for local species that earn their living mixing and/or burrowing in the surficial layer of sediment.

The identification of the clayey slide layer resulted in the subsequent publication of several co-authuored papers between 1980 and 1987 dealing with the sedimentological and other anthropogenically-imprinted features of Saguenay Fiord basin deposits. But, as you might have guessed, that's not where the story ends. Research publications by other geologists revealed that the village had been developed, during earlier 20th century decades, on the site of an older landslide that was estimated to have occurred some 300 to 500 years ago. The crater of the older slide was estimated to have produced a volume of about 210 x 106M^3 of remobilized clayey sediment (i.e, more than 38 times the volume of the 1971 slide crater) from a crater with an area of 21 km^2 , or about 77 times larger than the one produced by the 1971 slide.

This information started Smith and I wondering if that earlier slide might show up in sediment cores collected in the deeper distal parts of the Fiord basin where sediment accumulation rates had been determined to be considerably lower than was found for core 76-3111? Inspection of the other Lehigh gravity cores collected during the expedition brought us to core 76-3116 that had been raised near the western end of the main fiord basin just east of where it is joined by the basins of Baie des Ha Ha and the North Arm. Sure enough, at a core depth of about 78 cm, we found a thick grey clay-rich layer that extended down core to at least the 120 cm level. Using an average annual sedimentation rate of about 0.25 cm yr^{-1} that had been determined by Dr. Smith's Pb^{-210} laboratory for that core, we estimated the age of the top of the layer as having been

Continued….Landslide Page 10

Landslide (continued from page 9)

deposited around 1660 +/- 100 years. The clayey section of core between 80 and 120 cm featured the presence of large numbers of calcareous and planktonic foraminifera that are not commonly found in this part of the Fiord today but that are abundant in the Leda Clay.

The Leda Clay is a relatively widely distributed deposit that is linked to an arm of the Champlain Sea called the Mer de Laflamme that flooded the then isostatically depressed Saguenay river valley during the melting of Wisconsinan ice between about 8000 and 11000 years ago. In addition, the upper 30 cm of the clay layer contained comparatively large numbers of skeletons of freshwater thecamoebians that are presently mostly restricted the floor of the river's channel that lies upstream from the main (and more saline waters) of the fiord basin.

Further reading of the scientific literature (before Google became the search tool of choice) produced information about a magnitude 7 earthquake that had occurred in this region on February 5, 1663. Geologists working in the valley made another discovery during the 1940's when foundation pits for the Shipshaw power station were being excavated near the mouth of the tributary that carried the sediment from the 1971 slide into the Saguenay River's main channel. What they discovered was a peat layer below a thick clay deposit ("shelf") from an older slide. C14 analysis of a sample of the peat produced a date of 1639 +/- 140 years. Studies published by other geologists in 1978 suggested that the older slide may have blocked the Shipshaw River near its mouth too a degree that a temporary lake may have formed? We concluded that the occurrence of relatively large numbers of fresh water thecamoebian skeletons within the 80-120 cm section of core 3116 was consistent with their hypothesis in a Geo-Marine Letters paper that John and I published in 1987, and that the larger and older slide was likely triggered by the 1663 earthquake.

Since 1987, John and I have continued to investigate and ponder (at a very reduced and sporadic pace) some of the finer points of the fiord's sedimentary record using slightly (or sometimes completely) unbioturbated core samples, with a view to uncovering links between sediment texture characteristics (i.e., proxy indicators) and annual variation of the Saguenay River's spring freshet magnitude (Figure 2). We are hopeful that this work might, eventually, lead to new insights about the River's freshet magnitude variation between about 1850 and 1900 i.e., during the latter decades of the climate "transition period" following the end of the Little Ice Age. But that's another story.

Submitted Photo: Talus Deposit (Charles Schafer, Ph.D, P.Geo.)

Cliff Stanley and Sandra Barr Awarded NS Mineral Incentive Research Grants

Announced 2016-07-25

The Nova Scotia Department of Natural Resources (NSDNR) recently awarded Research Grants to two researchers from Acadia University's Department of Earth and Environmental Science from the Province's **Mineral Incentive Program**. These grants were established to help fund research that supports and encourages mineral exploration and development in Nova Scotia. The research must be undertaken in Nova Scotia by university-based researcher(s).

Dr. Cliff Stanley, P.Geo, FGC is studying the Lithogeochemistry of the Dominique Sn-Zn-Cu-Pb-Ag Vein Prospect, Yarmouth County, supported by a grant of $15,000 and at the opposite end of the province, **Dr. Sandra Barr** has been awarded a grant of $4800 to help support her project on the Geological Setting of Au-Cu-Fe-Ni Occurrences in the Second Gold Brook Area, Western Cape Breton Island.

The Cumberland Geological Society Needs Your Help!

Tim Fredak, Director/Curator, Fundy Geological Museum, Parrsboro, NS

The Society is reaching out to the geoscience community to help complete the fundraising required for the ***Parrsboro Rock Shop Project***.

The Society launched the *Parrsboro Rock Shop Project* in August 2015.

- Society has agreed to purchase the Parrsboro Rock and Mineral Shop from Eldon George, in Parrsboro, Nova Scotia.
- Intention is to build a future exhibit that recognizes Eldon's contributions as a citizen scientist and his efforts to develop geotourism.
- As part of the project, Eldon George has also donated his important fossil collection to the Fundy Geological Museum.

Fundraising target is $150,000 for the two-year project. More than $85,000 has been donated from more than 40 individuals and companies.

Please help the Society pay tribute to this important citizen scientist. All personal donations, from $50 to $500 will help us reach our goal!

Learn more about the project by visiting http://ParrsboroRocks.ca
Donations can be made on the website.

The *Cumberland Geological Society* provides Canadian tax receipts for all donations received.

Geoscientists Canada Report

Jeff Parks, P.Geo, FGC - Director (Nova Scotia)

Geoscientists Canada (GC) is the national organization of 9 of the 10 regulatory bodies that govern Canada's more than 9,500 Professional Geoscientists (P.Geo.'s) and more than 2,000 Geoscientists-in-training. Geoscientists Canada facilitates and coordinates national projects designed to enhance protection of the public and safeguard public interests as related to geoscience practice. Some of Geoscientists Canada's work includes improving standards of geoscience practice, fostering consistent admissions decisions and setting competency requirements, and enhancing national and international mobility for Canada's professional geoscientists.

On 21-22 January 2017, the Board of Directors met at the APEGBC office in Burnaby BC. The meeting coincided with AME Roundup 2017. The Board discussed a variety of issues and received updates on several endeavours including the QP Short Course, Geoscientist in Training (GIT or MIT) User's Guide, the Geoscience for Society (G4S) booklet.

The Qualified Person (QP) Short Course was designed in conjunction with provincial Securities commissions and is geared for 3rd / 4th year Geoscience students and recent graduates contemplating a career in the mineral or oil industry where reporting to standards such as National Instrument 43-101 and 51-101 are required. The one day was delivered by BC Director Garth Kirkham, P.Geo as a test in the fall of 2016 in BC. It was well attended and well received. APGNS is now planning to deliver the course in the near future. Parts of the course may also be presented to members as part of the Continuing Professional Development (CPD) program.

Early in 2016 the Board approved the National Guideline for Geoscientist-in-Training Programs. This guide is directed to the Constituent Associations of GC for use in developing their programs. It was decided that this information was also needed at the recent graduate / registrant level and so a User's guide is being developed. The first draft was presented to the Board in January and has been submitted to a test group. The current format is for print but other multimedia formats are being considered as budget and need allows. This is an ad-hoc committee of the Board that I chair.

Several international geoscience organizations have developed information pamphlets around the theme of Geoscience for Society (for example, UK - http://www.geolsoc.org.uk/geology-for-society ; Norway http://www.ngu.no/upload/Publikasjoner/Special%20publication/SP11_LO.pdf; USA https://www.americangeosciences.org/sites/default/files/AGI_GeoscienceForAmericasCriticalNeeds_102315_WebRes.pdf). In October 2016, GC and the Canadian Federation of Earth Sciences jointly embarked on Geoscience For Society information project and the outline has been developed.

The many other topics of discussion at the recent Board meeting included 2017 activity planning, expand and restructure the awards committee, and the Terms of Reference for the Canadian Geoscience Standards Council (formerly CGS Board).

This is my third year serving as your Director and I look forward to at least another year – at the discretion of APGNS Council of course. If there are any issues you feel should have national focus please bring them forward through our Association office.

Canadian Geoscience Standards Committee Report

Cliff Stanley, Ph.D, P.Geo, CGSC Representative

On Oct. 15, 2016, Cliff Stanley attended the regular fall meeting of the Canadian Geoscience Standards Committee in Toronto, Ontario. The following report describes the three important actions taken by the committee during that meeting. Discussions around these actions comprised approximately 85 % of the one-day meeting.

1- Admission Support Tools Project Proposal, **Phase 2** – This $660K proposal, originally submitted to the government (Economic & Social Development Canada - ESDC) before the last election, involved a 3-phase project to: 1) map the recently completed competency profile to the GKE; 2) develop competency-based tools and indicators by which to assess candidates against the competency profile; and 3) develop an on-line self assessment tool for prospective applicants. After much delay, due to the installment of a new government, ESDC has recently indicated that they are now willing to support a project involving components 2 and 3, above. They indicated that they are not willing to support 'mapping of the competency profile onto the GKE' (mapping), as they view anything to do with the GKE as "a backward move".

This government view is errant, given that even if a competency-based admissions process is implemented for geoscience professionals, admission of MIT's to the constituency associations (CA's) would still have to be undertaken using the knowledge component of the GKE. Furthermore, given the projected high cost of competency-based assessment (in both time and man-power), assessment using the GKE may remain the principle avenue for candidate assessment by the APGNS in the future, even if other, larger CA's adopt a competency-based approach.

As a result, because the GKE will remain an important component of admissions assessment in the future, the CGSC recognizes the critical importance of the GKE to the admissions process, and thus intends to re-configure the original proposal to ensure that this 'mapping' component is undertaken. The new proposal will consist of two parts, component 3 above, and a part consisting of the combination of components 1 and 2. This later part will be re-jigged to include what 'mapping' government can tolerate without jeopardizing the proposal success.

The CGSC will complement what 'mapping' can be undertaken in this new project by undertaking the balance of the mapping exercise in-house during regular CGSC meetings, using the expertise available within the CGSC. Consequently, a committee of three (academic) CGSC representatives (Cliff Stanley – APGNS, Kevin Andsell – APEGS, and Deborah Spratt – APEGA) has been formed to initiate, before the next meeting of the CGSC in March, 2017, a first-pass mapping of the competency profile onto the CGSC. This will serve as a starting point for the CGSC to modify and consolidate so that a mutually acceptable mapping of the competency profile to the GKE can be achieved.

The above activities will result in a new Admissions Support Tools Proposal that will be satisfactory to thegovernment while achieving the three original goals of the project. This revised proposal will be submitted to ESDC in the spring of 2017.

2- CGSC Terms of Reference – The CGSC received a draft of the proposed terms of reference for the Canadian Geoscience Standards Board approved by the CEO Group of Geoscience Canada.

The CGSC passed two significant recommendation motions that

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Canadian Geoscience Standards Committee Report

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will be passed onto the Geoscience Canada Board of Directors. First, they STRONGLY recommended that the name of the CGSC not be changed to the Canadian Geoscience Admissions Advisory Committee (CGAAC), for reasons of continuity, function, and branding. The CGSC found the reason for this change (a 'board' cannot answer to a 'board'*) to be specious and puerile, particularly given the fact that analogous name changes are not being proposed for the Accreditation Board on the corresponding side.

** Note: at the January 2017 meeting of the Geoscientists Canada Board of Directors, the renaming of the CGSB to the Canadian Geoscience Standards Committee, CGSC, was approved.*

Second, they recommended that the terms of office for the chair and vice-chair of the committee be four years (not two).

Submitted Photo: West Bay, Cape Breton, (Robert Young, RPF.)

Although none of the other CGSC representatives had any issues with the balance of these draft terms of reference, the APGNS representative did. As a result, after a brief discussion, it was decided that instead of voting (and rejecting) our objections and recommendations, they would be included as an appendix to the two CGSC Terms of Reference motions, all of which would be forwarded to the Geoscience Canada Board of Directors. This approach is favourable to the APGNS, as our Geoscience Canada Director can now speak to these objections and recommendations in front of the Board of Directors, instead of our objections and recommendations otherwise not reaching them. The appendix that will be passed on to the Geoscientists Canada Board of Directors is attached, below.

3- Election of a New Chair for the CGSC – The 2-year term of office for the Chair of the CGSC expired at this meeting, so nominations and a vote for the new chair was undertaken. Dr. Bruce Broster, the incumbent for the last 6 years, was the only nomination, and he was thus voted in as the CGSC Chair for another 2-year term (unless new Terms of Reference approved by the Geoscientists Canada Board of Directors change the term length and/or renewal numbers, and are deemed retroactive).

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APGNS relies on the skills and expertise, but mostly the dedication and pride of our Members and Members-in-Training. There are many opportunities to get involved with the Association. Members contribute their time, talent, and energy to APGNS each year. They are our lifeblood of the Association and provide a critical service.

Would you like to join those who are making significant contributions to APGNS by serving on a Committee, Board, or Executive, or by becoming a Mentor?

Email questions, comments, nominations, suggestions, etc. to exec.director@geoscientistsns.ca or call 902-420-9928 or contact a Committee Chair or a member of Council.

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If you are interested serving on any of these committees, please contact the Chair or any member of Council or the Executive Director (exec.director@geoscientistsns.ca; 902-420-9928).

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Members are welcome and encouraged to submit editorials, letters to the editor and articles of interest, including photographs, for publication.

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Submittals shall be of interest to the members of APGNS, and others interested in earth science. Articles and editorials may be noted as follows at the discretion of the editor:

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