GEOGAZETTE

MARCH 2021: VOLUME 10, ISSUE 1

GEOSCIENTISTS NOVA SCOTIA

In this Issue

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Geoscientists of Nova Scotia:
We are committed to holding paramount the health, safety and welfare of the public and the protection of the environment while contributing significantly to the economy of Nova Scotia.

This page is dedicated to the Professional Geoscientists that committed to working tirelessly throughout 2020. No one imagined the impacts the pandemic would have on our lives and work force.

We want to say thank-you for your continued commitment to your profession and staying safe throughout these challenging times.

EDITOR'S LETTER

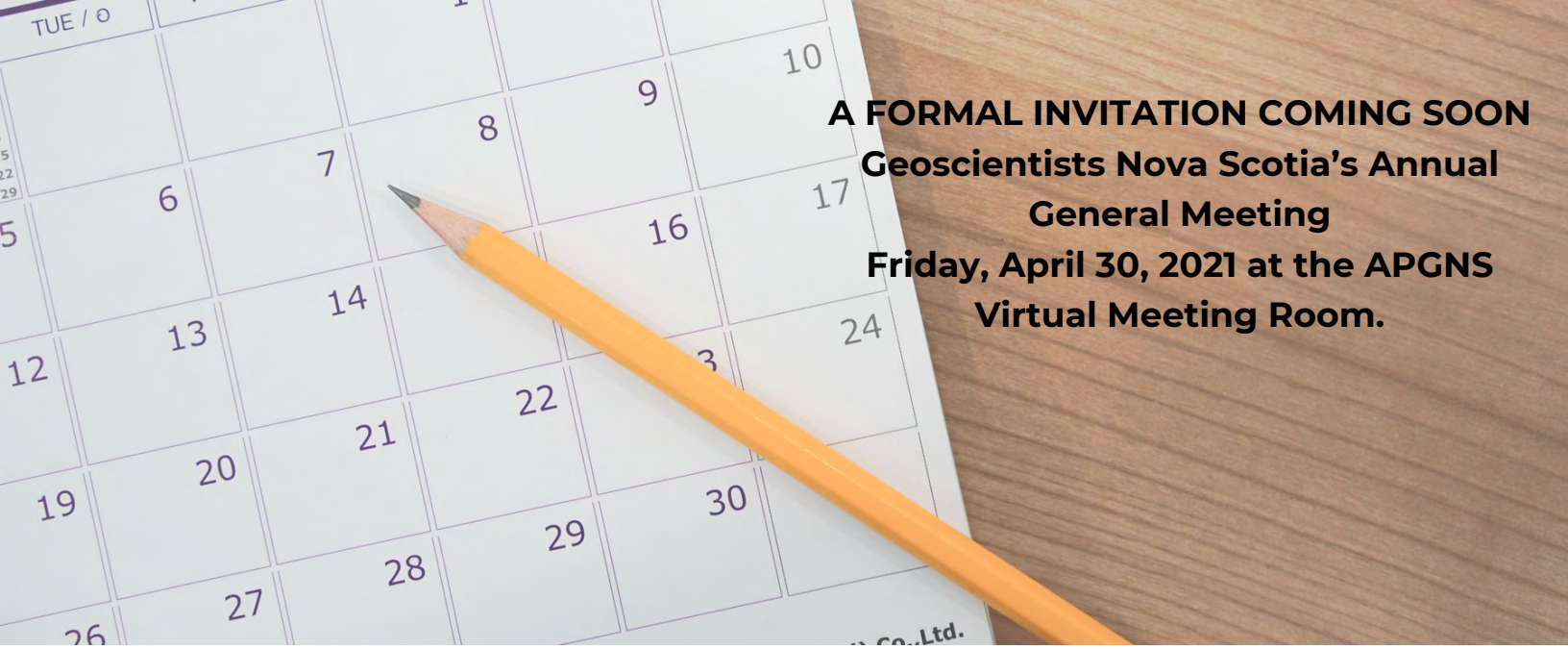
How do we share news?
A news article discusses current or recent news of either general interest (i.e. daily newspapers) or of a specific topic (i.e. political or trade news magazines, club newsletters, or technology news websites).

The GeoGazette is Geoscientists' Nova Scotia newsletter and in 2021 we are striving to re-vamp the newsletter to get our readers attention. We are committed to bringing you news of the association, the profession, the community we support and the general feel good stories along the way.

We are pleased to provide this issue of the GeoGazette. Please feel free to reach out to us with suggestions, articles and great photos to share in the next issue at **fgallacher@dillon.ca**.

So, go grab a cup of coffee and have a lovely read.

Thanks, Fiona Gallacher.
(and Kelsey O'Brien)



PRESIDENT'S DESK

We are all aware of the restrictions that are in place due to the COVID-19 pandemic and the provincial state of emergency as well as the social distancing requirements. I expect that we are all becoming more and more familiar with virtual meetings on various formats. Therefore, it should be no surprise that APGNS is in the planning phase to host the Annual General Meeting event using a virtual software platform (GoToMeeting).The exercise went well in 2020 and was well received by our members and guests. We are planning to host a virtual AGM in 2021, with the hope to return to our normal format in 2022.

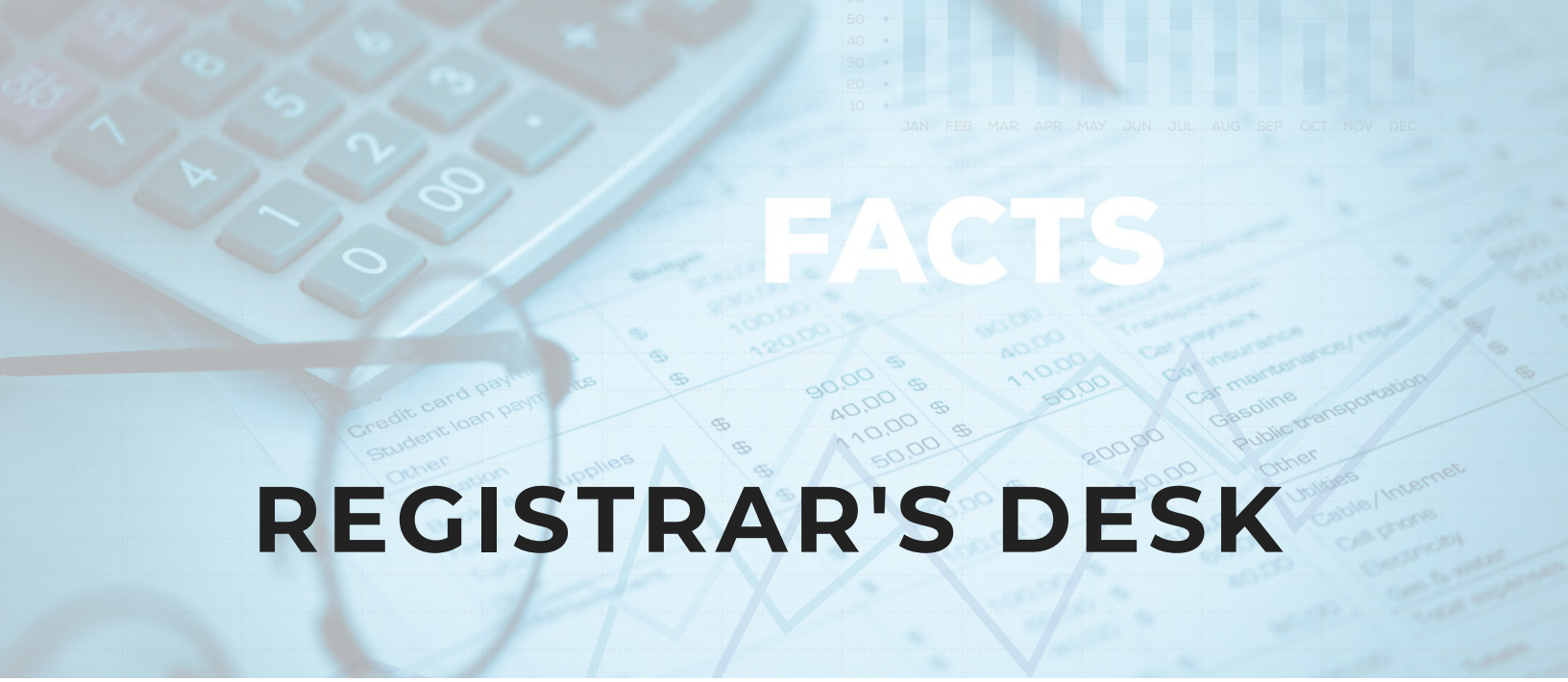
On behalf of the Association Executive and Council, I wish to extend an invitation to attend the Geoscientists Nova Scotia, Annual General Meeting, on Friday, April 30, 2021.

Based on your RSVP to the notice, we will send out a formal invitation with meeting connection details.

The 2020 Annual Report and the 2021 AGM Program will include executive and committee reports and the 2020 year end financial information. The Nominations Committee report for the 2021-2022 APGNS Council and Executive will also be introduced at the meeting. The 2020 Professional Geoscientist and the 2021 Exemplary Service awards will be presented as well as the 2020 and 2021 Fellow of Geoscientists Canada awards. We are also planning to present a "brown bag" lunch guest speaker and possibly a Continuing Professional Development session.

We look forward to seeing you at this event.

Kimberlea Green, P.Geo.
APGNS President



FACTS

REGISTRAR'S DESK

In trying to make sense of the impact that the COVID-19 pandemic and the response it had on professional registration numbers, the table below presents the current registration data along with comparatives from 2020 and 2019.

Although there has been no real change in P.Geo. member numbers since last year, they are up slightly from the year before. Personal contacts indicate that in 2021 some members have retired and left the profession or moved on to other jurisdictions, but it is also apparent that some members have either come back home or are newly arrived.

The total number of registrants in 2021 is up approximately 4% over 2020 and 10% over 2019. This is primarily in response to an increase in MIT registrants and applicants, which is encouraging for the future of the Association. However, the reality is that many applicants register in Nova Scotia because they have attended university here, and once registered, they move on to a work-related destination. There is still a challenge in creating professional jobs in Nova Scotia.

APGNS Membership (Registrants)	2021 Registrants	2020 Registrants	2019 Registrants
P.Geo. Members (146 male & 43 female) (including life and retired Members as well as pending application files)	194	195	178
License to Practice (16 male & 4 female) (non-resident in Nova Scotia)	20	23	14
MIT (24 male & 5 female) (including pending application files)	29	19	18
Certificate of Authorization (24 sole practitioners & 25 corporate) (1 pending)	50	44	50
Total Registrants	292	281	260

2021 EARTH RING CEREMONY

THE RITUAL OF THE CALLING

The 2021 Earth Ring Ceremony (the Ritual of the Calling) will be held Friday, April 9, 2021 as a virtual event. The ceremony will commence promptly at 6:00 pm and late arrivals will not be admitted to the ceremony.

Administered by the Covenant of the Earth Ring Society, recent Earth Science graduates and practicing Nova Scotia Geoscientists wishing to become obligated and receive a ring are welcome to request a ring. The ring is to be worn on the smallest (pinkie) finger of your working hand.

All Geoscientists who have received an Earth Ring are welcome to attend the 2021 Ceremony 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 David C. Carter, P.Geo., registrar@geoscientistsns.ca if you plan to attend. Observers are not permitted to attend the ceremony.

A Brief History of the EARTH RING CEREMONY …

Earth Science graduates and practicing Nova Scotia Geoscientists wishing to become "obligated" to the geoscience profession may receive an Earth Ring.

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 take during the ceremony.

The only way to receive an Earth Ring is to participate in the ceremony and affirm the professional oath, therefore, you must attend and participate in the ceremony to receive your Earth Ring. Observers are not permitted to attend the ceremony, but guests are welcome at the reception.

The tradition of the Earth Ring Ceremony began in Alberta in 1975 and the tradition has since been adopted across Canada. In Nova Scotia, the Earth Ring Ceremony, administered by the Covenant of the Earth Ring Society, with support from Geoscientists Nova Scotia, has been conducted annually since 2001. Like the historic iron ring of the obligated Engineer, its simplicity, and strength bear witness of the attitude which the professional Earth Scientist should maintain.

2021 EARTH RING CEREMONY

CONTINUED

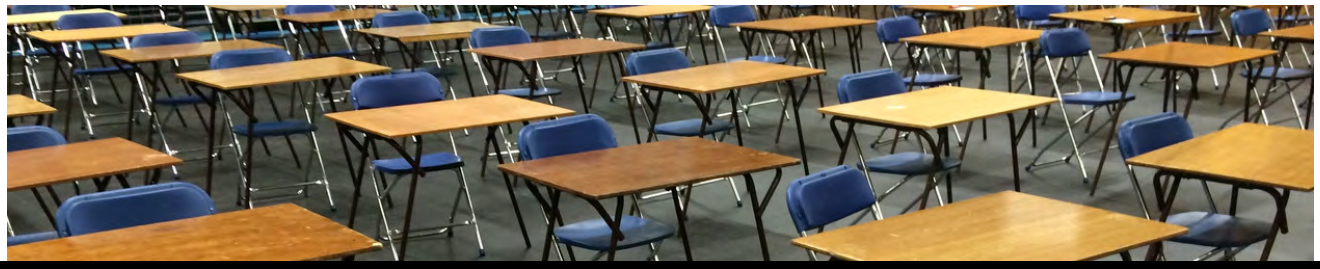
The Earth Ring for the obligated Geoscientist is worn on the smallest (pinkie) finger of the working hand to serve as a reminder to those who wear it of the values at the core of the profession and of the trust placed in them by society.

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 available in sterling silver or titanium.

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. The ceremony carries many of the same passages written by Kipling for the Engineers' Iron Ring Ceremony and symbolizes the commitment and responsibility that come with wearing the title of a professional.

The ceremony includes a charge (speech) from a senior Earth scientist and an obligation (pledge) taken by the group of soon to graduate geologists and geophysicists. The charge reads in part: "We tell you here that you will encounter no difficulty, doubt, danger, defeat, humiliation or triumph in your career which has not already fallen to the lot of others in your calling." The obligation includes: "I will not pass, ... false information or too casual interpretations in my work as an Earth scientist. My time I will not refuse, my thought I will not grudge; my care I will not deny towards the honour, use, stability and perfection of any project to which I may be called to set my hand. ... My reputation in my calling I will guard honourably .... I will strive my uttermost against professional jealousy and the belittling of my co-workers in any field of their labour."

On a lighter note, following the obligation, new ring bearers are reminded that, "From now on, we surrender to you what lies under the earth, and the tools to interpret or misinterpret. Sooner or later, you will drill the holes that bring no return, lose the vein in which lie extra riches and reputation, misinterpret the signal from the depths. This will equally baffle, bewilder and break your heart to your professional and personal education."



HAVE YOUR SAY IN THE NATIONAL PROFESSIONAL PRACTISE EXAMINATION

By Robert Stewart. P.Geo.
stewartrd@msn.com

At least every 5 years, the National Professional Practice Examination (NPPE) blueprint (or syllabus as it was previously known) is refined to reflect the current critical information needed for engineers and geoscientists at entry to professional practice. The content and weighting of this subject matter was last prepared by the Professional Practice Examination Committee (PPEC) and approved by the NPPE Advisory Committee (NPPEAC) in 2017. The next review of the blueprint will be undertaken in 2022 and this time the blueprint refinement process will include a broader canvassing of the engineering and geoscience communities for collective and individual input. This is our opportunity to have a say in the refinement of the NPPE blueprint.

The NPPE has been built, maintained, refined and administered by the Association of Professional Engineers and Geoscientists of Alberta (APEGA) for over 20 years. In 2008-2009, APEGA's partner associations' examination registrants only represented about 30% of the 5,000 applicants but by 2018, APEGA applicants accounted for only half of the total registered to write the exam. In 2020, APEGA's partner association's members represented 86% of the 8,288 NPPE registrants. This was largely due to Professional Engineers Ontario (PEO) adopting the NPPE. The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) have indicated that they may adopt the NPPE in 2021. This would leave only Quebec's engineering (OIQ) and geoscientist (OGQ) associations using their own professional practice exams.

The core NPPE exam is still one hundred multiple choice questions with only one justifiably correct answer and three distractors for each question. These questions must be non-technical, professional practice questions rooted in the blueprint. Questions must be fair for both engineers and geoscientists and must be written using a Grade 11-12 language level so that it is fair for applicants whose first language is not English or French. It is challenging to ensure questions in the operational database are fair and cover the entire blueprint content. Eight professionals are the 'gate-keepers' for ensuring all NPPE questions meet these requirements. At present the examination committee is composed of two geoscientists, five engineers and one professional technician.

Changes in legislation, as well as workplace and cultural changes require that new blueprint content be added in a timely manner. Professional practice expectations required through corporate social responsibility and community consultation are now a frontline responsibility for young professionals that was not well addressed in previous blueprints. International law (United Nations Declaration on the Rights of Indigenous Persons / Bill C-15, carbon-neutrality, sustainability), trade agreements (USMCA/former NAFTA, US-Canada agreements on Critical Minerals and Energy Resource Governance), and recent environmental laws, like the 2019 Impact Assessment Act, are examples of the changing legal landscape that will affect engineering and geoscience project timelines for future generations.

HAVE YOUR SAY IN THE NATIONAL PROFESSIONAL PRACTISE EXAMINATION

CONTINUED

Three professional practice and law textbooks' authors have major revisions underway to reflect the rapidly changing professional conditions for engineering and geoscience practice.

A licencing applicant to a Canadian engineering and/or geoscience professional association in most cases has to have successfully completed an approved professional practice exam prior to the association issuing a registration or a license to practice. In recent years there has been a post-examination questionnaire available for the applicants to provide feedback on the examination experience.This feedback shows strong support for the current examination content and its delivery.

Therefore, I appeal to Nova Scotia's geoscientist community to participate in the NPPE blueprint revision process to ensure that it is relevant for the next generations of geoscientists. This year is your opportunity to have your say in this next refinement of the NPPE blueprint. You can find the current blueprint on the APEGA website. ***https://www.apega.ca/apply/membership/exams/national-professional-practice-exam-nppe/blueprint.***

Your comments and suggestions for the revised blueprint can be sent directly sent to: Robert Stewart P.Geo. (**stewartrd@msn.com**) or David Carter, P.Geo. (**registrar@geoscientistsns.ca**).

NOVA SCOTIA DRILL CORE LIBRARY

A HIDDEN MINE WAITING TO BE FOUND

By Mick O'Neill, P.Geo., Geologist supervisor, Drill Core Library, Department of Energry and Mines

Most readers know about the Nova Scotia Department of Energy and Mines (NSDEM) Drill Core Library in Stellarton. Many of you have are regular clients and realize that it is a valuable resource for the geology community of Nova Scotia. What you may not realize is how large the holdings are compared to other drill core repositories across North America. I took part in a webinar series last summer, where the majority of the U.S. State repositories and three Canadian ones took part and discovered that the Nova Scotia Drill Core Library is in the top 10% for the size of our core holdings (over 750,000 m of core). With so much core, perhaps a new mine is just out of sight among the core boxes.

The first three of the six buildings were built in 1982, with additional buildings were constructed in 1986, 1994, and 2014. Four of the buildings are for storage only, while two buildings have a lab for clients to use to look at material stored here. Both labs are heated, spacious, and a great place to work when the weather is disagreeable. The Core Library has free Wi-Fi and a cell phone booster that covers both labs. Diamond cutting saws are in each lab in separate rooms from the viewing areas and there are binocular microscopes, magnetic susceptibility meters, ultraviolet lamps, and other equipment on site. The site has a large, paved yard for laying out core in warmer months. There is a full-time staff member available to help clients and there is no cost for clients to use the facilities.

The core stored covers all of Nova Scotia and dates from 1950 to now. A total of 96% of the 750,000 m of drill core stored at the Core Library is searchable online (over 7,800 holes) at **https://gesner.novascotia.ca/dcdh/core_querysearch/corequerysearch.aspx**.

There are over 170,000 boxes of core on 5,500 pallets. With over 750 km of core, it is more than the length of Nova Scotia. The majority of the holes were drilled for mineral exploration, with exception of some drilled for onshore oil and gas exploration. The core is stored on pallets and brought to the lab by forklift when requested. Sampling of core is usually allowed but must be discussed with the Core Library Supervisor beforehand.

NOVA SCOTIA DRILL CORE LIBRARY

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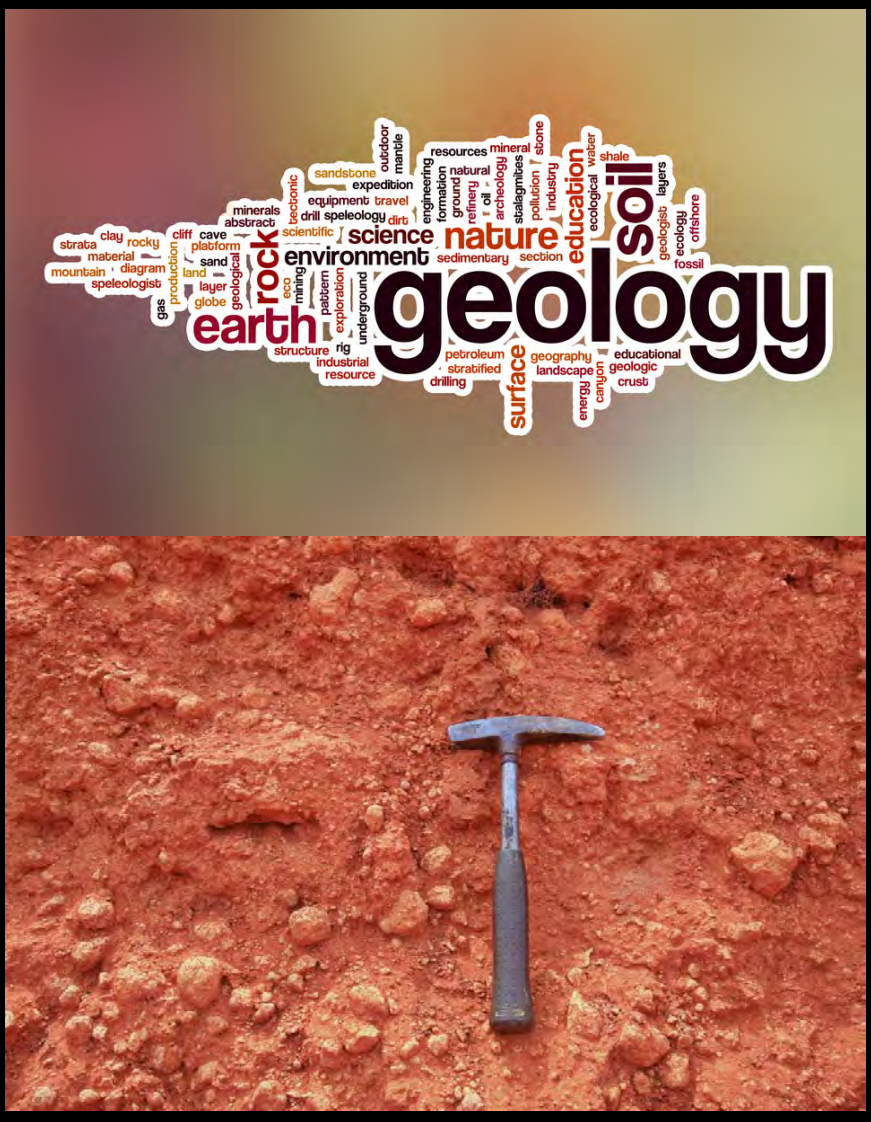


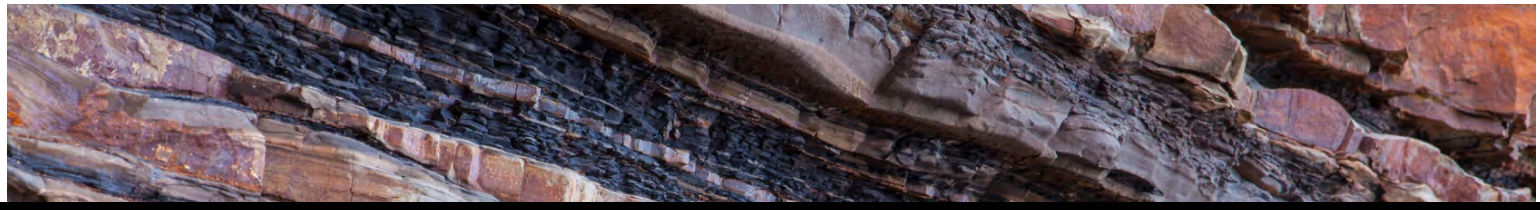
There are also over 300 pallets and apple bins of non-core material (rock, till, and soil samples, etc.) stored at the Drill Core Library. Thousands of rock slabs, geochemical sample vials, and offshore oil and gas cuttings are also available in custom-built storage cabinets. All material at the Drill Core Library is stored inside the six buildings, to prevent damage from exposure to the elements, which brings me to an important topic.

As the Core Library Supervisor, I travel the province to evaluate core in the field, to determine whether core offered to the government is worth adding to our holdings. Core that is considered in poor condition (weather exposure) is not recoverable (rotting boxes, tags gone, etc.). The Nova Scotia Mineral Resources Regulations does stipulate that the core holder must take precautions to secure the core against weather and vandalism.

People drilling in the province must also request permission before removing core from the province and must get permission from the Registrar of Mineral and Petroleum Titles before discarding or destroying core.

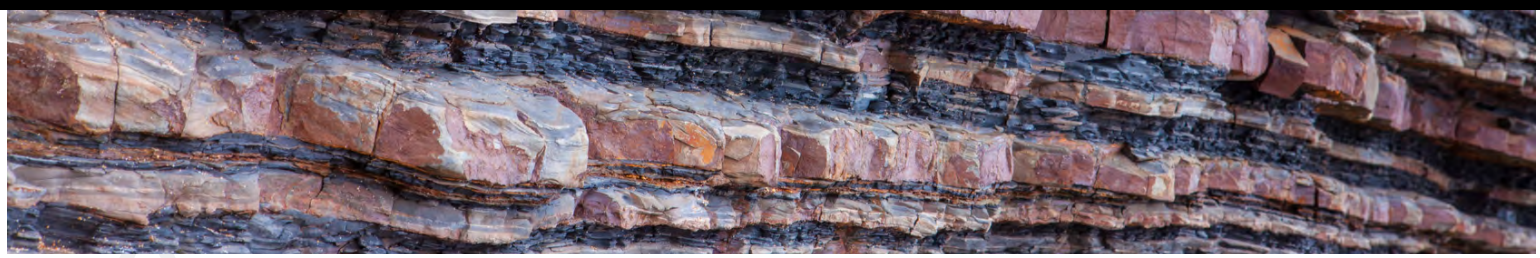
To look at any material stored at the NSDEM Drill Core Library, please send an e-mail to **mick.oneill@novascotia.ca**, or call 1-902-742-4842 to book an appointment.

NOVA SCOTIA DRILL CORE LIBRARY IS IN THE TOP 10% FOR THE SIZE OF OUR CORE HOLDINGS (OVER 750,000M OF CORE).



INTERPRETATION, EXPLANATION AND SELECTED EXAMPLES OF "PROFESSIONAL GEOSCIENCE"

By David C. Carter, P.Geo., FGC
Executive Director and Registrar



Geoscience in Nova Scotia is regulated under the Geoscience Profession Act of 2002. The Act is currently being revised and it is expected to be included in the 2021 Legislative agenda. The revised Act does not include any substantive changes to the regulation of the profession. It is intended to bring the Act into compliance with current federal and provincial legislation.

The prime objective of the Act is the protection of the public from incompetent and/or unethical practice. The Act grants self-governance to professional geoscientists because it has been deemed to be in the public interest to do so. The Act does not distinguish between geoscience practice as a consultant or individual or geoscience practice by or through a corporate entity. It applies to all professional geoscience practice.

Professional geoscientists are accountable for their own professional practice, and for the practice of professionals under their supervision. In addition to adherence and preservation to the terms and standards of the Code of Ethics, registrants, (professional members, members-in-training and license holders) are responsible for ensuring that they, and those under their supervision or control, have and maintain appropriate levels of competency.

The Geoscience Profession Act defines a geoscientist and geoscience as:

"a person who through specialized education, training and experience is skilled in the principles and practice of geoscience."

"performing of any activity that requires the application of the principles of the geological sciences, and that concerns the safeguarding of public welfare, life, health, property or economic interests, including, but not limited to,

- investigations, interpretations, evaluations, consultations or management aimed at the discovery or development of metallic or non-metallic minerals, rocks, nuclear or fossil fuels, precious stones or water resources; or
- investigations, interpretations, evaluations, consultations or management relating to geoscientific properties, conditions or processes that may affect the well-being of the general public, including those pertaining to the preservation of the natural environment; or
- geoscience education, instruction and teaching geoscience to a student at an educational institution or university.

The Geoscience Profession Act defines the practice of professional geoscience as: "performing any act within or involving geoscience for gain, hire or hope of reward, either directly or indirectly."

INTERPRETATION, EXPLANATION AND SELECTED EXAMPLES OF "PROFESSIONAL GEOSCIENCE"

CONTINUED

There are three “elements” to the definition of “professional geoscience”.

- an activity: it is important to note that the definition does not refer to the location where the geoscience work is undertaken;
- the use of specialized knowledge, experience, understanding and application of the principles of geoscience; and
- safeguarding of the public, property and the environment.

APGNS considers professional geoscience activities whose undertaking requires the application of the principles of geoscience to include, but not to be limited to:

- advising, planning, designing, collecting, sampling, mapping, logging, surveying, acquiring, examining, investigating, interpreting, processing, analyzing, reporting, evaluating, opining, consulting, certifying, directing, supervising, administering and/or managing; or
- these activities may involve the exploration, discovery, development or production of metallic or non-metallic, minerals, rocks, nuclear or fossil fuels, precious stones and/or water resources; or
- relating to geoscientific properties, and conditions or processes that may affect the well-being of the public, including those pertaining to preservation of the natural environment such as, but not limited to, assessing potential impacts of activities and developments on groundwater and other natural systems, and investigating, evaluating, remediating groundwater, soil, surficial or overburden sediment and bedrock conditions.

The activities involving the application of the principals of geoscience, such as those listed above, may also be carried out by a person who is training to be a geoscientist and who is registered with APGNS as a Member-in-Training (MIT) and who is under the direct supervision of a professional geoscientist, where the professional geoscientist is taking full responsibility for the work as if it were his or her own work.

Prospectors, defined as individuals acquiring mineral rights or performing work necessary to maintain such rights under the Nova Scotia Mineral Resources Act, are exempted, provided that the individual is engaged in activities that are confined to prospecting and the individual does not hold himself or herself out as a professional geoscientist.

Some of the activities listed may be carried out as the work of a professional engineer, who is competent and must be licensed under the Engineering Profession Act. Mutual exemptions for geoscience and engineering activities are considered in the respective Acts.

Additionally, some of the activities may be carried out as part of the work of a technician or technologist trained in aspects of geoscience and is supervised by a professional geoscientist or a professional engineer.

Geoscience is the study of the Earth and its systems and the practice of geoscience encompasses the use, understanding and application of the principles involved in the study of the Earth and its systems. These include, but are not limited to, such activities as are listed in the section above.

INTERPRETATION, EXPLANATION AND SELECTED EXAMPLES OF "PROFESSIONAL GEOSCIENCE"

CONTINUED

The specialized education, training and experience required in the practice of geoscience are reflected and specified in the Geoscience Profession Act and the by-laws of the Association as well as guidelines established by Geoscientists Canada and the Canadian Geoscience Standards Council.

Because the work of a geoscientist involves activities that generate information which others use, and upon which decisions are made by others that may affect life, property and the natural environment, APGNS interprets all geoscience activities to require "the safeguarding of public welfare, life, health, property or economic interests".

Examples of activities undertaken by professional geoscientists who require licensure to carry out include, but are not limited to:

- geological surveys; geochemical surveys; geophysical surveys; geomorphological surveys
- petrographic and mineralogical studies
- mineral exploration, assessment, feasibility and development studies (metallic or non-metallic, minerals, rocks, nuclear or fossil fuels, precious stones and/or water resources)
- mineral or fossil fuel, oil and gas exploration, assessment, feasibility and development
- limestone, coal, gypsum, salt, potash (i.e. industrial minerals) exploration and development
- mineral or petroleum property evaluation
- resource and reserve estimation and technical reporting (the work of a Qualified Person (QP) as defined by the Canadian Securities Commission, National Instrument NI 43-101 and/or NI 51-101 and companion technical documents)
- mineral and/or petroleum exploration assessment reporting as required by the NS Department of Energy and Mines, Geoscience and Mines Branch and Mineral Resources Act
- groundwater exploration, evaluation, development, protection, studies
- surface mapping and sampling; underground mapping and sampling
- geoscientific interpretation and modeling (2-D and 3-D)
- remote sensing interpretation; terrain and terrain stability analysis
- seismic and volcanism analysis
- environmental investigations, phased environmental site assessments and environmental impact assessments (the work of a Qualified Person (QP), as required by Nova Scotia Environment, Contaminated Sites Regulations)
- remedial action planning, site remediation
- monitoring, compliance, closure, reclamation and restoration
- coastal zone management evaluations and recommendations (the work of a Designated Professional (DP), reporting under the regulatory requirements of the Nova Scotia Environment, Coastal Zone Protection Act)
- expert testimony in a legal proceeding, discovery and/or actual testimony
- teaching of geoscience and supervision of geoscience students, undergraduate or graduate
- academic research in geoscience, that will or may be relied upon by other professionals and/or the public

INTERPRETATION, EXPLANATION AND SELECTED EXAMPLES OF "PROFESSIONAL GEOSCIENCE"

CONTINUED

These activities could be undertaken or carried out by, or for, several, including but not limited to:

- companies, partnerships and/or individuals
- financial institutions and financial advisors
- federal, provincial and/or municipal government agencies
- non-government organizations
- first nations
- educational institutions

The following are examples of job titles that represent to the public, regulators, or other stakeholders, that an individual is offering or providing professional geoscience services:

- Geoscientist; Geologist; Geophysicist; Geochemist; Geomorphologist; Earth Scientist; Hydrogeologist; Environmental Geologist or Environmental Geoscientist
- Vice-President, Director or Manager of Exploration or Projects

The use of these, or any other job titles or position designations, that may suggest to the public that an individual is trained in geoscience and is holding himself or herself out to be a professional geoscientist, is illegal, unless the title applies to an individual who is registered / licensed to practice by the Association of Professional Geoscientists of Nova Scotia under the Geoscience Profession Act.

INVERNESS AND CABOT LINKS

By Sean Kirby, Executive Director, Mining Association of Nova Scotia

Cabot Links, one of the best golf courses in the world, is on a reclaimed coal mine! It's a great example of how former mines/quarries can serve communities in other ways after mining is done.

Bootleg mining had taken place along Inverness' shore for years with people prying it from outcrops to heat their homes and for burning in the forges of local blacksmiths.

In 1863, the first sign of significant coal deposits was found in Inverness, which was called Broad Cove until renamed in 1903. John Beaton (Red) discovered coal on his farm at Big River. He exposed the coal face but Inverness lacked shipping or rail to sell significant quantity of coal beyond the community so little was done with the discovery.

Beaton sold his land to Reverend Hugh Ross who opened a small mine and sold small amounts of coal locally.

Two men named McCully and Blanchard tried organize a company in London, England, to mine the coal in 1866 but failed. Fifty tons were mined in 1867 but activity stalled after that.

It was not until the entrance of two Moncton men, Alexander Wright and J. Harry Ladd, that the first shipments of coal were exported. In 1872 they established a mining operation along the bank of the Big River.

They dammed the river and built lock gates in order to transport the coal by loading it on large scows capable of holding up to 11 tons and floating them to open sea where the coal was then loaded onto vessels anchored in deep water. The coal was sold in Prince Edward Island.This mining operation continued until 1880 when the wharf was destroyed in a major storm. Again, transporting the coal was the key obstacle.

Massachusetts coal merchant Willian Penn Hussey bought the mine in 1888 for $62,500 and formed the Broad Cove Coal Company with capital from Europe, mainly from Switzerland.

Hussey was a colourful figure, to say the least. He was described as a man of "excessive weight," rode around on a white horse wearing a six-gallon hat and wore pistols at his sides.

It is said that Hussey had the cliffs painted black to impress a potential Swiss investor – from a boat, it looked like the cliff was solid coal!

Hussey, clearly a man of big ideas, solved the transportation problem by turning MacIsaac's Pond into a harbour. He brought a dredge with a fleet of scows up from Massachusetts and cut a channel from the sea to the Pond.

INVERNESS AND THE CABOT LINKS

CONTINUED

He built a breakwater, two piers at the mouth and a shipping wharf inside the harbour. He also laid a narrow-gauge railway from the mine to the shipping wharf. (When Canadian Public Works Minister Israel Tarte visited the newly-built harbour, he was reportedly surprised to see such infrastructure built with no government money!)

Inverness was booming with miners and merchants. Streets were laid out in the late 1890s and houses were built to accommodate the growing population.

In 1899, Hussey sold the mine to the Inverness Railway and Coal Company which was run by William MacKenzie and Donald Mann. They were successful railway men, said to have built an average of a mile of railway per day throughout much of Canada – largely at public expense.

They built the Inverness Railway to carry coal and passengers, securing a subsidy of $6400 per mile from the federal government, $4000 per mile from the Nova Scotia government and $2000 per mile from Inverness County.

The pitch to governments was that they would build a railway from Point Tupper to Cheticamp, a distance of 100 miles. However, they stopped once the rail line reached their coal mine in Inverness - about 60 miles only.

They then turned their attention to further developing the mine. A new slope was dug, over 150 miners' houses were built and a new plant was installed. For a dozen years, they produced about 1000 tons of coal per day. In the early 1900s, 14 cars of coal per day were shipped from Inverness to piers at Port Hastings.

Inverness was incorporated in 1904 and the town had a population of 3000 at the time. The mine employed 482 men who earned $1.25 per day. By 1917, 725 men worked in the mine.
The mine continued to operate into the 1960s when it shut down for good.

Since Cabot Links opened, it has served as an economic engine for the town and the region, much like the coal mine did a century earlier – creating jobs, opportunity and investment that have reinvigorated the area. It illustrates how former mines can continue to serve communities after mining is done.

W.P. Hussey, who played such a key role in making the Inverness mine successful, returned to his home in Danvers, Massachusetts, after he left Cape Breton. He died there in 1910 at the age of 63. His last wish was to have his body mummified and placed in a glass case displayed in a standing position on the lawn at his estate. It didn't happen. He was instead buried in Harmony Grove Cemetery. Hussey would not be entirely disappointed though - a statue of him riding his horse marks the site.

NOVAROC UPDATE

Nova Scotia's online mineral rights management system, NovaROC, has been updated. The new HTML5 technology will maintain security and provide better functionality on more devices, and replaces the previous and outdated Adobe Flash technology. The map has also been enhanced with Crown lands and property boundaries.

For more information, contact us at: NovaROC@novascotia.ca or (902) 424-4068.

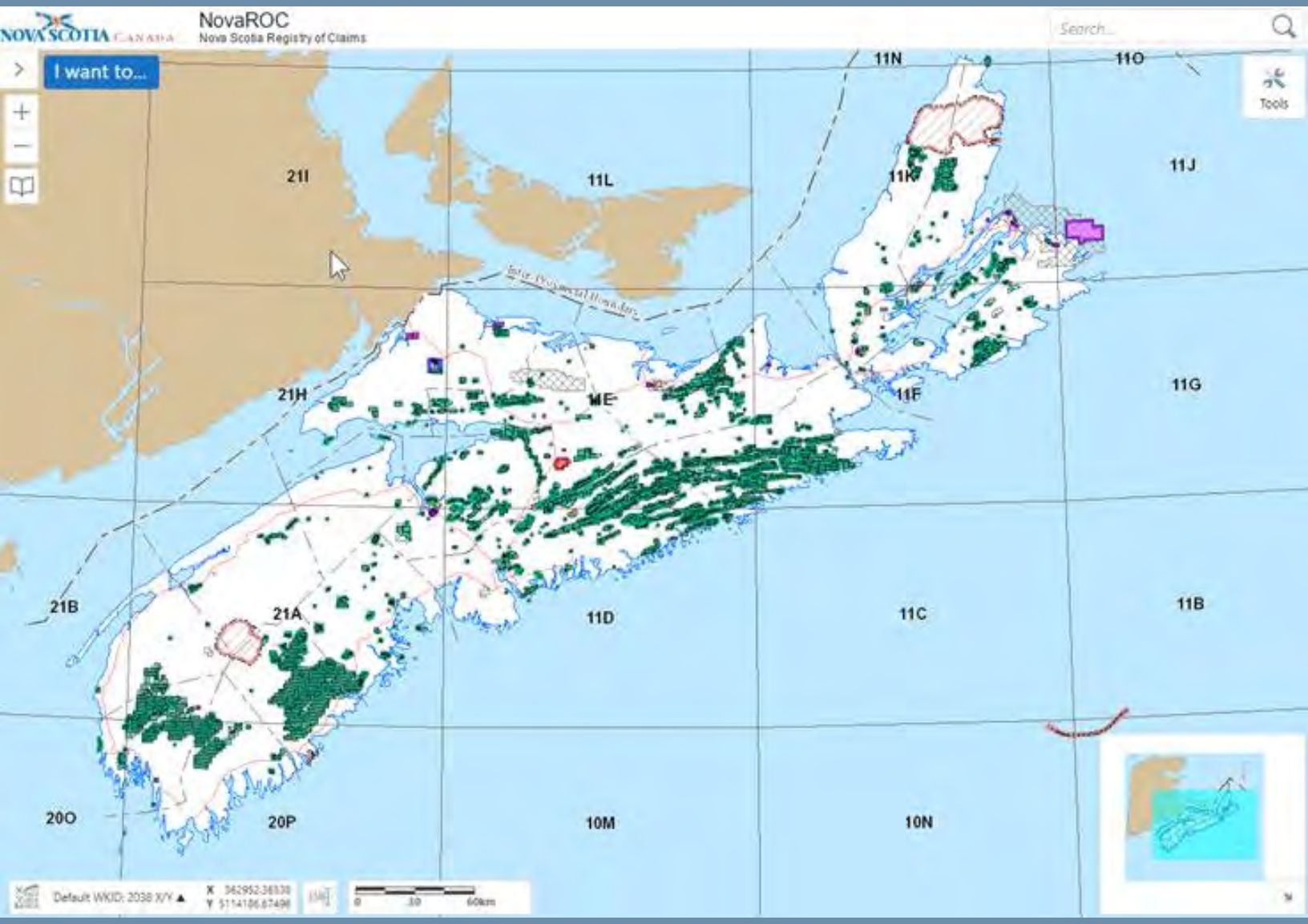


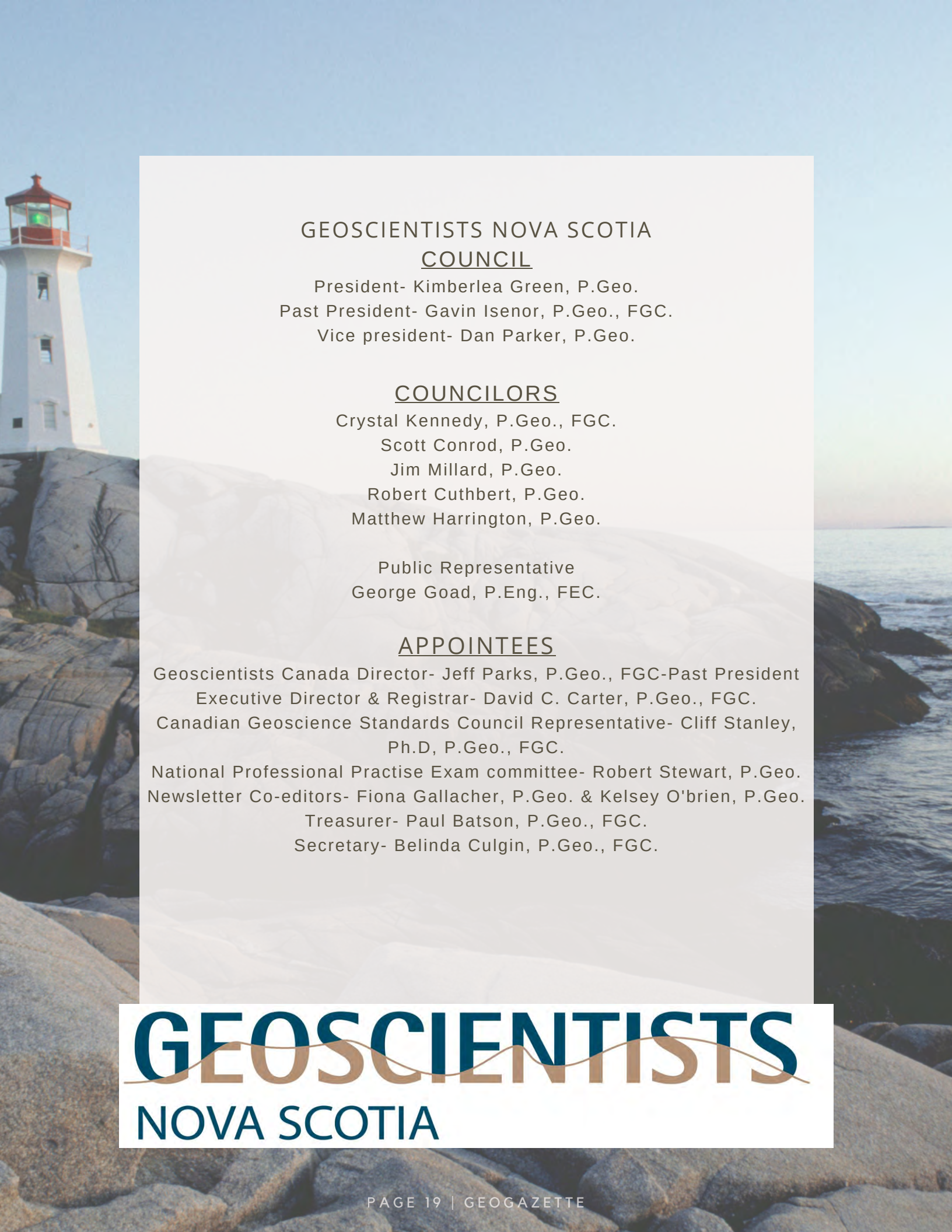
Photo CONTEST

100 Wild Islands (Captured by Noah Booth)
Drone photography

The GeoGazette is having a photo contest:
We want to feature your photos in our next issue.
Rules:
1) The photos should be taken in Nova Scotia
2) The photos can be geology related (outdoors or indoors)
3) A little description to the photo and photographer's name

1st prize: Featured on the Front page
2nd and 3rd prize: Featured within newsletter.
(the rest will be recognized and put in the newsletters throughout the year)

All photos submit to fgallacher@dillon.ca



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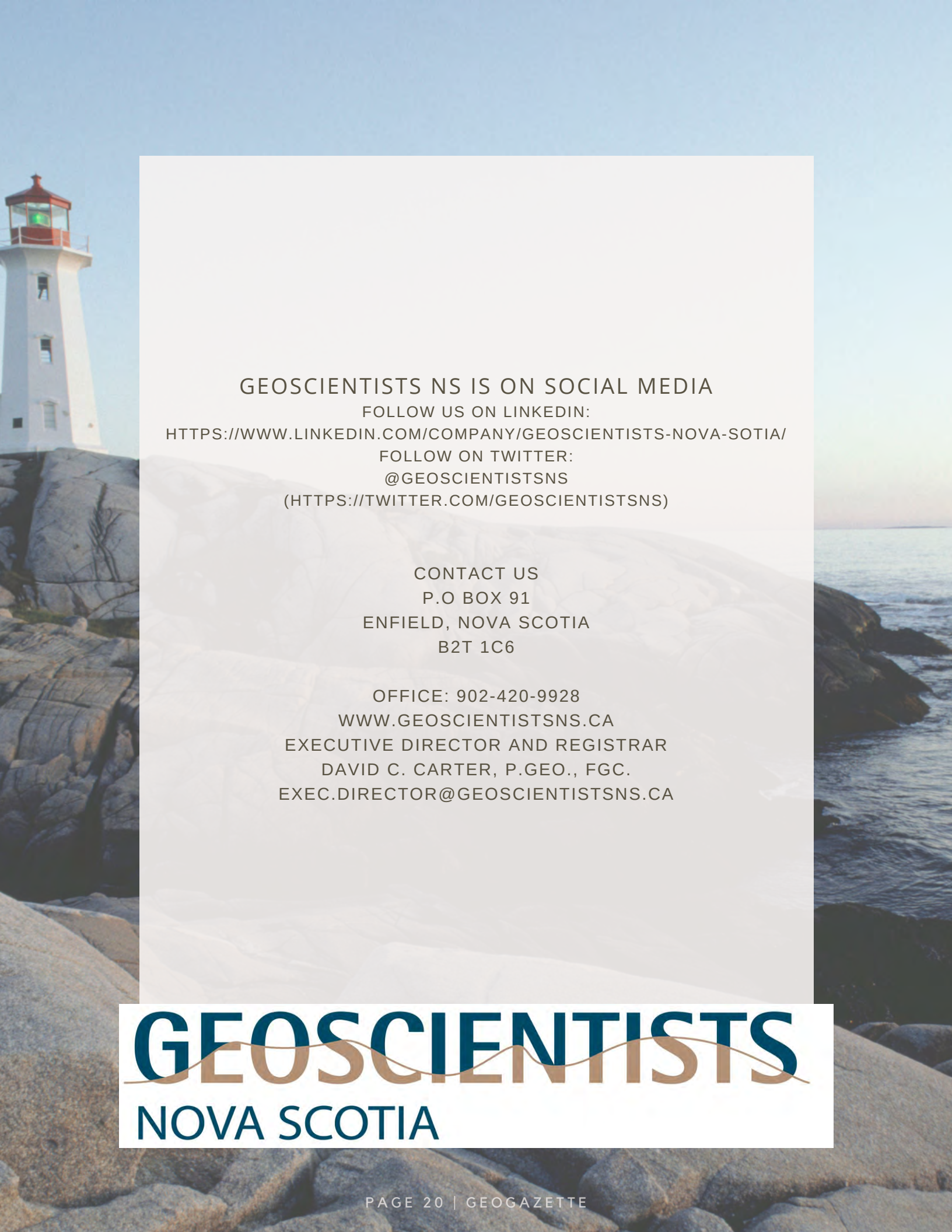

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Newsletter Advertising

Geoscientists Nova Scotia is now accepting newsletter advertising as full, 1/2 or 1/4 page camera ready inserts. All submitted advertising is subject to approval as per the AGNS Communications Policy.

For more information, or to submit camera ready layout material please contact David Carter, P.Geo., FGC - exec.director@geoscientistsns.ca

Location / Layout	Standard non-member rate per issue*	Standard member rate per issue*
Full Page	$600.00	$550.00
1/2 page	$400.00	$350.00
1/4 page	$250.00	$200.00

* full year subscriptions will receive a 10% discount

The ***GeoGazette*** is a quarterly publication of Geoscientists Nova Scotia.

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

Opinions and views independently expressed in this publication do not necessarily reflect those of Geoscientists Nova Scotia, the Council, Boards, Committees, and/or Staff.

Subscriptions to the ***GeoGazette*** are provided electronically to all registrants (members, licensees and members-in training, and student members) in good standing, and are included in the annual registration fees.

The ***GeoGazette*** will be distributed electronically and posted on the Association website (www.geoscientistsns.ca).

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APGNS encourages the submission of articles and editorials for publication in the ***GeoGazette*** on topics related to the science and profession of geoscience.

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:

"The opinions, positions and conclusions presented herein are those of the author and do not necessarily reflect the opinions, positions or conclusions of APGNS."

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