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Milestones, Memories, and Tributes

R. Frank Blackwood 1950-2020

On the 4th of August, 2020, I, together with the geoscience community of Newfoundland and Labrador, learned with shock of the death of Frank Blackwood, long one of our principal champions of geoscience in the Province and indeed the entire country.

I first met Frank in the summer of 1974 when I was engaged in my post-graduate field work in southern New Brunswick and he in a similar endeavor in eastern Newfoundland. I took Frank on a tour of my field area and rapidly came to realize that here was a force of nature with a remarkable ability to challenge established thinking in an articulate and erudite manner.

Our paths crossed again in 1976 when we both joined the Geological Survey of Newfoundland and Labrador at the time when Frank was engaged in extending his M.Sc. thesis work into a broader part of eastern Newfoundland, very close to the area of Bonavista Bay where he had been born and raised. Frank had studied geology at Memorial University of Newfoundland (as it was then) and completed his M.Sc. degree at the same institution, also in 1976. These were halcyon days for geological surveys as new federal-provincial funding agreements led to a surge in growth of government geoscience activities across Canada. As part of this surge, Frank went on to extend his work into southern Newfoundland around the remote communities of Grey River and McCallum. In this, his work contributed greatly to application of the then relatively new principles of plate tectonics to



Frank in his managerial role as Director of the Geological Survey of Newfoundland and Labrador

the development of models for the amalgamation of the Avalon zone, representing part of proto Africa, with the internal zones of the Appalachian orogen.

In 1986 Frank hung up his field boots and became editor of the Newfoundland and Labrador Geological Survey's publications system where he introduced high standards of map and report production, following which he moved into management as head of the Publications and Information section. Here he took on the additional responsibility of overseeing the Survey's efforts to promote the province as an attractive place for mineral exploration. In 1998, Frank took another step up the management ladder to become Director of the Survey. Under his guidance, the Survey continued its expansion to provide a full

GEOLOGICAL ASSOCIATION OF CANADA

The MISSION of the Geological Association of Canada is to facilitate the scientific well-being and professional development of its members, the learned discussion of geoscience in Canada, and the advancement, dissemination and wise use of geoscience in public, professional and academic life. The VISION of the GAC[®] is to be a multidisciplinary scientific society supportive of the entire scope of the geosciences in Canada. The GAC[®] aims to be a geoscience community that is knowledgeable, professionally competent and respected, whose input and advice is relevant, widely sought and utilized, and whose vital contribution to the economic prosperity and social well-being of the nation is widely acknowledged.

La MISSION de l'Association géologique du Canada est d'aider au développement scientifique et professionnel de ses membres, de favoriser les échanges géoscientifiques au Canada ainsi que de promouvoir et de diffuser l'utilisation éclairée des géosciences dans un contexte public, professionnel et académique. La VISION de l'AGC® est de faire connaître une communauté géoscientifique de grand savoir, dont les compétences professionnelles sont respectées, dont les suggestions et les avis sont pertinents, recherchés et utiles, et dont la contribution largement reconnue est considérée comme vitale pour la prospérité économique et le bien-être de la nation.

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GEOLOG (ISSN 0227-3713; 1712-3747) is the quarterly newsmagazine of the Geological Association of Canada, St. John's, Newfoundland and Labrador. *GEOLOG* is published for the benefit of GAC[®] members and its content reflects the diversity of the organization. News items and short articles on topics of potential interest to the membership including public geoscience awareness are encouraged. Also encouraged are communications promoting interaction among academic, industry and government sectors. *GEOLOG* accepts and publishes contributions in both of Canada's official languages. Opinions expressed herein are those of the writers and do not necessarily represent the official positions of the GAC[®]. *GEOLOG* is one of several forums provided by the GAC[®] for scientists worldwide.

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GEOLOG (ISSN 0227-3713; 1712-3747) est le bulletin trimestriel de l'Association Géologique du Canada, à St. Jean, Terre-Neuve-et-Labrador. GEOLOG s'adresse aux members de l'AGC® et son contenu reflète le caractère polyvalent de cette organisation. Nous invitons la soumission de nouvelles et articles courts pouvant intéresser les membres, incluant les thèmes de sensibilisation du public aux sciences de la Terre. Les articles suscitant des échanges d'opinions et d'informations entre les secteurs académique, industriel et ouvernementaux sont également la bienvenue. GEOLOG accepte et publie les articles dans les deux langues officielles du Canada. Les idées sont celles des auteurs et ne représentent pas nécessairement la position officielle de l' AGC®. GEOLOG n'est qu'un des nombreux forums offerts par l' AGC® aux scientifiques à travers le monde.

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Contributions for next issue

Please send items for the next issue of *GEOLOG* by e-mail to Alwynne.Beaudoin@gov.ab.ca on or before **June 1 2021**.

R. F. Blackwood Memorial Award in Geosciences

With the support of the family, a scholarship fund has been established at the Department of Earth Sciences, Memorial University, in recognition of Frank's many contributions. The fund will provide an annual award for a graduate student engaged in field-based geoscience research.

Contributions in memory of Frank can be made online at https://www.mun.ca/give/Donate.php. Select "Other" from the dropdown list located in the "Area of Designation" and enter 'R. F. Blackwood Memorial Award' in the "Designation Information" field. Receipts for tax purposes will be issued.

For more information about the fund and its objectives, please contact Dr. Stephen Piercey at Memorial University (spiercey@mun.ca).

Editor's notes: The tribute to Frank Blackwood was first published in Geoscience Canada 47(4): 223-225, 2020, and is included here with permission of the editor, Andy Kerr.

spectrum of services, including bedrock mapping, terrain science, geophysical and geochemical surveys, all tied together by a robust publication and promotions system that with time became increasingly dominated by digital applications and computerization. It was during the 1980s - early 1990s that the Newfoundland and Labrador Survey established its reputation as one of the most active surveys in Canada and greatly expanded its contribution to the understanding of the evolution of the Canadian landmass and its resource endowment. However, in the latter half of the 1990s, the growing problem of financial deficits began to constrain the ability of both federal and provincial governments to fund geoscience surveys at the previous levels. As a consequence, various financial reviews forced surveys to reduce their activities – a problem that affected the Newfoundland and Labrador Survey as much as any. In dealing with this challenge, Frank proved to be an example of the right man for the time and provided exemplary leadership in dealing with successive crises. In this his strategy was to take advantage of whatever opportunity presented itself to use his formidable powers of oratory and persuasion to promote the value, indeed the necessity, of geoscience surveys to senior bureaucrats and politicians. I was privileged to see Frank in action in this respect when on one occasion he took advantage of the publication of a new geological map of Labrador to get himself in front of the provincial Minister of Natural Resources and his staff, and then proceeded to successfully persuade them of the necessity of maintaining geoscience (including of course the survey budget) in resource dependent provinces such as Newfoundland and Labrador.

In his every-day duties, Frank was a strong and effective manager who could always be relied upon to rise to the challenges of the day. He preferred to manage through his powers of charm and persuasion but ran a tight ship and could clamp down when required. Even then he had the rare managerial gift of being able to administer a rebuke in a positive and encouraging manner that left no rancor behind.

Also in his Director role, Frank was active on the national scene as a member of the Committee of Provincial and Territorial Geologists, which reported to the annual Mines and Energy Ministers conference. This committee undertook as one of its key missions to garner the support of the principal mineral industry



associations of Canada in order to promote the importance of government geoscience to the federal, provincial and territorial ministers. This work was critical in reducing the impact of continued financial pressure through the 1990s and into the 2000s.

Frank had two passions in his professional career. One was, as outlined above, the Geological Survey of Newfoundland and Labrador; the other was the Geological Association of Canada (GAC[®]), a passion that was probably initially inspired by Dr. Ward Neale, Chair of the Department of Earth Sciences at Memorial University during Frank's university days and a passionate advocate for the GAC[®]. Frank became a fellow of GAC® early in his career and went on to become its Secretary-Treasurer during the period 1987 to 1990 and then President in 1993–94. During these years Frank contributed to the growth of the Association and to its increased national and international recognition. Frank's interest in GAC[®] culminated in 2001 with his chairmanship of the hugely successful joint GAC/MAC/CSPG annual meeting in St. John's.

In 2002 Frank became chair of the Canadian Geoscience Foundation (CGF), a charitable organization set up to fund worthy geoscience outreach projects across Canada. During his tenure (2002–2008), Frank was able to significantly increase the CGF's funding base through the securement of the Jerome H. Remick III endowment and left behind a legacy of strong, wellorganized governance and a solid investment policy that set the CGF up for long term success.

Frank's interest in public outreach also brought him to the attention of Paul Johnson, a prominent St. John's businessman, who in the late 1990s was in the conceptual stages of creating a geoscience facility that would promote interest in Newfoundland's spectacular geology to the general public. Frank was initially asked to assist in defining the scope and theme of the facility, then moved on to the development committee where he played an influential role in steering the project through its design and construction phases. The dream was realized in 2002 when the Johnson Geo Centre opened its doors on Signal Hill, adding a major tourist attraction to the scenic park that overlooks downtown St. John's. Frank continued to maintain his involvement in the new Geo Centre as a member of the Board of Directors and contributed significantly to the acquisition of new exhibits, including the ExxonMobil Oil and Gas gallery.

Frank eventually decided to retire in 2007, however he maintained an active role in the geoscience community and went on to administer a granting system to fund selected private sector mineral exploration research projects under the auspices of the provincial Research and Development Corporation, which was set up in 2007. Frank also became involved in professional geoscience through membership of the Awards Committee of the Professional Engineers and Geoscientists of Newfoundland and Labrador. His final involvement in public geoscience was assisting the Shorefast Foundation with its "Geologists in Residence" project on Fogo Island in eastern Newfoundland.

Frank also continually sought honours and awards for his many deserving colleagues, whether in government, industry or academia, but was self-effacing about his own recognition and on several occasions refused to accept nominations that he felt should go to others. However, GAC[®] did manage to persuade him to accept a Distinguished Fellow Award in 1996, followed in 2002 by a Distinguished Service Award and then in 2008 the J. Willis Ambrose Medal, which is awarded for sustained, dedicated service to the Canadian Earth Science community. The Ambrose medal in particular provided fitting recognition of Frank's work to build GAC[®] and to promote the importance of geoscience to governments and the general public.



Frank addressing the (somewhat wet) masses in 1976 on a GAC field trip to his project area in eastern Newfoundland

Frank was above all a gifted communicator, and whether chairing a committee or delivering a major public address, will long be admired for his command of the English language and ability to distil complex issues into readily understandable summations. Listening to his presidential address at the 1994 GAC/ MAC annual meeting on "The Poetry of Geology" was to see a master orator in action as Frank delivered his views on the importance of geoscience to society and our way of life to a rapt and attentive audience.

On August 4th, Frank passed away after a battle with bile duct cancer. His passing has left a deep sense of loss in the geoscience community. He was a strong and effective leader who could always rise to the challenge of difficult times and who commanded respect for his thoughtful and respectful eloquence. He was also a tireless advocate for the importance of geoscience, particularly public geoscience. He will long be remembered with great admiration and respect as a colleague, a friend, a manager and a leader. His loss is also a terrible tragedy for his family, notably his wife Verna, his mother Evelyn and his sons Michael and Alexander.

In keeping with Frank's desire to help others in geoscience, an annual award is in the process of being established at Memorial University where it will be given to a full time graduate student in the Department of Earth Sciences.

He will be sorely missed.

Richard J. Wardle, with contributions from Baxter Kean, Dave Liverman, Paul Dean, Jeremy Hall, Lawson Dickson and Andy Kerr

Events and Happenings

Celebration of Canadian Geoscience

May 10 – 22, 2021

Please join the Geological Association of Canada in a virtual Celebration of Canadian Geoscience!

This celebration will take place over several days in May 2021 as a series of talks to celebrate the Canadian Geoscience community at a time when we cannot yet gather together for our traditional events.

All members are invited to attend as many of the talks as they wish. We will showcase medallists and ward winners, our Sections, Divisions, publications, student initiatives, and partner organizations. The GAC Annual Business Meeting will be scheduled during this time.

A detailed schedule will be announced in late March.

Hutchison Lecture Tour Coming soon to a (virtual) lecture theatre near you!

The 2020 Hutchinson Lecture Tour is well underway, using a virtual format. Dr. Shahin Dashtgard is offering two different lectures for this tour. The abstracts are given below. Please keep an eye on https://gac.ca/ news/2020-hutchisonlecture-tour for places, dates and times of his talks.



The Cretaceous Nanaimo Group, B.C.: A Complicated Depositional History on an Active Margin Shahin E. Dashtgard

Applied Research in Ichnology and Sedimentology (ARISE) Group, Department of Earth Sciences, Simon Fraser University, Burnaby, British Columbia, Canada V5A 1S6

The Nanaimo Group consists of Cretaceous sedimentary strata that infills the Georgia Basin in southwest British Columbia. Exploitation of Nanaimo Group coal deposits drove European colonization of Vancouver Island, and made the region a major port for the global shipping trade in the late 1800s and early 1900s. Historically, the Nanaimo Group was interpreted using a lithostratigraphic framework, which has been revised multiple times over the past 120 years. A robust sequence stratigraphic framework for the lower Nanaimo Group was only recently developed, and

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reveals a complicated depositional history that existed during the early stages of basin development. In this talk, we explore the newly developed sequence stratigraphic framework and the data used in its development (i.e., facies analysis, detrital zircon, biostratigraphy). Like many forearc basins globally, development and infilling of the Georgia Basin was controlled, in part, by variable subsidence rates, steep topography, and both regional and localized active faulting related to the position of this basin along an active margin.

The Nanaimo Group also resides at the heart of the controversial Baja BC hypothesis, which purports that Vancouver Island was situated at a paleo-latitude equivalent to northern Mexico during the Late Cretaceous. The new sequence stratigraphic framework provides the means to sample strata chronologically, and thus better constrain the timing of Vancouver Island movement relative to North America. This research is ongoing.

GeoFact: Feb 18 1848: In his Presidential Address to the Annual General Meeting of the Geological Society, Sir Henry de la Beche pays tribute to Mary Anning and acknowledges her contribution to the recovery of many significant fossils. This Address was later published in the Quarterly Journal of the Geological Society of London.



Tropical cyclones and their expressions in shallowmarine sedimentary strata Shahin E. Dashtgard Applied Research in Ichnology and Sedimentology (ARISE) Group, Department of Earth Sciences, Simon Fraser University, Burnaby, British Columbia, Canada V5A 1S6

Tropical cyclones (TCs) are among the most devastating natural hazards on Earth and are predicted to increase in frequency and severity as the atmosphere warms. Assessing changes in TC frequency and severity requires tracking their prevalence through time using their preserved expressions in the rock record as a proxy. Presently, TCs are common to the world's oceans at latitudes of 7° to 40° north and 7° and 23° south of the equator. The processes and products of TCs have been well studied, and direct expressions of TCs in shallowmarine strata (e.g., Hummocky Cross-Stratification) are well defined. In this presentation, we will explore the depositional processes that occur during TCs and the range of TC deposits that occur in shallow-marine and shelf environments (10–150 m water depth). Two modern settings that experience regular TCs will be presented: the northern Gulf of Mexico and the Taiwan Strait. We will also evaluate TC deposits in shallowmarine strata. Together, these data provide a more complete picture of the mechanisms and processes that are active during TCs and their multiple expressions in the rock record. In turn, these results contribute to our understanding of past extreme-weather events and potentially can provide insights into future changes in TC frequencies and intensities as the Earth's climate warms.

Reading on the Rocks

The Ministry for the Future, by Kim Stanley Robinson. 2020. Orbit Books. 576 pages. ISBN 978-0-316-30026-2. \$34.65 Hbk.

It's 2025 and a blistering hot summer. India swelters under a deadly heatwave. People try, unsuccessfully, to escape the heat, even wading deep into dwindling pools in the futile hope that the water will cool them. Aid worker Frank May survives but the horrors he saw change him forever. He's incapable of resuming his career since he relives the suffering in unremitting PTSD episodes. The spectacle of millions of people dying in this extreme weather event galvanizes the UN into action. They set up a new agency—The Ministry for the Future—in Zürich, Switzerland. The Ministry's mandate is to speak for and protect the future by seeking to influence the trajectory of financial and political systems so as to mitigate, or even reduce, the impacts of climate change. Not an easy task! The new head of this organization is Mary Murphy, an experienced former Irish politician, who is clear-sighted about the dim prospects for success but nonetheless accepts the appointment out of a strong sense of duty.

Mary's and Frank's paths cross when out of frustration he makes an inept attempt to kidnap her and force her into becoming more active in combatting the climate crisis. Her slow behind-the-scenes diplomacy seems ineffective to him and an inadequate response to the calamities he sees everywhere. Mary strikes up an odd uneasy relationship with Frank-she is sorry for him and she too wishes her efforts to effect change yielded more obvious results. Through their occasional gettogethers, we share different perspectives on the work of the Ministry: how feeble it seems from the outside and what is actually happening on the inside through assemblies and off-site low-key meetings. While an advocate of patient negotiation and consensus-building, Mary is ambivalent towards hot-heads in her own organization who agitate for a more interventionist approach to forcing transformation in political and economic systems. Although aware that the Ministry harbors a "black ops" group coordinating direct action, Mary strives to remain aloof and maintain the facade of an urbane and politically sophisticated organization. Yet her silence makes her complicit in subsequent ecoterrorism and violence that focuses world attention on squandered resources and wasteful consumption.

Jolted by disasters, it is the slow change of attitudes and local grassroot actions that begin to mitigate the worsening effects of climate shifts, including accelerating polar ice melt, further deadly heat waves, and devastating wildfires. However, the situation



doesn't significantly alter until a few major central banks agree to new form of future trading, using a type of carbon credit predicated on a risk analysis of the future. Once nation states and industry see a way of making money on greenhouse gas reduction, the world economy begins, very gradually, to reframe itself.

Many of Robinson's usual themes are evident in this story, firmly situated within the cli-fi genre. Climate change underpins the plot. Societal change is slow. Real change only happens when people sit down and talk face to face. Change can take years, yet at some point takes on a momentum of its own. Scientists are key players in societal issues. Geoscience in seemingly remote areas, such as Antarctica, can have a significant impact on geopolitics.

Robinson is fascinated by politics and the intersection between powerful interests and the individual. As in his "Science in the Capital" series, politics and finance are closely meshed. In this novel, though, politicians are seen as less powerful and less effective than bankers. Robinson's characters are disturbingly earnest, intense and driven. He rarely allows them to enjoy life or have fun. The story is interlarded with long asides on topics ranging from geoengineering to the taxation system. This slows the narrative pace and forces thought. It's a tale to chew on, whether you agree with Robinson's premises or not.

> Alwynne B. Beaudoin Edmonton, Alberta

Announcements

GAC[®]-PDAC Logan Student Prize Winners

Congratulations to the 23 recipients of the annual GAC[®]-PDAC Logan Student Prize.

- Hailey Berry, Brandon University
- Kaitlyn de Moree van Lierde, Carleton University
- Charlotte Alexander, University of Western Ontario
- Tania Chatila-Amos, Université du Québec à
 Montréal
- Heather Clarke, University of Victoria
- Ragi Ramesh, Lakehead University
- Jade Lockie, Laurentian University
- Nathan Carter, Acadia University
- Chenille Callender, St. Mary's University
- Jasmine Lamoureux, University of British Columbia, Okanagan
- Shaelyn Clark, Vancouver Island University
- Christina Bakowsky, University of Ottawa
- Jessica Patterson, University of Toronto
- Kaitlin Lindblad, University of Regina
- Vivien Yin, University of Windsor

- Bailey Sutcliffe, Thompson Rivers University
- Hannah Robutka, University of Calgary
- Kale Wood, University of Saskatchewan
- Émilie Saucier, McGill University
- Alexander MacLaren, University of British Columbia
- Léo Champagne, Mount Royal University
- Thomas Ruel, Université Laval
- Phillip Wright, University of Waterloo

The prize is awarded annually to one undergraduate student at each CCCESD-member department. The award has a monetary prize component, a one year memberships to both GAC[®] and PDAC, and recognition in the form of a certificate.

The selected students are expected to be academically sound, have good leadership skills (e.g., as they pertain to organizing field trips, geology club geo-events, etc.), and have done well at field school or otherwise show proficiency in field techniques. The prize recognizes students who are leaders and participate in advancing the study and application of geoscience. Students are usually in their final (i.e., graduation) year.

CANQUA W. A. Johnston Award

This is the highest honour given by CANQUA and recognizes outstanding professional achievement in Quaternary Science. It is my pleasure to announce that the selection committee recommended that the award be given to two outstanding scientists this year (2020):

 Dr. Anne de Vernal (Université du Québec à Montréal), for exceptional work in paleoceanography, paleoclimatology, marine palynology, and other contributions; and,

CANQUA Meeting

The board has decided that there will be no in-person CANQUA meeting in 2021; our intention is that the next inperson meeting will be in the summer of 2022, in Prince George. In the meantime, in order to maintain an active Dr. Lynda Dredge (Geological Survey of Canada), for exceptional work in Quaternary geology and geomorphology, glacial history, surficial mapping, and other contributions.

This decision follows several previous occasions when two recipients were given the award in the same year. We offer our heartfelt congratulations to both Dr. de Vernal and Dr. Dredge and are honored to have them as part of our scientific community.

> Matthew Peros President, CANQUA

engagement with our community, we are hoping to run an online CANQUA "social evening" – possibly with a few talks, but more as an opportunity to network and interact informally – sometime this winter. Details about this will follow in the New Year.

Matthew Peros President, CANQUA





Geoscience Canada

JOURNAL OF THE GEOLOGICAL ASSOCIATION OF CANADA JOURNAL DE L'ASSOCIATION GÉOLOGIQUE DU CANADA

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Canada continues its participation in the International Ocean Discovery Program

Thanks to a new partnership between Ocean Networks Canada and the Canadian Consortium for Ocean Drilling (CCOD), Canada's membership in the International Ocean Discovery Program (IODP; formerly Integrated Ocean Drilling Program) will continue until at least 2023. The International Ocean Discovery Program (IODP) is a 23 nation research collaboration that uses ocean-going research platforms to explore Earth's history and dynamics by collecting data recorded in sub-seafloor sediments and rocks. Drill cores, borehole imaging, observatory data, and related geophysical imaging are obtained from beneath the ocean floor using two specialized drill ships and other mission-specific platforms. For over 50 years, IODP drilling expeditions have led to many fundamental breakthroughs in the understanding of our oceans, climate, and Earth evolution, including significant leaps in our understanding of plate tectonics, climate change, circulation of fluids through Earth's crust, the limits of life on and within Earth. The program is arguably the most successful international geoscience research initiative to date, and Canadian-based researchers have published over 800 articles in peerreviewed scientific journals using data collected during



John Jamieson is the Chair of the Canadian Consortium for Ocean Drilling. He holds a Canada Research Chair in Marine Geology in the Department of Earth Sciences at Memorial University of Newfoundland. *Photo: William Crawford, IODP/TAMU*

IODP expeditions. The program also builds intellectual capacity through the promotion of international collaboration, education, and training, including workshops and summer schools.

Canada's participation in IODP dates back to 1985. The CCOD coordinates Canada's participation and is composed of 10 universities and Natural Resources Canada. More information on the CCOD, including participating members, and IODP can be found at www.iodpcanada.ca.



The scientific drilling vessel JOIDES Resolution, has been an integral part of IODP since 1985. Photo: William Crawford, IODP/TAMU

Howard Street Robinson Fund

The Robinson Fund was established in 1977 by the Geological Association of Canada, using a bequest from the estate of Howard Street Robinson. The fund is dedicated to the furtherance of scientific study of Precambrian Geology and Metal Mining by:

- sponsoring an annual Distinguished Lecturer Tour whose focus alternates between Precambrian research and economic geology (lecturer alternately chosen by the GAC[®]'s Precambrian and Mineral Deposits divisions)
- supporting Special Projects including publications, symposia and conferences.

Proposals for special projects on Precambrian Geology or Metal Mining should be submitted to the Robinson Fund Committee. Projects should be sponsored or organized through the GAC[®] or one of its Divisions or Sections. Proposals that have a wide appeal or degree of accessibility to the GAC[®] membership are preferred.

For further information and proposal submissions, please contact: Dr. Stephen Piercey, Chair, Robinson Fund, c/o Department of Earth Sciences, Memorial University of Newfoundland, St. John's, NL A1B 3X5 Canada, E-mail: spiercey@mun.ca

Information for Contributors

Contributions should be submitted by e-mail to Alwynne.Beaudoin@gov.ab.ca, with GEOLOG in the subject line. Contributions are welcome in either of Canada's two official languages. MS Word (.doc or .docx) is the preferred format for contribution but generic word processing (.rtf or .txt) files are also fine. Please do not submit PDF files. Up to four hi-res images may be submitted per contribution: preferred format is .jpg, RGB colour, with a minimum 300 dpi resolution at 5" x 3" size. Please ensure that images are cropped and colour-corrected, and provide a caption for each image, and an image credit line if needed. Contributors are responsible for securing permission to publish for any third-party images or images of living recognizable people. Diagrams (vector graphics) may also be submitted. Preferred format for graphics is Adobe Illustrator (.ai); make sure that the file is saved with "save text as lines" option enabled to ensure no font substitutions. Additional information on other file formats can be obtained from the Editor. Please do not embed images or graphics in your text document; images or graphics should be submitted as separate files. In your text, use a call-out in parentheses to indicate the approximate placement of each image and graphic. If files are larger than 10 mb, please contact the Editor for alternate delivery arrangements. Your contribution will be copy-edited to ensure consistent spelling and orthography and to correct any obvious typos or errors. Contributions may also be edited for clarity and length. If the Editor has questions about specific information in the text, she will contact contributors for clarification. Contribution deadlines are March 1, June 1, September 1 and December 1.

Consignes aux auteurs

Les contributions d'auteur doivent être soumises par courriel à Alwynne.Beaudoin@gov.ab.ca, en indiquant GEOLOG à la rubrique Objet. Les articles seront acceptés dans l'une des deux langues officielles du Canada. Les fichiers de format MS Word (.doc ou .docx) sont préférables, mais les formats génériques (.rtf ou .txt) sont aussi acceptables. Veillez ne pas soumettre de fichiers au format PDF. Par article, jusqu'à quatre images haute résolution peuvent être soumises; format préféré est .jpg, couleurs RVB, avec un minimum de 300 PPP en taille 5 po x 3 po. Veillez vous assurez que les images sont recadrées et leurs couleurs corrigées, qu'elles sont accompagnées d'une légende ainsi que des informations de référence le cas échéant. Il est de la responsabilité des auteurs d'obtenir la permission de publier toute image de tiers ou de personne reconnaissable. Des diagrammes (graphiques vectoriels) peuvent également être soumis. Le format préféré pour les diagrammes est celui d'Adobe Illustrator (.ai); assurez-vous que le fichier est sauvegardé avec l'option « Sauvegarder le texte comme ligne » activée pour éviter toute substitution de police de caractère. On peut obtenir des informations sur d'autres formats de fichiers en communicant avec l'éditrice. S'il vous plaît ne pas incorporer d'images ou de graphiques dans votre texte; ces images ou graphiques doivent être soumis sous forme de fichiers distincts. Dans votre texte, veillez utiliser des notes numérotées entre parenthèses pour indiquer l'emplacement approximatif de chaque image et graphique. Dans le cas de fichiers dépassant 10 Mo, veuillez contacter l'éditrice pour convenir des modalités de téléchargement. Vos articles seront révisés afin d'en assurer la cohérence orthographique et corriger les fautes de frappe ou erreurs évidentes. Les articles pourront aussi être corrigés pour plus de clarté et éviter des longueurs. Dans les cas où l'éditrice aurait besoin d'informations particulières concernant le texte, elle communiquera avec les auteurs. Les dates limites pour soumettre des articles sont le 1 mars, le 1 juin, le 1 septembre et le 1 décembre.