



The Canadian Geomorphology Research Group
Le Groupe Canadien de Recherche en Géomorphologie

BULLETIN DU GROUPE CANADIEN DE RECHERCHE EN GEOMORPHOLOGIE
LE PAYSAGE CANADIEN
THE CANADIAN LANDSCAPE
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Salt weathering
along the
shores of a
saline lake in
Saskatchewan.
Photograph by
Kyle Hodder.



President's Message Mot du Président

Duane Froese, CGRG President

Greetings CGRG Members. If like me you are in the midst of preparing for summer field work, no doubt this newsletter comes to you at a busy time.

I have just returned from the CGRG Annual General Meeting, this year held in conjunction with the Canadian Association of Geographers in Regina, and want to express my thanks to the organizing committee, and especially the CGRG liason, Kyle Hodder. The meeting was excellent with two CGRG Special Sessions: a dendrochronology session organized by Dan Smith and Z'ev Gedalof, and a session on high latitude eolian processes organized by Steve Wolfe and myself. In addition to these sessions, there were multiple field trips, including the Qu'appelle valley (Kyle Hodder) and Cypress Hills (Janis Dale and Dave Sauchyn), and an impromptu trip to the Douglas Sand Dunes by Steve Wolfe. We also awarded two Slaymaker awards at the AGM- one for best poster presentation to Roberta Kotowich from the University of Regina, and a second for best oral presentation to Graham Clarke from the University of Guelph.

Chers membres du GCRG, si tout comme moi vous êtes présentement au milieu des préparatifs de vos travaux de terrain estivaux, sûrement que cette lettre d'information vous parviendra dans une période d'intense activité.

Je reviens juste de l'assemblée générale annuelle du GCRG, qui fut tenue cette année en conjonction avec l'Association Canadienne des Géographes à Regina, et je tiens à adresser mes remerciements au comité organisateur, et tout spécialement à l'agent de liaison pour le GCRG, Kyle Hodder. La rencontre fut excellente – avec deux sessions spéciales du GCRG : la première en dendro, organisée par Dan Smith et Z'ev Gedalof, et la seconde sur l'Éolien en hautes latitudes, organisée par Steve Wolfe et moi-même. En plus de ces sessions, il y eut de multiples excursions, incluant la vallée Qu'appelle (Kyle Hodder) et Cypress Hills (Janis Dale and Dave Sauchyn), ainsi qu'une sortie impromptue aux dunes de sable Douglas menée par Steve Wolfe. Nous avons également décerné deux prix Slaymaker lors de l'AGA – un récompensant la meilleure affiche scientifique, produite par Roberta Kotowich de l'Université de Regina, et le second décerné à la

CGRG is an active organization that supports professional meetings, provides *The Canadian Landscape* newsletter, sponsors student awards at regional and national meetings, and organizes special sessions and fieldtrips at a variety of meetings. We consistently get feedback from our parent organizations about the high level of activities of the CGRG. As we discussed at the AGM, CGRG remains strong with more than 120 regular members and about 100 student members. These numbers are a bit low including only 6 CAG memberships, reflecting the timing that we received our annual update from the CAG. We can assume that the real number is somewhere closer to 260, or about the same as last year. This year, however, because our expenses were a bit lower than normal- some of our AGM costs were covered by the SFU CANQUA organizing committee- we had a small operating profit for 2009. But keep in mind that over the longer term we tend to be running at a loss of about \$1000 per year. These expenses largely go to supporting the student awards, AGM costs, International Association of Geomorphologist dues, and occasional hardware costs associated with the on-line CGRG Bibliography. While these losses have been manageable in the short term, our reserve funds are being eroded and these losses will eventually affect CGRG's ability to maintain its current level of support for Canadian geomorphology into the future.

With this backdrop, the CGRG executive raised a motion to increase the annual fees from \$15 (where they have been since its inception in 1993) to a still nominal \$25; student membership remains free. The motion was supported by members in attendance, and about a dozen members responded positively to an earlier email that I circulated on the CGRG listserv on the issue. This increase in membership dues will put CGRG in a revenue-neutral situation for the foreseeable future. Following the raising of the fees, we voted to raise the value of the Trenhaile and Dionne Awards (for student presentations at non-AGM meetings) from \$50 to \$100. I think one of the principles that we have taken with the CGRG is that these funds to a great extent should be used to foster the next generation of geomorphology in Canada and I think our expenses reflect this investment. In 2011, CGRG will hold its AGM in conjunction with the Geological Association of Canada in Ottawa. Details of the special sessions and field trips are below.

I want to close by thanking the CGRG Executive for a successful year and encourage you to think about organizing sessions or activities through CGRG.

Attention Session Organizers!

Funding from the Canadian Geomorphological Research Group is available to support student awards in geomorphology and related disciplines at regional or national conferences. Contact President Greg Brooks to add CGRG student awards to your next session!

meilleure présentation orale, faite à Graham Clarke de l'Université de Guelph.

Le GCRG est une organisation active qui supporte les rencontres professionnelles, édite la lettre d'information *du Paysage Canadien*, parraine les prix étudiants lors de rencontres régionales et nationales, et organise des sessions spéciales et des excursions de terrain lors de réunions variées. Régulièrement nous recevons des réactions enthousiastes d'organisations parentes touchant à l'excellence des activités du GCRG. Comme nous en avons discuté à l'AGA, le GCRG demeure vigoureux avec plus de 120 membres réguliers et une centaine de membres étudiants. Ces chiffres, qui incluent 6 adhésions de l'ACG, peuvent sembler modestes, mais sont le reflet du moment de notre mise à jour annuelle de l'ACG – en fait nous pouvons assumer que le nombre réel avoisine probablement plus les 260, ou un nombre similaire à celui de l'an dernier. Cette année, parce que nos dépenses ont été légèrement moins importantes qu'à la normale – certains de nos coûts d'AGA ayant été couverts par le comité organisateur de la SFU CANQUA – nous avons enregistré un modeste profit durant nos opérations de 2009. Mais il faut garder à l'esprit que sur un plus long terme, la tendance fut à un déficit d'approximativement 1000\$ par an lors des dernières années. Nos dépenses vont principalement au support des prix d'étudiants, aux coûts des AGA, aux frais dus à l'Association Internationale des Géomorphologues, et occasionnellement aux coûts de matériel informatique associé à la bibliographie en-ligne du GCRG. Tandis que ces pertes ont été gérées sur le court terme, nos fonds de réserve sont en train d'être érodés et ses pertes vont finalement affecter la capacité du GCRG à maintenir son niveau de support actuel à la géomorphologie canadienne dans un avenir proche.

Avec ce décor en toile de fond, le comité exécutif du GCRG a proposé une motion qui élève les frais annuels de 15\$ (montant inchangé depuis son entrée en vigueur en 1993) à un montant toujours minime de 25\$; l'adhésion étudiante demeure gratuite. La motion a été appuyée par les membres présents, et à peu près une douzaine de membres ont répondu positivement à un courrier électronique sur cette question que j'avais fait circuler antérieurement via la liste de diffusion du GCRG. Cette augmentation des frais d'adhésion permettra au GCRG de pérenniser une situation financière équilibrée dans l'avenir. Suivant cette augmentation des frais, nous avons voté pour une augmentation de la valeur des prix Trenhaile et Dionne (attribués aux présentations étudiantes lors de réunions non-AGA) de 50 à 100\$. Je pense que l'un des fondements que nous avons adoptés avec le GCRG et que ces fonds devraient, dans une large mesure, servir à favoriser la géomorphologie de prochaine génération au Canada, et je pense que nos dépenses reflètent cet investissement. En 2011, le GCRG tiendra son AGA en conjonction avec l'Association Géologique du Canada à Ottawa. Les détails des sessions spéciales ainsi que des excursions sont mentionnés plus bas.

Pour clore cette lettre, je tiens à remercier le comité exécutif du GCRG pour cette année riche en succès, et à vous encourager à penser à un partenariat avec le GCRG lors de l'organisation de session ou d'autres activités.



Brian Luckman on the 2010 CAG 'Palliser Triangle Excursion' to southwestern Saskatchewan.

Photograph by Steve Wolfe.

Luckman retires after 39 years at Western

Brian Luckman, past President of the Canadian Geomorphology Research Group (1999-2000) has retired after 39 years of service to the University of Western Ontario.

Brian was born on the Isle of Man in the United Kingdom and was educated at Manchester University, where he completed B.A. and M.A. degrees in Geography. Brian began lecturing at Western in 1971 while he was pursuing his Ph.D. at McMaster University under the supervision of Brian McCann. He joined the faculty at Western in 1974 and was promoted to full professor in 1987.

Brian began his scientific career working as a geomorphologist specializing in alpine regions. His first scholarly contribution, published by the Institute of British Geographers, described how snow avalanches affected the evolution of alpine talus slopes. His dissertation work brought Brian to the Canadian Rockies, where he developed a deep understanding of alpine geomorphology and the dynamic nature of mountain environments. Brian's early work shows a willingness to push disciplinary boundaries, using a broad range of techniques taken from geography, geology and biology to uncover the past and present of Canada's Rocky Mountain Parks.

In a 1984 paper published by *Arctic and Alpine Research*, Brian and his collaborators reported the discovery of ancient Engelmann spruce and whitebark pine growing at treeline sites near the Columbia Glacier and Mount Robson. In their Introduction, they suggested that these sites offered "considerable potential for future dendrochronological and dendroclimatological studies in the Canadian Rockies".

That modest but prescient statement marked a turning point in Brian's career. Starting in the mid-1980s, Brian began to devote his energies to establishing tree rings as a key source of information about environmental change in western Canada. This work led Brian to produce an exceptional network of tree-ring records that stretches from Waterton Lakes National Park to the northern Yukon Territory. Several of these collections are among the longest tree-ring records in the world, and represent a major Canadian contribution to global studies of climate change during the last millennium and beyond.

Brian has been honoured for his contributions to science and scholarship by national and international bodies. In 2005, the Canadian Association of Geographers presented Brian with its *Award for Scholarly Distinction in Geography*. In 2008, Brian received the inaugural *Harold C. Fritts Award for Lifetime Achievement in Dendrochronology*, the highest honour bestowed by the international Tree-Ring Society. In its citation, the Society recognized Brian "for his significant influence on dendrochronology, emphasizing innovative research that has advanced the field, distinguishing it amongst our peer sciences".

Brian and his wife Helen plan to stay in London, at least for the immediate future. At Western's invitation, he has agreed to continue teaching classes in Geography and Environmental Science. Brian also intends to remain active in the tree-ring community, both by co-ordinating a multi-nation paleoclimate program supported by the Inter-American Institute for Global Change and by guiding field programs in South America and western Canada.



Left: Graham Clark takes a break at the base of the Niagara Escarpment in Lions Head Provincial Nature Reserve.

Below: Roberta Kotowich and her dog Echo near Cowessess First Nation, Saskatchewan.

2010 Slaymaker awards recognize Guelph and Regina students

Here are the winners of the 2010 Olav Slaymaker Awards that were announced at the joint CGRG/CAG meeting in Regina. Congratulations to Graham and Roberta!

Best oral presentation

Graham Clark, University of Guelph, for his presentation (co-authored by Ze'ev Gedalof, Peter Kelly and Doug Larsen), *2,500 years of environmental variability along a natural transect of Thuja Occidentalis forest sites on the Niagara Escarpment cliff face in Southern Ontario*

We analyzed the growth patterns of Thuja occidentalis sampled from the limestone cliffs of the Niagara Escarpment. We concluded that growth in the 20th century was larger than any other period within the 2,500 year record, putting at risk a community that has developed a unique longevity as a result of maintaining low levels of growth. The onset of this period of high growth is variable across the Niagara Escarpment, suggesting that it is not caused by CO₂ fertilization. Analysis of the growth climate relations for the chronologies suggests that, while an important determinant of growth, climate alone cannot explain the elevated growth. We documented the regional variability in growth associated with the major synoptic climate patterns, but found none likely contributors to the growth phenomenon. We think the most likely explanation is groundwater eutrophication associated with agricultural development. Regardless of the cause, this unprecedented growth is cause for concern from a conservation perspective, as small stature is a condition for survival in the cliff face environment. We went on to document the regional variability in growth associated with the major synoptic climate patterns.

Best poster

Roberta Kotowich, University of Regina, for her poster (co-authored with Ulrike Hardenbicker), *The influence of landuse on alluvial fans in the Qu'Appelle Valley area of Saskatchewan.*

Sedimentation on alluvial fans is controlled by erosional processes acting on source drainage basins and slopes. In the Qu'Appelle Valley, landuse changes during the last 150-years have strongly influenced erosion and sedimentation patterns in the valley catchments and subsequently the alluvial fans. Two alluvial fans in the Qu'Appelle Valley were chosen in order to analyze the influence of these landuse changes on sediment deposition and to document the geomorphic response. The first alluvial fan is situated adjacent to intensive agricultural landuse near Lumsden, whereas the second lies within the Cowessess First Nation with little to no agriculture activity documented in the catchment. Bore holes were drilled and sediment cores extracted from each fan: on the First Nation the length of core is 350cm and near Lumsden the length is 850cm. Particle size analyses in combination with geochemical parameters were used to identify sediments which reflect times of severe erosion in the catchment and sediments which reflect times of geomorphic stability in the cores.



Researcher Profile Dr. Michele Koppes University of British Columbia

A global citizen by necessity, Michele spent her childhood living in eight countries, including a pre-school stint in Toronto. She earned an undergraduate degree from Williams College in Massachusetts, and a Masters and Ph.D. from the University of Washington, in Seattle. After completing her Ph.D. in geology and glaciology, working with Bernard Hallet, in 2007 she migrated back north to Canada to join the Geography Department at UBC as a Teaching Postdoctoral Fellow. In January 2010, she joined the faculty of the department, specializing in Quaternary studies, ice dynamics and glacial geomorphology – and is attempting to follow in the footsteps of giants.

Michele's research focuses on glacier processes, glaciated landscapes and landscape response to climate change over a range of temporal scales, from the long term (the Quaternary Era) to recent change (the past decade). She is interested in all rates of geomorphic change, including the effects of humans on the landscape and how we as agents compare to other 'natural' geomorphic agents such as glaciers and rivers.

Her interest in glaciers and glacial erosion is motivated primarily by the question of how glaciers both respond to



Michele goes down a moulin to check the plumbing of the Mendenhall Glacier, Alaska

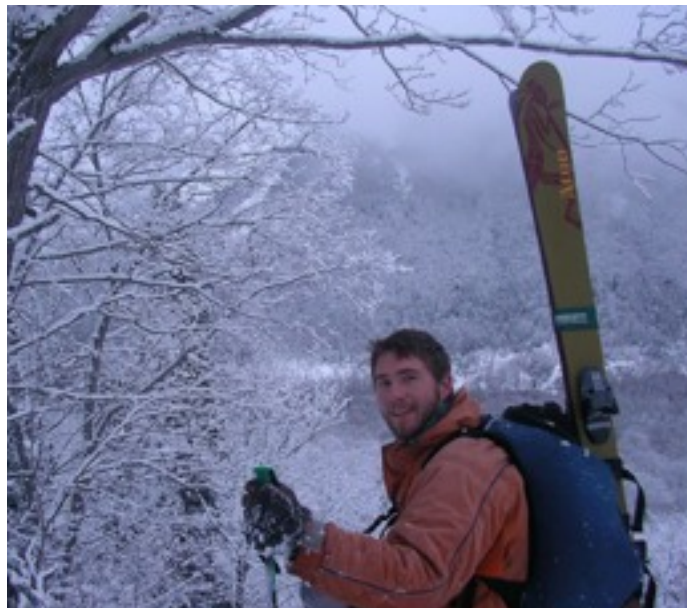
and affect climate. Because even minor changes in temperature or precipitation can have a major impact on the mass balance of glaciers, the glaciers and the sediments they produce can generally be used as sensitive paleoclimatic indicators. Glacier erosion also affects the topography of a region, resulting in increased relief and altered orographic precipitation, changes in surface elevation and albedo, isostatic uplift by erosional unloading and sequestration of atmospheric CO₂ due to chemical weathering, implying that glaciers not only respond to but affect the climate regime as well. Decoupling the relationship between glaciers, topography and climate throughout the Quaternary is an integral challenge for scientists attempting to distinguish between natural and anthropogenic climate forcings.

Michele's past research focused quantitative studies of the erosion rates of glaciers and rivers to understand what factors might influence the discrepancy in the rates between glaciated and non-glaciated basins. The extreme rates of glacial erosion measured worldwide today likely reflect a transient dynamic state in which glaciers are shrinking and accelerating, corresponding to ice fluxes that are much higher than can be sustained over the long term.

Michele's current research attempts to clarify how such rates of glacial change and glacial erosion are correlated with fluctuations in climate that determine both the amount of meltwater at the glacier bed and the thermal forcing at the ice-ocean interface. She has an ongoing NSF-funded project with colleagues from Chile and the US to look at ice dynamics and erosion rates from temperate (warm-based) to polar (cold-based) glacial systems in Patagonia and the Antarctic Peninsula, which is needed to understand the full spectrum of climate forcing on glacial erosion and help reconstruct the paleoclimate signature from sediment records of continental margins. Other projects include a collaboration with Eric Rignot (NASA-JPL) to measure submarine melt rates at the calving fronts of outlet glaciers in Patagonia and Greenland to understand recent responses of icefields and ice sheets to ocean warming, and a collaboration with Summer Rupper (BYU) and Indian colleagues to quantify climate forcing on glacier melt in the northwestern Himalayas, including future impacts for downstream water use in the Indus watershed. She plans to expand these studies to examine the response of glaciers in British Columbia to post-Little Ice Age warming.



Conducting a radar profile of the Maar Piedmont, Antarctica



Student Profile

Francis Gauthier, université du québec à rimouski

Francis est un étudiant au doctorat en sciences géographiques co-supervisé par Bernard Hétu de l'Université du Québec à Rimouski et par Michel Allard de l'Université Laval. C'est après un parcours chaotique entre les berges inondées de la rivière des Mille-Îles et les sommets enneigés des rocheuses canadiennes que Francis découvre la géomorphologie. Après son baccalauréat en géographie physique à l'Université de Montréal, Francis fait la connaissance de Bernard Hétu. Ce dernier lui montre des photos de blocs de glace de la taille d'une voiture accolés sur des arbres fortement endommagés ou reposants dans les fossés le long de la route 132 dans le nord de la Gaspésie. C'est à ce moment que la passion de Francis pour les glaces, les sports extrêmes et la montagne fusionne. Après l'obtention d'une maîtrise en science de la terre à l'INRS-ETE, il poursuit au doctorat ses travaux de recherche sur les mécanismes de formation des glaces de paroi et leurs dynamiques d'écroulement. Il s'intéresse à la thermodynamique, à l'hydrogéologie, aux formations de glace saisonnière comme les auefs et les stalactites de glace, à la dynamique des versants, à la géotechnique appliquée au mouvement de masse et au principe de gestion de risque. Depuis, Francis développe des méthodes originales pour modéliser la croissance et la fonte des glaces de paroi et quantifier l'impact géomorphologique des chutes de blocs de glace sur les versants. Les résultats obtenus jusqu'à maintenant montrent clairement que lorsque ce mouvement de masse est présent sur un versant, il doit être considéré comme le processus d'érosion et de transport dominant. Il travaille également en collaboration avec le ministère des Transports du Québec, division Sainte-Anne-des-Monts, afin de développer un modèle de prédiction des chutes de blocs de glace sur les principaux axes routiers du nord de la Gaspésie.

Francis is a PhD student in geography co-supervised by Bernard Hétu from the Université du Québec à Rimouski and Michel Allard from the Université Laval. Francis discovered geomorphology after a chaotic path between the flooded river banks of the Milles-iles River and the snow-capped Canadian Rockies. After his degree in physical geography at the Université de Montréal, Francis got to know Bernard Hétu. Bernard showed him pictures of ice blocks the size of a car resting on heavily damaged trees or melting in the ditches along Highway 132 in northern Gaspésie. It was then that Francis' passion for glacier, extreme sports and mountains merged. Following his Master's degree in earth science at INRS-ETE, he continued his doctoral research on the formation mechanisms and collapsing dynamics of ice walls. Francis's interests include thermodynamics, hydrogeology, the seasonal formation of ice bodies such as ice stalactites and auefs, slope dynamics, geotechnical engineering applied to mass movement and risk management principles. Francis is now developing new methods to model ice wall growth and decay and to quantify the geomorphic impact of ice avalanche on slopes. The results obtained so far clearly show that when this mass movement is present on a slope, it must be regarded as the dominant erosion and transport process. He also works in collaboration with the Ministry of Transport of Quebec, the Sainte-Anne-des-Monts division, to develop a predictive model of ice fall on the main road of northern Gaspésie.



"I can remember Olav asking me on a class field trip two years ago what I was planning to do with my degree. When I said I wanted to be school teacher he replied that I had better think about graduate school instead".



Student Profile

Justine Cullen, University of the Fraser Valley

Justine Cullen is entering her final year in the BSc Honours program (physical geography) at University of the Fraser Valley (UFV) under the supervision of Dr. Olav Lian. Justine has been working in Dr. Lian's luminescence dating laboratory for almost two years. Her duties in the laboratory include training other undergraduate students, and graduate students, in sample preparation, measurement, and data analysis. Her own research has dated a sedimentologically complex, and palaeoecologically significant, unit that overlies Stage 5e sediments at Muir Point, southern Vancouver Island. For this work Justine won the 2009 UFV Associate Vice-President Research Award (top science research prize university-wide) and the 2010 UFV Undergraduate Research Excellence Award for geography, while being supported by NSERC Undergraduate Student Research Awards.

For her Honours thesis, Justine will study the luminescence characteristics of the quartz fraction of sand found in

climatically-significant aeolian deposits in the Foothills area of western Alberta. These Foothills aeolian deposits contain many independently dated tephra beds and charcoal layers that allow luminescence dating protocols to be tested. Justine was recently awarded the Farouk El-Baz Student Award for Desert Studies from the Geological Society of America for her proposed Honours research. Justine is the first undergraduate student to win this prestigious award.

When she is not investigating tiny sand grains in a dimly lit laboratory, or scampering up sand dunes in the field, Justine enjoys going to the drive-in movie theatre and reading (non-academic) books for pleasure. Justine will graduate from UFV in the spring of 2011 and will pursue graduate research in Quaternary geology where she can apply her expertise in luminescence dating.



Meeting announcement Quebec City hosts CANQUA in 2011

Hi, Bonjour!

The Canadian Quaternary Association (CANQUA) and the Canadian Chapter of the International Association of Hydrogeologists (IAH-CNC) invite you to attend their first joint meeting, organized by the Geological Survey of Canada and the Institut national de la recherche scientifique - Eau Terre Environnement (INRS-ETE). The conference will be held August 28-31, 2011 in historic Quebec City, a world-heritage site.

Under the theme "Water and Earth: The junction of Quaternary Geoscience and Hydrogeology", the organizing committee wishes to promote valuable exchanges between hydrogeologists and Quaternary scientists of all persuasions during this long overdue event. The conference will consist of broad-scoped thematic sessions led by keynote speakers of international stature as well as a series of more specialized thematic sessions. In addition to the conference program, the meeting will include short courses, thematic workshops as well as pre- and post-meeting field trips.

Participants will have the opportunity to experience the "joie de vivre" and the many charms of Quebec City and its surrounding area.

Suggestions for technical sessions as well as volunteers for session chairs are welcome.

Please visit our web page at <http://geohydro2011.ca>, and circulate the attached announcement. Call for abstracts will close by December 15th 2010. Upon acceptance, the authors will be asked to submit a 4 to 8 page paper by May 31st 2011.

Looking forward to seeing you in Quebec City!

Bonjour à tous!

L'Association canadienne pour l'étude du Quaternaire (CANQUA) et la section canadienne de l'Association internationale des hydrogéologues (AIH-CNC) vous invitent à assister à leur premier congrès conjoint organisé par la Commission géologique du Canada et l'Institut national de la recherche scientifique - Eau Terre Environnement. Le congrès aura lieu du 28 au 31 août 2011 à Québec, une ville historique inscrite au patrimoine mondial.

Sous le thème « Eau et terre : La jonction des géosciences du Quaternaire et de l'hydrogéologie », le comité organisateur souhaite favoriser de précieux échanges entre les hydrogéologues et les spécialistes du Quaternaire de tous horizons lors de cet événement tant attendu. Le congrès comprendra des sessions thématiques générales présidées par des conférenciers de renommée internationale ainsi qu'une série de sessions thématiques plus spécialisées. En plus du programme de conférences, la rencontre inclura des cours intensifs, des ateliers thématiques ainsi que des excursions sur le terrain avant et après le congrès.

Les participants pourront faire l'expérience de la joie de vivre ainsi que des nombreux charmes de la ville de Québec et de ses environs.

Des suggestions de sessions techniques et de volontaires pour présider des sessions sont les bienvenues.

S.V.P. bien vouloir consulter la page Internet <http://geohydro2011.ca> et faire circuler l'annonce ci-jointe. L'appel de communications prendra fin le 15 décembre 2010, suite à l'acceptation, les auteurs seront invités à soumettre un article de 4 à 8 pages avant le 31 mai 2011.

Au plaisir de vous voir à Québec!



Water and Earth:
The Junction of Quaternary
Geoscience and Hydrogeology

Eau et terre: La jonction des
géosciences du Quaternaire et
de l'hydrogéologie

geohydro
2011.ca

August 28-31, 2011
Quebec City

28-31 août 2011
Ville de Québec

Joint meeting of the Canadian
Quaternary Association and
the Canadian Chapter of the
International Association
of Hydrogeologists

in collaboration with the
"Association d'hydrogéophysique du Québec"

Congrès conjoint de l'Association
canadienne pour l'étude du
Quaternaire et de la section
canadienne de l'Association
internationale des hydrogéologues

en collaboration avec
l'Association d'hydrogéophysique du Québec



CALL FOR PAPERS

The organizing committee invites abstracts outlining original contributions on all aspects of Quaternary geoscience and hydrogeology. Prospective authors are invited to submit their abstract(s) for either oral or poster presentations by December 15th 2010. All details may be found online at

www.GeoHydro2011.ca.

APPEL DE COMMUNICATIONS

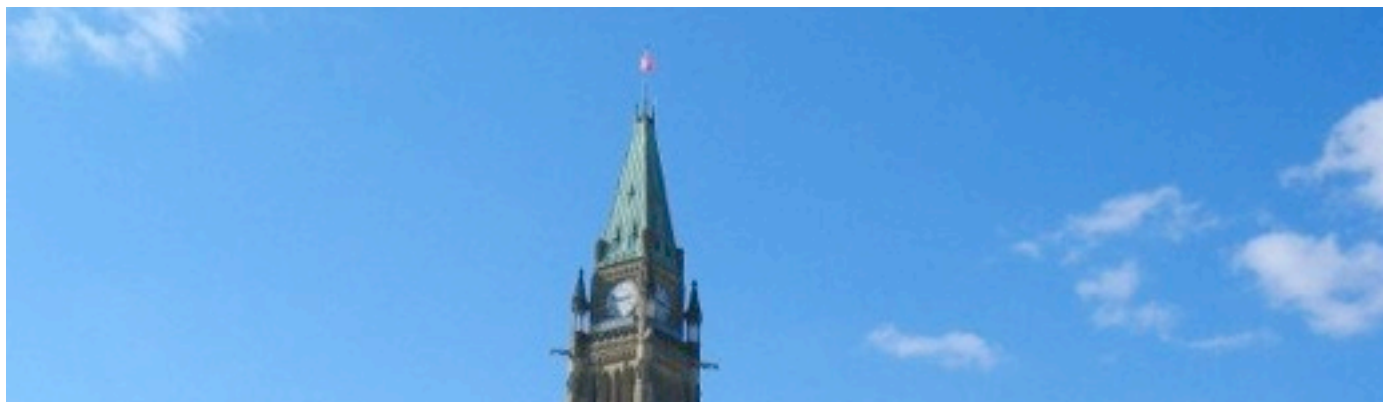
Le comité organisateur sollicite des résumés décrivant des contributions originales sur tous les aspects des géosciences du Quaternaire et de l'hydrogéologie. Les auteurs potentiels sont invités à soumettre leurs résumés pour des présentations orales ou des affiches avant le 15 décembre 2010. Pour plus d'information, consultez le site

www.GeoHydro2011.ca



Association
Hydrogéophysique
Québec





Meeting announcement Geomorphology/hazards at GAC/MAC 2011

The 2011 meeting of GAC/MAC will be held in Ottawa, Ontario on May 25 to 27, 2011. In addition to holding its AGM at this venue, CGRG will have a strong presence at the meeting through its sponsorship of three special sessions and two field trips (see list below). Please check the GAC/MAC 2011 website (<http://www.gacmacottawa2011.ca/welcome.html>) and future CGRG newsletters for more information on this conference and these special sessions and field trips.

Field Trips

Deglacial history of the Champlain Sea basin and implications for urbanization.

Leaders: H. Russell and D. Cummings (Geological Survey of Canada)

Subglacial hydrology: Implication of the Cantley Meltwater site.

Leader: D.R. Sharpe (Geological Survey of Canada)

Special Sessions

Integration of process based glacial understanding in mineral exploration studies

Organizers: H. Russell, D.R. Sharpe and D. Cummings (Geological Survey of Canada)

Arctic landscape evolution: large scale geomorphic response to regional climatic, oceanographic, and geodynamic processes

Organizers: Duane Froese (University of Alberta) and John Gosse (Dalhousie University)

Living in naturally hazardous places

Organizers: G.R. Brooks and R. Couture (Geological Survey of Canada)

Mackay Lecture Kokelj talks permafrost at GEO2010 Calgary

The Canadian Geomorphology Research Group will present Dr. Steve Kokelj with the 2009 J. Ross Mackay Award at the GEO2010 meeting. GEO2010 is a joint meeting that combines the 63rd Canadian Geotechnical Conference and the 6th

Canadian Permafrost Conference. It will be held in Calgary on September 12-16, 2010.

As part of the award ceremony, Dr. Kokelj will deliver a lecture at GEO2010 describing the central role that permafrost plays in northern environmental science:

Permafrost as a unifying discipline for northern environmental change research: Environmental studies across treeline, Mackenzie Delta region, NWT

A research program in the Mackenzie Delta region was initiated through the study of vegetation, snow and thermal regimes across the treeline. The scope of study was expanded to investigate the impacts of permafrost degradation on terrestrial and aquatic environments. Retrogressive thaw slumps, which are large-scale permafrost degradation features, modify soil chemistry and microclimate, accelerating tall shrub growth and modifying plant communities. Thaw slumps also have significant impacts on water quality and sediment loads in streams. The associated thermal disturbance, talik enlargement and thawing of underlying ice-rich permafrost can drive initiation and polycyclic behaviour of lakeside thaw slumps. This model relates rising permafrost temperatures with the recent increase of thaw slump activity. The central relevance of permafrost in the study of northern environments and engineering makes the discipline a potential focal point around which to develop integrated monitoring and research programs.

Mackay Award winner Steve Wolfe (2000) demonstrates how sand dunes evolve under a changing climate.
 Photograph by Rod McGinn.



Submissions are open 2010 J. Ross Mackay Award

The Canadian Geomorphology Research Group gives the J. Ross Mackay Award to a young geomorphologist in Canada in recognition of a significant achievement. The purpose of the award is to foster the development of geomorphology in Canada and to provide recognition of young scientists in this field.

CRITERIA

The award is to be given for a significant contribution to geomorphology. It may constitute either a single publication appearing within a five-year period previous to the nomination, or a body of work. The candidate's contribution(s) may include a synthesis or regional study, a new concept, a significant advance in a subfield of geomorphology, or the development of a technique. In the case of contributions with multiple authors, the candidate must have assumed a lead role in the development of the work, and this role must be clearly explained in the nomination letter.

Recipients of the award must be:

- a CGRG member or a member of one of the supporting societies;
- either a Canadian citizen or resident and working in Canada;
- within 10 years of graduation from a PhD or Masters or undergraduate program, exclusive of periods relating to parental or medical leaves. The award can be made to an individual or research team, providing that the principal investigators fulfill these criteria.

NOMINATION

Nominations should be made by two CGRG members in a letter to the Chair of the Award Committee and must be accompanied by an up-to-date CV for the nominee. Letters of support by the Proposer and Seconder should clearly outline the basis for the nomination (see criteria above). The Proposer and Seconder may not have acted as supervisors (or directors) of the nominee's research; however, additional supporting letters may be included with the nomination.

The Awards Committee will maintain a file on each nominee which will remain active for two years or until the nominee is no longer eligible. The file may be updated by the nominators in subsequent years.

Nominations should be sent by **November 15, 2010** to:

Dr. Duane Froese
duane.froese@ualberta.ca
 Department of Earth and Atmospheric Science
 University of Alberta
 Edmonton AB
 T6G 2E3
 780.492.1968

National Technical Guidelines and Best Practices related to Landslides: a Canadian initiative for loss reduction

The Earth Science Sector of Natural Resources Canada, through its Geoscience for Public Safety Program, has initiated the development of national technical guidelines and best practices related to landslides. With this initiative, Canada, as a world leader in the field, will actively contribute to reduce losses from landslides, with an aim to contribute to sustainable development.

The guidelines and best practices will provide Canadian geo-professionals, geoscientists, and engineers with a document that will be the state-of-the-art related to the science and applied science of landslides and associated loss reduction. It will be compiled from contributions by many of this country's landslide specialists. The document will provide a comprehensive summary of key landslide topics, including identification, mapping, investigation, analysis, hazard and risk assessment, and mitigation.

Besides providing guidelines and best practices to landslide practitioners, this document will be a valuable reference for

other groups including decision-makers, property owners, land use planners and environmental agencies. Ultimately it will help improve the safety of Canadians.

This initiative has received strong endorsement and support from federal and provincial governmental agencies, learned and professional societies, academia, and geo-professionals in industry. Consultation meetings with all interest groups were held across Canada in early 2010 and helped to define the scope and content of the document. The first chapters are expected to be released later in 2010; the entire document is expected to be completed in 2012.

Canadian geo-professionals interested in contributing to the guidelines and best practices are invited to contact Réjean Couture, Geological Survey of Canada, Ottawa, ON, Email: rcouture@nrcan.gc.ca; Tel: 613-943-5237.

Guides méthodologiques et meilleures pratiques en matière de glissement de terrain : Une initiative canadienne pour la réduction des pertes dues aux aléas naturels.

Le Secteur des sciences de la terre de Ressources naturelles Canada a entamé, par le truchement de son programme intitulé la Géoscience pour la sécurité publique, le développement de guides méthodologiques et de meilleures pratiques en matière de glissement de terrain. Comme chef de file mondial, le Canada contribue activement à la réduction des pertes liées aux glissements de terrain afin d'assurer un développement durable.

Ces guides méthodologiques offriront aux géo-professionnels, géo-scientifiques, et ingénieurs canadiens un ouvrage complet faisant état de la connaissance actuelle, de la science, et les techniques en matière de réduction des impacts liés aux glissements de terrain. Ces guides méthodologiques, auxquels contribuent de nombreux experts canadiens, fournissent une source commune et détaillée de l'expertise technique canadienne sur des sujets clés liés aux glissements de terrain comme l'identification, la cartographie, l'investigation, l'analyse, l'évaluation de l'aléa et du risque, et les mesures d'atténuation.

En plus de fournir des conseils et des indications sur la bonne pratique, ces documents serviront également d'outils de

référence pour des décideurs, des propriétaires d'infrastructures nationales, des gestionnaires de territoires, et des agences d'évaluation environnementales. L'amélioration de la sécurité des Canadiens est visée à travers les bénéfices qu'apporteront ces guides méthodologiques.

Cette initiative peut compter sur un appui solide venant d'agences gouvernementales canadiennes, de sociétés professionnelles et savantes, du milieu universitaire et des géo-professionnels de l'industrie. Une consultation pancanadienne tenue en 2010 auprès d'utilisateurs et de collaborateurs potentiels a permis de structurer la portée et le contenu de ces guides. Les premiers chapitres de ces guides devraient être publiés dès 2010, alors que les guides complets seraient disponibles en 2012.

Les géo-professionnels canadiens intéressés à collaborer à ces guides méthodologiques et de meilleures pratiques sont invités à contacter Réjean Couture à la Commission géologique du Canada, Ottawa (ON), Courriel: rcouture@nrcan.gc.ca; Tél : 613-943-5237.

Join the Canadian Geomorphology Research Group

CGRG was established in 1993 at the International Association of Geomorphology Congress in Hamilton, Ontario. It provides a strong voice for geomorphology in Canada. Its objectives are to advance the science of geomorphology in Canada by 1) organizing and sponsoring technical sessions, workshops, and field trips, 2) publishing newsletters twice a year, 3) operating a listserv (CANGEORG) which maintains a comprehensive bibliography of Canadian geomorphological, Quaternary, and environmental geoscience publications, 4) supporting publication of technical reports and field guides, 5) presenting the J. Ross Mackay Award in recognition of a significant achievement by a young geomorphologist in Canada, and 6) co-operating with related earth science associations within Canada (GAC, AQQUA, CAG, CANQUA, CGU).

We encourage all earth scientists with an interest in geomorphology to join CGRG.

Name: _____

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_____ Postal Code: _____

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Please make cheque or money order payable to the Canadian Geomorphology Research Group

Send completed form and cheque to: Nicole Couture, Secretary-Treasurer, Geological Survey of Canada, 601 Booth Street, Ottawa, ON, K1A 0E8

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