



NEWSLETTER OF THE CANADIAN GEOMORPHOLOGY RESEARCH GROUP

BULLETIN DU GROUPE CANADIEN DE RECHERCHE EN GEOMORPHOLOGIE

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PRESIDENT'S MESSAGE - MOT DU PRÉSIDENT

First I would like to acknowledge my predecessor Antoni Lewkowicz. Toni ensured a successful 2003 AGM by working closely with Ralph Stea and the CANQUA meeting organizing committee. He had a busy AGM chairing the annual meeting, giving a paper and judging (with Trevor Bell and Yves Michaud) the student paper and poster competitions. A report on CANQUA-CGRG 2003 appears in this newsletter. The relatively small group of CGRG members in attendance had a prominent role in the meeting.

With the standard rotation of affiliated societies, CGRG meets with AQQUA in 2004. AQQUA-CGRG 2004 will be held in Quebec City during May 14-17. Michel Allard accommodated a request from CGRG that the meeting be scheduled to avoid conflict with a CGU/AGU conference in Montreal, enabling geomorphologists to attend both meetings in Quebec and even the GAC in St. Catherines immediately prior to the CGRG AGM. Presentations on all aspects of geomorphology will be welcomed at AQQUA-CGRG 2004. Special sessions have been proposed by Antoni Lewkowicz on Periglacial Geomorphology and Permafrost (dedicated to Hugh French) and by Michel Parent on Ice streams of the Laurentian Ice Sheet. The Centre d'études nordiques will hold one-day workshop in dendrochronology. A one-day field trip in southern Québec is planned. Abstracts are due February 1, 2004. Watch for further details at the CGRG web site and via the list server.

International Representation

From the inception of the IAG in 1989 and until the Tokyo conference in 2001, Canadian geomorphology was exceptionally well represented on the executive committee of the IAG by Olav Slaymaker. To restore Canadian representation at the executive level of the IAG, we should consider nominating a prominent Canadian geomorphologist from the ranks of the CGRG. The next IAG executive will be elected at the Sixth International Conference on Geomorphology in Zaragoza (Spain) in September 2005. In other international geoscience news, CGRG member and former president, John Clague, was elected president of INQUA. Congratulations John!

Issues and Challenges

For the past several years, the dominant issues and challenges facing Canadian geomorphologists have been professional registration, NSERC funding of the earth sciences, and the increasing diversity of our research interests. In the January 2000 newsletter, Brian Luckman wrote "the rise of professional accreditation will lead to major new challenges". Now, almost four years later, in all provinces and territories except PEI and Yukon, legislative acts restrict the practice of geoscience to individuals licensed by self-governing professional associations. The consequences for the teaching and practice of geomorphology are major, especially for departments of geography where most courses in geomorphology are

taught. The academic requirements to qualify for professional status range from a degree in geology from specified universities (or equivalent programs), for example in Manitoba, to environmental geoscience syllabi (e.g., BC) comprised of courses in geology but also a lot of coursework from other disciplines. These environmental geoscience syllabi give geography departments in particular the opportunity to offer programs that meet the requirements for professional registration and thus qualify many more geomorphologists for the P.Geo. designation. The web site of the Canadian Council of Professional Geoscientists (<http://www.ccpge.ca/>) is the best source of information on the professional registration of geoscientists.

Previous CGRG presidents have also discussed the poor track record of the NSERC Earth Sciences Granting Committees in the last three grant reallocation exercises. Despite new sources of funding for geomorphological research, much related to environmental change, most academic geomorphologists depend on NSERC for long-term support. The 2003 application from the Solid and Environmental Earth Science sectors to the NSERC Reallocations Committee urged NSERC to support and expand capacity in three targeted areas of research. Two of these areas are "Global Environmental Change and the Challenge of Greenhouse Warming" and "Earth Resources: Environmental Stewardship and Sustainable Development". If the Canadian geoscience community is going to target the environmental earth sciences for relevance and support, then geomorphologists will have to provide some leadership. In the our March 2003 newsletter, Antoni Lewkowicz suggested that a separate submission be prepared by the environmental earth sciences for the next reallocation exercise.

Finally the issue of the diversity and visibility of our discipline is raised by every CGRG president. Canadian geomorphologists are stretched across a large country and an array of sub-disciplines. We make significant contributions to the study of natural hazards and

climatic change, for example, although these fields of study are often seen as the domain of engineers and climatologists, respectively. Our capacity for collaborative research (even with social scientists) is a strength, but it challenges geomorphologists to maintain a strong and unique identity. The CGRG gives a voice and visibility to Canadian geomorphology. I hope to see many of you at our AGM in Quebec City.



Je voudrais d'abord remercier mon prédécesseur Antoni Lewkowicz. Toni a mené de main de maître l'Assemblée générale 2003 en collaborant étroitement avec Ralph Stea et le comité organisateur de la CANQUA. Il a été fort occupé en présidant l'Assemblée annuelle, en présentant une conférence et en participant au jury (avec Trevor Bell et Yves Michaud) du prix 'Olav Slaymaker' honorant la meilleure présentation étudiante (conférence et affiche). Un rapport sur CANQUA-GCRG 2003 est disponible dans ce bulletin. Le groupe relativement restreint des membres du GCRG a apporté une contribution importante au congrès.

Avec la rotation habituelle des associations affiliées, la prochaine rencontre du GCRG se déroulera avec l'AQUA en 2004. Le congrès AQUA-GCRG 2004 se tiendra à Québec, du 14 au 17 mai. Michel Allard, le responsable du comité organisateur, a fait l'impossible pour éviter tout conflit avec la conférence du CGU/AGU à Montréal, afin de permettre aux géomorphologues de participer à au moins deux conférences dans le même voyage, et même à trois si on inclut le congrès de l'AGC-AMC à Ste.-Catherines la semaine précédente. Au programme de l'AQUA-GCRG 2004 il y aura, entre autres, une session spéciale organisée par Toni Lewkowicz sur '*le pergélisol et la géomorphologie périglaciaire*' en l'honneur de Hugh French et une autre organisée par Michel Parent sur '*les courants glaciaires de l'inlandsis Laurentidien*'. La programmation scientifique sera complétée par des présentations générales, un atelier d'une journée en dendrochronologie, organisé par le Centre d'études nordiques de l'Université Laval, et une excursion sur le Quaternaire de la région de Québec. La date

limite de soumission des résumés est le 1^{er} février 2004. De plus amples informations sont disponibles sur le site Web du GCRG et par l'entremise de Michel Allard, à l'Université Laval.

Représentation internationale

Dès le début de l'AIG en 1989 et jusqu'à la conférence de Tokyo en 2001, la géomorphologie canadienne était représentée de façon exceptionnelle au sein du comité de direction de l'AIG par Olav Slaymaker. Afin de soutenir la représentation canadienne au comité exécutif de l'AIG, nous devrions penser à proposer la candidature d'un de nos membres. Le prochain directeur de l'AIG sera élu à la sixième conférence internationale sur la géomorphologie à Zaragoza (Espagne) en septembre 2005. Une autre nouvelle d'intérêt international concerne l'élection de John Clague, membre du GCRG et ancien président, au titre de président de l'INQUA. Félicitations John !

Enjeux et défis

Ces dernières années, les principaux enjeux professionnels pour la discipline ont été l'accréditation professionnelle, la redistribution des fonds du CRSNG en Sciences de la Terre et la diversité croissante de nos intérêts de recherche. Dans le bulletin de janvier 2000, Brian Luckman écrivait "l'arrivée de l'accréditation professionnelle mènera à de nouveaux défis". Presque quatre ans plus tard, toutes les provinces et territoires à l'exception de l'Î-P-E et du Yukon, ont maintenant des actes législatifs limitant la pratique des géosciences aux individus autorisés par des associations professionnelles autonomes. Les conséquences au niveau de l'enseignement et de la pratique de la géomorphologie sont considérables, notamment pour les départements de géographie où l'on enseigne la plupart des cours de géomorphologie. Le profil académique pour obtenir le statut de professionnel en géosciences varie d'une province à l'autre, allant d'un diplôme de premier cycle en géologie comme au Manitoba à celui d'un diplôme en géosciences environnementales comme en Colombie-

Britannique. Ces programmes en géosciences environnementales donnent aux départements de géographie l'occasion d'offrir des programmes qui répondent aux exigences d'accréditation professionnelle et, ainsi, de permettre à beaucoup plus de géomorphologues d'accéder au titre de P.Geo. De plus amples informations sont disponibles sur le site Web du Conseil canadien des professionnels en géosciences (<http://www.ccpge.ca/>).

Mes prédécesseurs au titre de président du GCRG ont longuement discuté de l'érosion du financement du comité en Sciences de la Terre du CRSNG au cours des dernières années. En dépit de nouvelles sources de financement pour la recherche en géomorphologie, surtout dans le domaine des changements climatiques, la plupart des chercheurs universitaires dépendent du CRSNG pour leur financement à long terme. En 2003, le comité de ré-affectation pour les secteurs Sciences de la Terre solides et environnementales ont clairement demandé au CRSNG d'augmenter les budgets pour soutenir et augmenter la capacité de recherche dans trois domaines spécifiques. Deux de ces domaines sont "Les changements environnementaux et le défi de l'effet de serre" et "Les ressources: intendance environnementale et développement durable". Si la communauté géoscientifique canadienne veut viser le secteur des Sciences de la Terre environnementales pour la pertinence et l'appui, alors les géomorphologues devront jouer un rôle plus important. Dans notre bulletin de mars 2003, Antoni Lewkowicz a suggéré qu'un document distinct soit préparé par le secteur des Sciences de la Terre environnementales pour le prochain exercice de redistribution.

Enfin, la question de la diversité et de la visibilité de notre discipline a été soulevée à plusieurs reprises par les présidents du GCRG. Les géomorphologues canadiens sont éparpillés aux quatre coins du pays et à travers un grand éventail de sous-disciplines. Nous apportons des contributions significatives à l'étude des risques naturels et des changements climatiques, par exemple, bien que ces champs d'étude soient souvent vus comme le domaine des ingénieurs et des climatologues, respectivement. Notre

capacité à mener des recherches en collaboration (même avec les sciences humaines) est une de nos forces, mais elle met les géomorphologues au défi de maintenir une identité forte et unique. Le GCRG donne une voix et une visibilité à la géomorphologie canadienne.

J'espère voir bon nombre d'entre-vous à notre prochaine assemblée générale dans la ville de Québec.

Dave Sauchyn

SECRETARY-TREASURER'S REPORT

Membership has increased and we are now above the 180 mark. At last count, 77 members had joined through the CAG, 75 members through the GAC, 21 through AQQUA and 12 members joined directly through the CGRG.

Our finances are strong. Recent significant expenses have included the CGRG AGM in June (Mackay Award and luncheon at about \$1,050 and two Slaymaker student awards at \$250 each) and the renewal of our membership in the IAG (\$856). Expenses for the Mackay Award were less than usual this year because the AGM was held in the same city as the recipient's residence; this allowed for the successful CGRG-sponsored luncheon talk given by Dalhousie's Dr. John Gosse.

We also are considering the creation of a new CGRG logo. We want to have the new design available for printing on T-shirts. The T-shirts that we had in the past were very popular and we would like the opportunity for a new generation of Canadian geomorphologists to show their stripes. Look for more information on the design contest in this newsletter and our website.

How to reach us: You are encouraged to contact any of the executive about newsletter items at the addresses shown at the end of the newsletter, or by Email. Newsletter items should ultimately be sent to Kevin Driscoll or Yves Michaud.

Kevin Driscoll

IAG WORKING GROUPS

Activities Report (2002-2003)

Since the Fifth International Conference on Geomorphology (Tokyo, August 23-28, 2001), the activity of the WGs of the IAG has been incessant. The special sessions, meetings, international conference or symposiums organised by the different WGs amount to over more than ten events mainly held in Europe and Mexico.

The WG "**Interaction between Fluvial, Aeolian and Lacustrine Processes in Arid Regions**" chaired by Prof. Xiaoping Yang organised two symposiums: a poster session "Late Quaternary Landscape Evolution and Palaeoclimates in Arid and Semiarid Regions of Central and East Asia" (INQUA, Congress in July 2003, Reno, USA) and a special session on "Desertification, Land Degradation and Landforms in Arid and Semiarid Regions" during the Regional Conference in Mexico

(October 27th-November 2th 2003). This WG is also preparing a workshop with a field excursion in China for September 2004.

Prof. Paul Carling from the University of Southampton chaired the WG on "**Hydrology and Geomorphology of Bedrock Rivers**", and set up an interactive web-based discussion forum on bedrock channel processes. The site is <http://www.geog.soton.ac.uk/research/bedrock>. A special session "Hazard Management in Bedrock Channels", was held by Prof. Carling himself at the Mexican Regional Conference (October 27th-November 2th).

The **Geoarchaeology** WG has Prof. Eric Fouache as Chairman, and the professors Morgan de Dapper and Zhongyuan Chen as Vice-presidents. This group has the objective of encouraging regional syntheses in geoarchaeology studies and has organised four

conferences, two of which have already been held: the international conference "Environmental Dynamics and History in Mediterranean areas" in Paris (April 24-26, 2002) and a Workshop at the Harokopio University in Athens that will have just taken place in October 2003. This WG is now preparing a field training session in Shanghai for 2004, and a workshop in Zaragoza for the Sixth International Conference on Geomorphology in 2005.

Finally, please note that E. Fouache has prepared a CD with a presentation by his WG.

The group "**Geomorphological Sites: Research Assessment and Improvement**", among its main goals, focuses on the areas conservation, education and tourist interests related to these sites. The group's leader, Dr. Emmanuel Reynard, called a first meeting from 19th to 22th June 2002, organised by Prof. Sandra Piacente and Dr. Paola Coratza, together with the Italian Research Project COFIN 2001-2003 "Geosites in the Italian Landscape".

Other activities include the symposium held during the VI National Geomorphology meeting on September 19-22, 2002 in Valladolid (Spain): "Natural Heritage and Geomorphology". Mario Panizza opened the meeting with his presentation: "Geomorphology applied to Cultural Heritage".

Similarly, a postgraduate seminar on "Geomorphological Landscape Assessment, Protection and Valuation" was held on February 10-14, 2003 in Lausanne. This seminar was attended by 30 students and researchers from universities in Western Switzerland. In this same year, from 1st to 5th October, an International Workshop on the topic "Geomorphological Sites, Assessment and Mapping" took place in Cagliari (Italy).

In Mexico, during the Regional Conference from October 27th- November 2th, 2003, a special session was held on "Geomorphological sites: Vulnerability and Assessment". Several other

activities have been programmed for the years 2004 and 2005, particularly those to be held during the 32nd International Geological Congress, Florence, 2004 and 6th International Conference of Geomorphology, Zaragoza 2005.

The WG on **Large Rivers**, headed by Profs. Avijit Gupta and Steve Wells (U.K), conducted, during the Mexican Regional Conference (2001), a special session devoted to the role of large-scale events, and water and sediment transfer and storage along valley slopes and river channels.

"**Geomorphology and Wine Producing Regions**" is the WG chaired by Prof. Alain Marre of France. This group held its third meeting on "Mountain Regions" in April 2002 in San Giorgio Canavese near Turin (Italy) and is preparing a book of proceedings from the meetings of Camerino (Italy), October 2000, Reims (France), June 2001 and this last San Giorgio Cavanese meeting.

The WG "**Geomorphologic Consequences of Volcanic Eruptions, Including Hazards**", led by Jean-Cloude Thouret of France and J.J. Nossin from The Netherlands, also organised a special session at the Mexican Regional Conference (2003) on "Volcanic Landforms and Hazards", directed by C. Ollier and Thouret himself. The WG also has a website set up and updated by J.J. Nossin at the International Institute for Geo-information and Earth Sciences (ITC, Enschede, The Netherlands), <http://www.itc.nl/ags/volcanic>

Participants wanted

The IAG is comprised of **Working Groups** that are open to the participation of geomorphologists or professionals interested in the objectives of these Groups.

The following are the **Working Groups** for the period 2001-2005:

Interaction between fluvial, aeolian and lacustrine processes in arid regions

Chair: Prof. Dr. Xiaoping Yang, Beijing (China) e-mail: xpyang@95777.com

Hydrology and geomorphology of bedrock rivers

Chair: Prof. Dr. Paul A. Carling, Southampton (U.K.) e-mail: P.A.Carling@soton.ac.uk

Geoarchaeology

Chair: Prof. Dr. Éric Fouache, Paris (France) e-mail: eric.g.fouache@wanadoo.fr

Geomorphological sites: research, assessment and improvement

Chair: Dr. Emmanuel Reynard, Lausanne (Switzerland) e-mail: Emmanuel.Reynard@igul.unil.ch

Large rivers

Chair: Prof. Dr. Avijit Gupta Leeds (U. K.) e-mail: avijit@foxhill.demon.co.uk

Terroirs viticoles

Chair: Prof. Dr. Alain Marre Reims (France) e-mail: alain.marre@univ-reims.fr

Geomorphological consequences of volcanic events, including hazards

Chair: Prof. Dr. J.J. Nossin Enschede (The Netherlands)

Prof. Dr. J.-C. Thouret Clermont-Ferrand (France)

e-mail: nossin@itc.nl

thouret@opgc.univ-bpclermont.fr

The Executive Committee of the IAG is extremely interested that you transmit to the relevant members of your National Association, the importance of disseminating the objectives of the IAG working groups as corresponding members (free participation) or full members.

If you would like any further information on this Working Groups, please do not hesitate to contact me or visit our website <http://www.geomorph.org>

With my very best wishes,

Alfredo Pérez-González

Elected Member of the Executive Committee of the IAG e-mail: alfredog@geo.ucm.es

NEW CGRG LOGO CONTEST

CGRG needs a new logo and we need your help!

You may have assumed that the “Niagara Falls” illustration on CGRG materials is our logo. As attractive as that graphic is, that illustration was not designed to serve as CGRG's logo. In fact, it was created as the logo for the International Geomorphology conference held at McMaster in 1993 and adopted by CGRG during conference preparation. We need a graphic that symbolizes the breadth of Canadian geomorphology and the research undertaken by the CGRG community. We hereby invite the many hundred talented and creative members of CGRG - and their colleagues, students, and friends - to submit a logo design.

CGRG logo contest guidelines

1. Anyone may submit an entry through a CGRG member. Only one entry per individual or collaborative group.

2. The logo should represent the breadth of Canadian geomorphology and the research undertaken by the CGRG community.

3. The logo should preferably be in colour and must be clear when reduced to a minimum size of 4 x 4 cm. Keep in mind that the logo will be used for diverse purposes in both printed and electronic formats.

4. Entries must be received by 15 January 2004 via email (tbell@mun.ca) or regular mail (Trevor Bell, Geography Department, Memorial University of Newfoundland, St. John's, NL A1B 3X9).

5. The winning logo will be chosen by the CGRG Executive. CGRG may work with a professional graphic artist to refine the selected design.

6. The winner will receive honour, glory, fame . . . a cash award of \$250 and a free T-shirt bearing their logo.

Questions?...Contact:
Trevor Bell,
Geography Department,
Memorial University of Newfoundland
St. John's, NL A1B 3X9

THE J. ROSS MACKAY AWARD

One of the major objectives of the organisation is to give out 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. After a year in which no award was given, the 2003 award was made to Dr. John Gosse of Dalhousie University, Halifax to recognize the excellence of John's work on the application of terrestrial in situ cosmogenic nuclides to geochronology, and more specifically for his masterly article entitled "Terrestrial in situ cosmogenic nuclides: theory and applications" Fig.1: John Gosse is receiving The J. Ross Mackay award plaque from Antoni Lewkowicz. Congratulation John that appeared in *Earth Science Reviews* in 2001. John gave the J.R. Mackay lecture, "Cosmogenic nuclide exposure dating in Canada: new strategies, old landscapes, new questions" at the Halifax meeting to a highly interested audience who also heard about applications of his technique through student and collaborators' presentations throughout the meeting.



Fig.1: John Gosse is receiving The J. Ross Mackay award plaque from Antoni Lewkowicz. Congratulation John

Nomination criteria for The J. Ross Mackay award can be found both below and at: <http://cgrg.geog.uvic.ca/jrm1.htm>

CRITERIA

1. The award is to be given for a significant contribution to geomorphology, which may be a synthesis or a regional study, a new concept, a significant advance in a sub-field of geomorphology, or the development of a technique.
2. Recipients of the award must be:
 - a member of one of the following: CGRG, AAQUA, CAG, CANQUA, or GAC.
 - a Canadian citizen or resident working in Canada.
 - within 12 years of graduation from a Ph.D., Masters or undergraduate program, OR under the age of 40 on December 31 of the year of the award.

NOMINATION

Nominations are to be made in a letter to the Chair of the Award Committee signed by two members of the CGRG. The letter of support should first identify the nominees' contribution in a concise statement. The reasons why the contribution is considered significant should then be given. Nominations should be accompanied by a current c.v. and five (5) copies of a publication or part of a publication presenting the contribution.

Nominations should be sent by **January 15th 2004** to:

Dr. Toni Lewkowicz
Associate Dean (Research)
Faculty of Arts
University of Ottawa
Ottawa, Ontario K1N 6N5

Telephone (613) 562-5972
Fax: (613) 562-5975
e-mail: alewkowi@uottawa.ca

THE SLAYMAKER AWARDS

The second Slaymaker awards were given out at the CANQUA/CGRG meeting in summer 2003. These awards, for the best student oral paper and best student poster presented at the CGRG Annual Meeting, are named after Olav Slaymaker, one of Canada's most distinguished geomorphologists. Each winner receives a cheque for \$250, a certificate, and the opportunity to list the honour in their resumé.

Two new student awards were introduced at the 2002 Saskatoon meeting with GAC and given for a second time at Halifax. The Slaymaker awards, valued at \$250 each and named in honour of Olav Slaymaker who was formerly President of the International Association of Geomorphologists, are given for best student oral presentation and best student poster on a geomorphological theme. The recipients in

2003 were Jennifer Smith of Memorial University for her paper (co-authored with Trevor Bell and Lisa Rankin) entitled "Changing landscape and prehistoric settlement patterns along Porcupine Strand, Labrador", and Kimberly Wahl of Acadian University and COGS for her poster (co-authored with Ian Spooner and David Colville) entitled "Thin-skinned debris flows in Cape Breton Highlands National Park, Nova Scotia).

Congratulations to these two winners. We look forward to awarding the next pair of Slaymaker awards at the joint AQQUA-CGRG meeting in Québec City in May 2004.

Antoni Lewkowicz

RECENT THESIS ABSTRACT IN GEOMORPHOLOGY

Ph.D thesis from Chris Houser
Scarborough College Coastal Research Group,
University of Toronto
Supervised by: Dr. Brian Greenwood.

Feedback mechanisms in the morphodynamics of multiple barred nearshores

It is increasingly recognised that the equilibrium model of nearshore morphodynamics is too simplistic and that nearshore morphology reflects a more complex dynamic related to the cumulative effect of a number of storm events, with the spatial and temporal patterns of sediment transport directed (to a greater or lesser extent) by that morphology. The purpose of this study is to identify the feedback mechanisms between the pre-existing morphology and the

hydrodynamics and suspended sediment transport within the inner surf zone, and to describe the consequence of those feedback mechanisms to the behavior of the nearshore environment over a sequence of storm events. Data relating to suspended sediment transport and to wave transformation were collected from the inner surf zone of a marine tidal and a lacustrine multiple-barred nearshore, with the results from the latter site integrated with a morphometric analysis of profile changes over a sequence of storm events. Results of the study suggest that the direction and magnitude of suspended sediment transport vary with the magnitude of local wave dissipation; a strong feedback at the individual bar scale. Within the outer surf zone, suspended sediment transport and bar response tend to converge at a condition of $H_{rms} h^{-1} \approx 0.3$, which is maintained over a

locally defined range of incident wave heights due to the ability of the outer bar to *filter* the incident wave field through breaking and the generation of secondary (harmonic) waves. Further wave breaking offshore also leads to both a weakening of the undertow current within the inner surf zone (particularly within the intertidal zone) and to a bar-scale relationship in which suspended sediment transport and bar response are divergent relative to $H_s h^{-1} \approx 0.6$; potentially the source of much of the unexpected behavior in nearshore morphodynamics. The feedback relationships at the bar-scale are further influenced by shoreward transport

resulting from a modulation of the incident wave field at infragravity frequencies that both balances the offshore transport by undertow currents and forces the inner bars to a position coincident with the antinodes of the standing wave structure. These results, when combined with the morphometric analysis, suggest that the expression of a *bar cycle* over a sequence of storm events is not affected by storm chronology, although the timing and frequency of that cycle depends on the sequence of storm events.

UPCOMING MEETINGS

**ASSOCIATION QUÉBÉCOISE POUR
L'ÉTUDE DU QUATÉNAIRE
(AQQUA)
ET
GROUPE CANADIEN DE RECHERCHE
EN GÉOMORPHOLOGIE
(CGRG)**

Organisé conjointement par le Centre d'études nordiques de l'Université Laval et le Centre géoscientifique de Québec, le congrès conjoint de l'AQQUA et du CGRG aura lieu du 14 au 17 mai 2004, à l'Université Laval, à Québec.

Les communications pourront être soit orales soit par affichage.

Les résumés (300 mots), en français ou en anglais, seront demandés pour le 1^{er} février 2004.

Les communications dans tous les domaines de la géomorphologie, du Quaternaire et de la paléoécologie seront bienvenues. Cependant, nous prévoyons tenir deux colloques thématiques d'une demie-journée ou d'une journée à l'intérieur du congrès :

- La géomorphologie périglaciaire et le pergélisol, en l'honneur de Hugh M. French. (responsable A.G. Lewkowicz)
- Les courants de glace de l'inlandsis laurentidien (responsable : M. Parent)

Dans le cadre de la rencontre, une journée de formation et de discussion en dendrochronologie sera tenue par le Centre d'études nordiques et d'autres laboratoires canadiens.

Une excursion d'une journée au Québec méridional est en planification. Le thème de l'excursion sera la géologie du Quaternaire et l'hydrogéologie.

Pour informations supplémentaires, consulter l'une des personnes suivantes :

Michel Allard, Centre d'études nordiques
Université Laval
michel.allard@cen.ulaval.ca

Dave Sauchyn,
Professor of Geography
Research Coordinator
Prairie Adaptation Research Collaborative
sauchyn@uregina.ca

**CANADIAN GEOMORPHOLOGY
RESEARCH GROUP
(CGRG)
AND
ASSOCIATION QUÉBÉCOISE POUR
L'ÉTUDE DU QUATÉNAIRE
(AQQUA)**

Jointly hosted by Centre d'études nordiques de l'Université Laval and Centre géoscientifique de Québec, the next joint CGRG-AQQUA meeting will take place from 14 to 17 May 2004, at Université Laval, Québec city.

Presentations will be accepted either as oral papers or as posters.

Abstracts (300 words), either in English or in French, will be due for 1 February 2004.

Presentations in all fields of geomorphology, Quaternary science and palaeoecology will be welcomed. We plan, however, to hold two half-day or day-long symposia during the meeting:

- Periglacial geomorphology and permafrost, dedicated to Hugh M. French. (responsible A.G. Lewkowicz)
- Ice streams of the Laurentian ice Sheet. (responsible : M. Parent)

A one-day training and discussion workshop in dendrochronology will also be held by Centre d'études nordiques and other Canadian laboratories.

A one-day field trip in southern Québec is in planning. The theme will be Quaternary geology and hydrogeology.

For further information, please contact one of the following persons:

Michel Allard, Centre d'études nordiques
Université Laval
michel.allard@cen.ulaval.ca

Dave Sauchyn,
Professor of Geography
Research Coordinator
Prairie Adaptation Research Collaborative
sauchyn@uregina.ca

CHURCHILL NORTHERN STUDIES CENTRE

In February 2004, the Churchill Northern Studies Centre (CNSC) will be hosting the 5th

Circumpolar Ecosystems International Workshop and Symposium from February 25-29, 2004 entitled "Northern Margins: Changing Transition Zones in Time". A one-day workshop will focus on snow sampling methods and instrumentation and will take place on Thursday, February 26, 2004. The symposium will be held Friday, February 27 and Saturday, February 28 and consists of a series of oral and poster presentations. Please visit the website at www.churchillmb.net/~cnscc/e5.html

Abstract deadline is December 5, 2003.

For registration information contact:

LeeAnn Fishback, Ph.D.

Scientific Coordinator

Churchill Northern Studies Centre

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CGU-AGU in Montreal, 2004 GROUNDWATER AND CLIMATE CHANGE

Climate change impacts on groundwater are potentially important, affecting groundwater resource availability, groundwater discharge to surface water, etc. But the linkages between climate and groundwater, via recharge and discharge processes, are complex and difficult to quantify and to model. Can climate, surface water and groundwater be integrated in models that allow reasonably robust simulation and predictions of the impacts of climate change on groundwater?

This session will address the issues of climate variability and climate change and the potential or observed impacts on groundwater. A range of time scales and site scales will be considered, including short-term studies that focus on the observed responses of groundwater to climate variability, and the interactions between groundwater and surface water, and long-term studies that focus on the links between groundwater and paleoclimate or between groundwater and future predictions for climate

change, encompassing groundwater recharge processes, low flows, wetland water levels, and coastal aquifer systems.

<http://www.agu.org/meetings/sm04/index.shtml>

Conveners:

D.M. Allen, Department of Earth Sciences,
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G. van der Kamp, Environment Canada,
Saskatoon, Saskatchewan

Email: Garth.vanderKAMP@EC.GC.CA

CALENDAR

2003

GSA Annual Meeting,
Seattle, Washington.
November 2–5, 2003
Information: GSA Meetings, (303) 447-2020.

2004

4^e rencontre ACRH-2004, CWRA-2004
Montréal, Juin 2004

www.ouranos.ca/acrh

CGU-AGU 2004
Montréal, Mai 2004

<http://www.agu.org/meetings/sm04/index.shtml>

GéoQuébec 2004
57^e congrès canadien de géotechnique et 5^e
congrès conjoint SGC/AIH, Quebec City,
Québec, October, 2004
www.geoquebec2004.org

LINKS TO WEBSITES

American Geophysical Union -
<http://earth.agu.org/kosmos/homepage.html>

AQQUA
<http://cgcq.mcan.gc.ca/aqqua/>

Association of American Geographers -
<http://www.aag.org>

British Geomorphological Research Group -
<http://boris.qub.ac.uk/bgrg>

CANQUA
<http://www.mun.ca/canqua/>

European Union of Geosciences -
<http://eost.u-strasbg.fr/EUG>

Geological Society of America -
<http://www.geosociety.org>

Geomorphology Speciality Group Homepage -
<http://www.cla.sc.edu/geog/gsgdocs>

International Association of Geomorphologists
<http://www.homepage.montana.edu/~ueswl/geomorphlist/index.htm>

International Association of Sedimentologists -
<http://www.blackwell-science.com/uk/society/ias>

International Union for Quaternary Research -
<http://inqua.nlh.no>

NSF – Geography and Regional Science -
<http://www.nsf.gov/sbe/bcs/geograph/start.htm>

Ouranos – Consortium en Changements
climatiques au Québec
www.ouranos.ca

Quaternary Geology and Geomorphology
Division – Geological Society of America -
<http://www.ocean.odu.edu>

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CONTRIBUTIONS TO FUTURE CGRG NEWSLETTERS

The CGRG newsletter is published twice annually. As with all such newsletters, its success is directly dependent on the contributions that we receive. CGRG welcomes contributions to future newsletters from any of our members. These should be of interest to the Canadian geomorphology community and could include discussions, commentaries, reviews of regional or national meetings and field trips, summaries of issues pertinent to geomorphology, and announcements of future meetings and workshops. Please forward your contributions to:

ymichaud@nrcan.gc.ca

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 listserver (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) cooperating with related earth science associations within Canada (GAC, AQQUA, CAG, CANQUA). We encourage all earth scientists with an interest in geomorphology to join CGRG

CANADIAN GEOMORPHOLOGY RESEARCH GROUP

Registration Form

2004

Name: _____

Address: _____

_____ Postal Code: _____

Phone numbers: (Home) _____ (office) _____

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Institution: _____

Annual dues: \$15

New member _____; membership renewal _____ *Please check one*

Student _____ Academic _____ Government _____ Industry _____ *Please check one*

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

(Photocopy application form as necessary)

Send completed form and cheque to: Kevin , Kevin Driscoll, Secretary-Treasurer, 71 Equestrian Drive, Kanata, ON, K2M 1H7