



**NEWSLETTER OF THE CANADIAN  
GEOMORPHOLOGY RESEARCH GROUP**

**BULLETIN DU GROUPE CANADIEN DE  
RECHERCHE EN GEOMORPHOLOGIE**

Number 14

January 2001

**PRESIDENT'S MESSAGE - MOT DU PRÉSIDENT**

I would like to begin by thanking Brian Luckman for all his efforts as president and now as past president of CGRG. In particular, I would like to recognize his efforts at focussing the debate on the NSERC reallocation exercise. Many of us had the opportunity to respond on an individual basis, but Brian made a great effort to represent the collective views of CGRG as well. Steering committees for the exercise have now been struck and chairs of the committees met in October to discuss the phase. A report of this meeting can be found at <http://www.nserc.ca/programs/real2000/report-oct04-e.htm> which sets out the next steps for the exercise. Environmental and solid earth sciences have much at stake in this process, so continuing feedback and dialog are essential.

Many will have seen the recent survey distributed by the Canadian Geoscience Council (<http://www.geoscience.ca/index.html>). This is a solid attempt to collect data on the number, background and area of specialty of geoscientists in Canada. I would encourage everyone to respond to the survey and be counted. The results will be useful in identifying current strengths and weaknesses in geoscience training in Canada. Some of you may have noted that CGRG is not listed as a separate society/organization in the survey. This in part reflects our constitution as a group affiliated with several established associations (CAG, CANQUA, GAC-MAC, AQQUA).

The CGRG sponsors and encourages participation in five main activities: conferences, workshops, a functional and highly useful web site, a newsletter and publications. We have been successful in most of these efforts but, with a few exceptions, have not done particularly well in getting conference-based research results into publication. I would like to encourage anyone organizing special sessions at upcoming conferences to make every effort to get a series of collected contributions together for publication. At this years AGM in Montreal I would like to see us devote some time on the best practices for getting out edited volumes and special journal issues of geomorphic research.

The CGRG web site continues to attract much interest. I want to thank Dan Smith for his continuing effort to maintain and upgrade the site. Suggestions for additions or enhancements are of course welcomed. Please forward any ideas to myself or Dan Smith. This past September another workshop was sponsored by CGRG concerning sediment transport by wind. Full details of the workshop are reported on in this newsletter. However, I do want to thank Drs Cheryl Mckenna-Neuman and Bill Nickling for all their time and effort in organizing the event. The workshop participants were treated to lively discussion, debate and hands-on demonstrations of laboratory and field methods in aeolian sediment transport.

Another area that CGRG could help facilitate is outreach beyond the academic and professional consulting communities. In the past year I have noted presentations by CGRG members on the Discovery Channel and other popular media outlets. We have no useful archive of these efforts or a summary of the topics discussed. I would like to encourage all those who are approached to interview on topics of geomorphic interest to submit a one paragraph summary to the CGRG web site that highlights the topic of the interview including the program, date and time.

This is a very busy year for conferences and next year looks the same. There are several opportunities to showcase Canadian geomorphic research.

The CGRG sponsored a session and held its AGM at the AQQUA/CGRG meeting this past August in Montreal. Details of the conference are provided elsewhere in the Newsletter. The conference was well attended, papers were well presented and the field trips were a success. However, the number of CGRG participants was small and again was partly due to timing and conflicts with other conferences. Michel Lamonte did a superb job organizing the conference and I wish to thank him and his team for all their efforts.

CGRG will hold its AGM and sessions jointly with the Canadian Association of Geographers conference in Montreal May 29 to June 3, 2001. This is the 50<sup>th</sup> anniversary of the CAG so there are high expectations for attendance and interaction. As we announced earlier the CGRG sessions will be on June 2<sup>nd</sup> and 3<sup>rd</sup> with the theme Advances in Canadian Geomorphology. Three theme areas have been identified including research in fluvial, aeolian and hillslope geomorphology. Three keynote speakers have been identified: Prof. Rob Ferguson, Prof. Bill Nickling and Prof. Rorke Bryan and a field trip on fluvial geomorphology and river management in southern Quebec is planned. Given that this is a joint meeting, CGRG members are treated as if

they are CAG members (whether you are or not). For more details on registration see:

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|---|------------|------|
| CGRG  | WEB        | PAGE |
| <a href="http://cgrg.geog.uvic.ca/confer.html">http://cgrg.geog.uvic.ca/confer.html</a> |            |      |
| CAG   | CONFERENCE | WEB  |
| <a href="http://www.geog.umontreal.ca/cag2001">www.geog.umontreal.ca/cag2001</a>        |            |      |

This coming August 23-28 the IAG has organized the fifth International Conference on Geomorphology at Chuo University in Tokyo, Japan. CGRG has prided itself on being one of the most visible/active members of the IAG. This is in part due to the leadership of outgoing IAG president Olav Slaymaker. Olav has encouraged and supported the participation of CGRG and was instrumental in keeping CGRG informed and involved. Although the early registration deadline was Dec. 31, 2000, advanced registration continues until June 30, 2001. My informal survey of possible attendees this past fall indicated that only a small number from Canada will be attending. Cost and distance are always a factor. However, I would like to highlight that at this meeting there will be a review of existing working groups (special projects) and proposals for new ones. The existing working groups are on the geomorphology of large rivers, volcanic hazards and geoarchaeology. I would encourage you to establish through your contacts support for the continuation of these working groups or proposals for new ones. Our numbers at the ICG may not be large but there is no reason why our ideas should not be well represented. Please see: <http://wwwsoc.nacsis.ac.jp/jgu/firstcir.html> for additional details.

CANQUA is holding its bi-annual meeting in Whitehorse this August 20-24. Chris Burn is organizing a CGRG session on permafrost and periglacial processes at the conference. Abstracts are due by May 31, 2001 and further details area available at: <http://www.beringia.com/canqua/p&a.html>

CGRG has plans to meet with GAC-MAC in 2002 in Saskatoon. Dave Sauchyn and Steve Wolfe have begun discussions on a session on semi-arid environments under the IGCP 314 umbrella. Further details will be available in the

new year. Finally, the CGRG has plans for an AGM with CANQUA in Halifax for 2003 and a possible session on sediment transport in earth surface environments with CGU that same year. Tout d'abord je veux remercier Brian Luckman de son travail comme président et maintenant comme ex-président du CGRG. J'aimerais souligner, en particulier, ses efforts à orienter la discussion sur l'exercice de redistribution de NSERC. Bon nombre d'entre nous ont eu l'occasion de répondre sur une base individuelle, mais Brian a fait le grand effort de représenter l'ensemble du CGRG. Des comités de coordination ont été formés et les présidents de ces comités ont été rencontrés en octobre pour discuter cette phase. Un compte rendu de cette réunion qui met en place les prochaines étapes de l'exercice est disponible sur <http://www.nserc.ca/programs/real2000/report-oct04-e.htm>. L'environnement et les sciences de la terre occupent une grande place dans ce processus, c'est pourquoi une implication continue est essentielle.

Plusieurs d'entre vous ont pris connaissance du sondage récent émis par le Conseil géoscientifique canadien (<http://www.geoscience.ca/index.html>). Il a pour but de rassembler des données sur le nombre, la formation et le domaine de spécialisation des géoscientifiques au Canada. J'encourage chacun de vous à répondre à ce sondage. Les résultats serviront à identifier les forces et les faiblesses actuelles dans l'enseignement des géosciences au Canada. Vous avez peut-être remarqué que le GCRG n'apparaît pas dans la liste société/organisation du sondage. Ceci reflète, en partie, notre constitution en tant que groupe affilié à plusieurs associations établies (CAG, CANQUA, GAC-MAC, AQQUA).

Le GCRG commandite et encourage la participation à cinq activités principales: conférences, ateliers, site Web fonctionnel et très utile, bulletin et publications. Nous avons bien réussi dans la plupart de ces activités sauf, la publication des compte-rendus de conférences. J'encourage les organisateurs de sessions spéciales des prochaines conférences à rassembler une série de contributions pour

publication. Lors de l'AGM à Montréal j'aimerais que nous nous penchions sur les meilleures façons de sortir les volumes édités et les numéros spéciaux sur la recherche en géomorphologie.

Le site Web du GCRG continue d'attirer beaucoup d'intérêt. Je veux remercier Dan Smith de son effort continu à mettre à jour et améliorer le site. Des suggestions pour des ajouts ou de l'amélioration sont, bien entendu, acceptées. Vous les faites parvenir à Dan Smith ou à moi-même. En septembre dernier, un autre atelier a été commandité par le GCRG au sujet du transport éolien. Vous trouverez un rapport complet concernant cet atelier dans ce bulletin. Je veux toutefois remercier Cheryl McKenna-Neuman et Bill Nickling pour le temps et le travail consacrés à organiser l'événement. Les participants ont eu droit à une discussion animée, un débat et des démonstrations de méthodes laboratoire et de terrain en transport de dépôt éolien.

Un autre domaine où le GCRG pourrait apporter sa contribution dépasse le cadre des communautés de consultation scolaire et professionnelle. Au cours de la dernière année, j'ai remarqué des présentations faites par des membres du GCRG sur le Canal Découverte et d'autres médias populaires. Nous n'avons aucune information sur ces présentations ni de sommaires des sujets discutés. Je demande à tous ceux qui sont contactés pour des entrevues ayant pour sujet la géomorphologie, de soumettre au site Web du GCRG un sommaire d'un paragraphe ayant comme information principale le sujet de l'entrevue, le titre de l'émission, la date et l'heure.

Les conférences sont très nombreuses au programme de cette année et il en va de même pour l'année prochaine. Plusieurs opportunités nous sont offertes de présenter la recherche en géomorphologie au Canada.

Le GCRG a commandité une session et a tenu son AGM à la réunion de l'AQQUA/GCRG au mois d'août dernier à Montréal. Les détails de la conférence sont fournis plus loin dans le bulletin. La conférence a attiré une grande

assistance, les communications ont été bien présentées et les excursions furent un succès. Cependant, les participants du GCRG étaient peu nombreux, encore une fois à cause d'un conflit d'horaire avec d'autres conférences. Michel Lamothe a fait un travail superbe pour organiser la conférence et je les remercie sincèrement, lui et son équipe.

Le GCRG tiendra son AGM et ses sessions conjointement avec la conférence de l'Association canadienne des géographes à Montréal, du 29 mai au 3 juin 2001. Comme c'est le cinquantième anniversaire de l'ACG, les attentes sont élevées au point de vue de l'assistance et de l'interaction. Comme nous l'avons précédemment annoncé, les sessions du GCRG auront lieu les 2 et 3 juin et le sujet sera l'avancement en géomorphologie au Canada. Trois thèmes ont été identifiés comprenant la recherche en géomorphologie fluviale, éolienne et de versant. Trois conférenciers principaux ont été identifiés : Prof. Rob Ferguson, Prof. Bill Nickling et Prof. Rorke Bryan et une excursion sur la géomorphologie fluviale et la gestion des rivières au Québec méridional est prévue. Étant donné que c'est une réunion conjointe, les membres du GCRG seront aussi considérés comme membres de l'ACG (que vous le soyez ou non). Pour plus de détails sur l'inscription voyez

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| CRRG  | WEB        | PAGE |
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Du 23 au 28 août prochain aura lieu la cinquième conférence internationale sur la géomorphologie organisée par l'AGI à l'université de Chuo à Tokyo, au Japon. Le GCRG est fier d'être un des membres les plus visibles/actifs de l'AGI. C'est en partie grâce au président sortant Olav Slaymaker de l'AGI. Olav a encouragé et supporté la participation du GCRG en le maintenant informé et impliqué. Bien que la date limite des inscriptions ait été fixée au 31 décembre 2000, elles seront acceptées jusqu'au 30 juin 2001. D'après mon sondage informel de l'automne dernier, les participants canadiens y seront peu nombreux. Le coût et la

distance sont toujours les principaux facteurs. Cependant, je vous souligne que lors de cette réunion, les groupes de travail existants (projets spéciaux) seront passés en revue et des propositions seront faites pour en créer des nouveaux. Les groupes de travail existants se penchent sur la géomorphologie des grands fleuves, les risques volcaniques et la géoarchéologie. Je vous incite, avec l'aide de personnes ressources, à accorder votre soutien à ces groupes de travail existants ou à venir. Nous sommes peut-être peu nombreux à participer à la CGI mais il n'y a aucune raison pour que nos idées ne soient pas bien représentées. Voyez <http://wwwsoc.nacsis.ac.jp/jgu/firstcir.html> pour les détails supplémentaires.

La CANQUA tient sa réunion bisannuelle à Whitehorse du 20 au 24 août prochain. Chris Burns y organise une session du GCRG sur le pergélisol et les processus périglaciaires. Les résumés doivent être soumis avant le 31 mai 2001 et les informations sont disponibles à : <http://www.beringia.com/canqua/p&a.html>

Le GCRG planifie une réunion avec le GAC-MAC en 2002 à Saskatoon. Dave Sauchyn et Steve Wolfe ont entamé des discussions pour une session sur les environnements semi-arides sous la responsabilité d'IGCP 314. D'autres détails seront disponibles au cours de l'année. Finalement, le GCRG prévoit un AGM avec la CANQUA à Halifax en 2003 et possiblement une session sur le transport des sédiments avec le CGU la même année.

Joseph Desloges

## SECRETARY-TREASURER'S REPORT

Membership in CGRG stands at 147, with 55% of people joining through the GAC, 25% through CAG, 20% through CGRG, and 9% through AQQUA. For all those who register directly through CGRG, **its time to renew you membership.** The application form is included in the newsletter, and the cost is \$15. This mailing of the newsletter includes people who were members in 1998, 1999, and 2000. Your membership status is included on the members list, which is now posted on the website. The CGRG supports the website, job listings for geomorphologists, the newsletter, the Mackay award and lecture, meetings, and field trips. Please consider rejoining if you have not already done so.

This year we ended up with a positive balance of \$5855, due mainly from a carry-over from last year. This money will go towards publications and future meetings run through our parent Canadian societies, and sponsor a delegate to the IAG.

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 Lynda Dredge or Yves Michaud.

Lynda Dredge

## EOLIAN WORKSHOP REPORT

On Saturday September 16, 2000 a dedicated group of graduate students, faculty and other research scientists met at Trent University for a one-day workshop concerning aeolian sediment transport. The workshop was hosted by Dr. Cheryl McKenna Neuman (Trent University) and Dr. Bill Nickling (University of Guelph). The purpose of the workshop was to discuss the current state of sediment transport modelling in aeolian environments, highlight future needs and to demonstrate modern lab and field measurement techniques.

About 25 attended and enjoyed the discussions, equipment demonstrations and refreshments. The workshop began with a round table discussion on issues of surface boundary layer measurement and the basic physics of sediment entrainment by wind. Of particular note was the difficulty in using standard anemometry (1 m and 10 m tower heights) measurements to capture adequate information on wind shear over deformable boundaries. It was argued strongly that the lower boundary layer (1 m) characterized by Reynolds stresses, was the most



Bill Nickling demonstrates the Guelph-Trent sediment trap to participants

important aspect in defining energy transport relationships. Differences in modelled and measured transport rates were ascribed to the spatial in-homogeneity of boundary conditions. Moisture content, particularly as it influences cohesion and surface crusts, accounts for much of the variability. Organic matter content and surface vegetation are also difficult to parameterize. While modelling results have improved greatly, there still remains a gap in understanding sub-aerial sediment transport by wind compared to modelling work in coastal and fluvial systems.

Development and testing of transport models are conducted by using a suite of laboratory and field measurement techniques. Dr. McKenna Neuman demonstrated the Trent University Wind Tunnel (TWT) and highlighted the advantages and disadvantages of open-loop systems compared to close-looped systems. Two innovations of the TWT have assisted in improving wind transport models. The first is high-resolution, micro-pitot tube arrays that can be stepped through the boundary layer using computer control. Proximity sensors are used to limit downward travel of the pitot tubes and thus can be referenced to bedform heights. The second is the ability to monitor grain entrainment in low temperature conditions. The entire flume is housed in a computer controlled cold room capable of temperatures as low as -20°C. Sediment transport in the TWT is measured automatically by a Guelph-Trent wedge trap design linked to an electronic digital balance. All data are captured and plotted automatically by an integrated software package. The approaches allows for simulation of a wide

range of surface configurations and ambient environmental conditions. Additional advantages of the close-looped system (at Guelph) were discussed.

In the second part of the workshop, the group was treated to a demonstration of the Guelph portable field wind tunnel. The equipment allows for assessment of entrainment and transport conditions over in-situ surfaces using controlled wind conditions. A unique feature of the portable tunnel was the relative ease of set-up and its mobility. Sediment transport measurements were facilitated by Sensit probes and dust-particle collectors. Additional field gear was demonstrated and included innovative pressure sensitive shear plates for shear stress partitioning, and a laser scanning system for surface roughness and topographic profiling. The shear stress instrumentation included a bi-directional shear plate design, for use in determining shear stresses imparted on standing shrub-like vegetation. A more complex bed-design was also demonstrated, for partitioning of shear stresses between upright obstacles and the ground surface. Shear stress partitioning experiments conducted to date have shown that present partitioning models (such as the Raupach model) perform reasonably well.

The CGRG, along with all those who attended, are highly appreciative of the efforts made by Drs. McKenna Neuman and Nickling (and of course their students!) in preparing this informative and enjoyable workshop.

Joe Desloges and Steve Wolfe

## IAG REPORT

"The year 2001 will see the 5th International Geomorphological Conference hosted by the Japanese Geomorphological Union in Tokyo from August 23-28. Previous venues were Manchester (1985), Frankfurt (1989), Hamilton (1993) and Bologna (1997). Nominations for the Executive to serve from 2001-2005 are requested for the following positions: Vice-

President, Secretary General, Treasurer, Publication Officer and two members without portfolio. The present Secretary General, Piotr Migon (Poland) requires that these nominations be in his hands no later than July 20, 2001.

There will also be voting on the location of the 6th IGC in 2005. Proposals to host the

conference have to be with the Secretary General by May 20, 2001. Thirdly, a new set of Working Groups will be created and proposals are requested. Suggestions should be forwarded to our President, Joe Desloges, as soon as possible. CGRG members will also be interested to know that there are several features of a proposed revised constitution that will be discussed and voted on in Tokyo. An expanded role for the Adhering National Bodies, eligibility of all elected Executive Members for nomination as President in the following four year period and removal of automatic succession of Vice-President to President are some of the key changes proposed. The Canadian delegate, who has yet to be selected, will be responsible for voting at the Council Meeting in Tokyo.

I would urge as many Canadian geomorphologists as possible to be present. The JGU is one of the largest, most active and most compatible national geomorphological groups, with many Canadian collaborations. I am told that the emphasis will be strongly on recent developments in geomorphology and at last count 16 paper sessions and 26 symposia have been organised. Six pre- and 11 post-congress field trips are planned in Japan and 6 are planned in China, Taiwan and Korea.'

Olav Slaymaker  
President of IAG.

#### ONTARIO LICENSING CLOSER THAN EVER

In the summer the Ontario Legislature passed the Act to establish the Association of Professional Geoscientists of Ontario (APGO). In October the proposed regulations for governing the Association and its activities were published, and they should go for approval to the Cabinet in January. Shortly thereafter, we may expect the Association to consider applications for membership. The Ontario regulations allow for a two-year period during which existing geoscientists, who do not possess the precise requirements for registration may apply to have their existing qualifications and experience

recognised. This period will likely begin in early February.

APGO has solicited nominations for the adjudication boards from the community of geomorphologists in Ontario, and I was assured by John Bowlby, Vice-President and Registrar of APGO, that geomorphology will be in the front row of geoscientific practices considered under the Environmental Geoscience rubrics.

Chris Burn

#### UPCOMING MEETINGS

##### **Call for Papers Special Session(s) of the CGRG Advances in Canadian Geomorphology**

CGRG-CAG Annual Meeting  
May 28- June 3, 2001  
Montreal, Quebec

This is a call for papers for special sessions of the Canadian Geomorphology Research Group to be held at the 50th Anniversary Meeting of the Canadian Association of Geographers. The

CGRG sessions will be on June 2nd and 3rd, 2001.  
Theme: **Advances in Canadian Geomorphology**

Three research areas have been targeted for the CGRG meeting in Montreal. They are Advances in Research in Fluvial, Aeolian and Hillslope Geomorphology. We have secured three keynote speakers for each theme: Professor Rob Ferguson (University of Sheffield), Professor Bill Nickling (Guelph University) and Professor Rorke Bryan (University of Toronto).

Please consider submitting papers to any one of these theme areas. Along with papers on process and form, submissions on landform evolution and current and future trends in the theme areas are welcomed.

Co-organisers for the sessions will be:

André G. Roy, Université de Montréal  
(andre.roy@umontreal.ca)  
Joseph R. Desloges, University of Toronto  
(desloges@geog.utoronto.ca)

The deadline for submission of Abstracts to the CGRG special sessions will be 15 February 2001. Please forward your abstract to either co-

organiser who will submit it on your behalf to the local organising committee of the CAG. Indicate with your abstract submission if you wish to give an oral or a poster presentation.

Registration and accomodation forms and deadlines can be found in the Second Circular of the CAG conference or at:

CGRG web page  
<http://cgrg.geog.uvic.ca/confer.htm>  
CAG conference web page  
[www.geog.umontreal.ca/cag2001](http://www.geog.umontreal.ca/cag2001)

Please note that a field trip on **Fluvial Geomorphology and River Management in Southern Québec** is scheduled for Friday June 1st. Other field trips of interest for CGRG members are also planned within the CAG activities.

We look forward to a lively and interactive set of sessions. Students are particularly encouraged to participate.

**Appel de communications**  
**Séances spéciales du GCRG**  
**Avancement de la recherche en géomorphologie au Canada**

Congrès annuel du GGRC-ACG  
Du 28 mai au 3 juin 2001  
Montréal, Québec

Voici l'appel de communications pour des séances spéciales du Groupe Canadien de Recherche en Géomorphologie. Ces séances se tiendront à Montréal lors du congrès du 50ième anniversaire de l'Association canadienne des géographes. Les séances du GCRG se dérouleront les 2 et 3 juin 2001.

**Thème: Avancement de la recherche en géomorphologie au Canada**

Pour la rencontre de Montréal nous avons ciblé la géomorphologie fluviale, éolienne et des versants. Pour lancer chacune des séances, nous avons invité les professeurs Rob Ferguson

(University of Sheffield), Bill Nickling (Guelph University) et Rorke Bryan (University of Toronto) comme conférenciers.

Vous êtes invités à soumettre des communications dans l'un ou l'autre des domaines choisis. Nous serons heureux de recevoir des propositions de communication sur les processus, les formes, l'évolution morphologique du paysage et les nouvelles tendances de la recherche dans notre discipline.

Les coorganisateur de ces sessions spéciales sont:

André G. Roy, Université de Montréal  
(andre.roy@umontreal.ca)  
Joseph R. Desloges, University of Toronto  
(desloges@geog.utoronto.ca)

La date limite pour soumettre un résumé est le 15 février 2001. Prière d'envoyer votre résumé à l'un ou l'autre des organisateurs qui l'acheminera en votre nom au comité organisateur de l'ACG. Indiquez clairement si vous préférez donner un exposé oral ou présenter une affiche.

Les formulaires d'inscription au congrès et de réservation d'hébergement se trouvent dans la seconde circulaire du congrès de l'ACG ou sur les pages web suivantes:

Le GCRG <http://cgrg.geog.uvic.ca/confer.htm>  
Le congrès de l'ACG  
[www.geog.umontreal.ca/cag2001](http://www.geog.umontreal.ca/cag2001)

Notez qu'il y aura aussi une excursion sur la **Géomorphologie fluviale et la gestion des rivières dans le sud du Québec**. L'excursion se déroulera le vendredi 1er juin. D'autres excursions d'intérêt pour les membres du GCRG sont aussi à l'horaire des activités de l'ACG.

Nous anticipons des échanges simulants et fructueux et nous encourageons tous nos membres et en particulier les étudiants à participer.

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**GLACIER-INFLUENCED  
SEDIMENTATION ON HIGH-LATITUDE  
CONTINENTAL MARGINS: MODERN  
AND ANCIENT**  
**A meeting of the Marine Studies Group of the  
Geological Society to be held at:**  
Bristol Glaciology Centre, School of  
Geographical Sciences,  
University of Bristol, England  
**29-30 March 2001**

**First announcement and call for papers**

The last decade has seen important advances in the understanding of glacier-influenced sedimentation on high-latitude continental margins. Sedimentary packages in fjord-shelf-slope settings preserve a record of interactions between glaciers, oceans and climate. The objective of this meeting is to provide researchers working on these topics in both modern and ancient environments with a forum for presentation and discussion of their research. The scope of the meeting is intended to be broad, reflecting the frequently inter-disciplinary nature of the topic.

Topics to be addressed include, but are not limited to:

- Geophysical and geological investigations of glacier-influenced sedimentation on continental shelves and slopes
- Glacimarine sedimentary processes and facies in high-latitude fjords
- Controls on glacier-influenced sedimentation on continental margins
- Reconstruction of former glacier-dynamics from geological and geophysical investigations along continental margins
- Sedimentological investigations of ancient glacier-influenced margins
- Genetic discrimination of glacier-influenced lithofacies on continental slopes

Invited speakers include: J.B. Anderson, J.T. Andrews, M.J. Hambrey & R.D. Powell.

It is intended to publish refereed papers from this meeting as a Geological Society Special Publication. If you would like to contribute to the meeting, please fill in the registration and abstract forms provided on the conference web page, noting your preference for an oral or poster presentation.

Registration fee: £45 professionals, £30 members of the Geological Society and students. Fee includes abstracts booklet, tea/coffee and lunches. There will also be a formal conference

dinner (£30). Delegates are asked to arrange their own accommodation directly. Registration details, including a list of accommodation and location maps, are provided on the conference web page at:

<http://www.ggy.bris.ac.uk/glac/glacimarine.html>

#### Convenors

**Professor Julian A. Dowdeswell and Dr. Colm Ó Cofaigh**

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Both at: Bristol Glaciology Centre, School of Geographical Sciences,  
University of Bristol, Bristol, BS8 1SS, England  
Fax: +44-(0)117-9287878

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### THE ANNUAL GEOLOGICAL ASSOCIATION OF CANADA – MINERALOGICAL ASSOCIATION OF CANADA 2001

Joint Annual Meeting will be held in St John's Newfoundland, May 27-30 2001

There are several sessions of interest to Quaternary Researchers listed below. Abstract deadline is January 15, and on-line abstract submission and more details regarding the conference can be found at the conference web site <http://www.geosurv.gov.nf.ca/stjohns2001/>

Technical sessions of interest

SY4: Global Change and Its Impact on the North Atlantic Borderlands : Moire Wadleigh and John Jacobs (Memorial University of Newfoundland), Don Forbes (Geological Survey of Canada) and Frank McDermott (University College Dublin)

SS3: Quaternary Geology of Northwest Atlantic region : David Liverman and Martin Batterson (Geological Survey of Newfoundland and Labrador) and Norm Catto and Trevor Bell (Memorial University of Newfoundland)

SS6: Environmental And Geotechnical Aspects Of Resource Development And Exploitation John Gale (Memorial University of Newfoundland) and Tom Al (University of New Brunswick)

SS7: Terrestrial In Situ Cosmogenic Nuclide Techniques and Applications : John Gosse (University of Kansas)

SS8: Geology of Marine Habitat : Brian Todd and Dick Pickerill (Geological Survey of Canada) and Bill Collins (Quester Tangent Corporation, Victoria, BC).

SS15: Water as a commodity : Bruce Broster (University of New Brunswick)

SS18: Canada's Coastal Hazards : Peter T. Bobrowsky (British Columbia Geological Survey).

#### Field Trip

##### B6. QUATERNARY GEOLOGY OF WESTERN NEWFOUNDLAND

This is a five-day field trip, traversing the west coast of Newfoundland from southern St. George's Bay to the tip of the Great Northern Peninsula. It will encompass a wide range of themes, including sedimentology, stratigraphy, glaciated landscapes, archaeology, sea-level change, hazards and more. The first day of the trip will examine some spectacular glacial and glacial sequences on the margins of St. George's Bay. Well-exposed sections there shed light on the timing of late-glacial re-advances in the area, as well as an unusual and varied deglacial sedimentological record. The second day will be spent in Gros Morne National Park via Corner Brook and Deer Lake. Gros Morne is a world heritage site, renowned for its geology. The unusual landscapes of the Tablelands will be visited, as well as examining evidence for sea-level change at Trout River, and slope movements along Trout River Pond. Weather

permitting, a boat tour of Trout River Pond will be included. On the third day, the group will continue to move northward, examining coastal environments, weathering zones and evidence of sea-level change in the north of the park, before continuing on to Port-au-Choix. Port-au-Choix has a complex sea-level history that is closely related to the archaeological record, which spans 5000 years. The fourth day will be spent on the tip of the Great Northern Peninsula, focusing on the Viking archaeological site at L'Anse aux Meadows. The final day will re-trace our steps to Deer Lake

where the trip will end. (Cost includes taxes, meals, transportation, accommodations and guidebook. Participants should arrange their flights to depart the trip from Deer Lake. For more details email [dgl@zeppo.geosurv.gov.nf.ca](mailto:dgl@zeppo.geosurv.gov.nf.ca))

Leaders: Martin Batterson and Dave Liverman (Geological Survey of Newfoundland and Labrador) and Trevor Bell (Memorial University of Newfoundland)

Duration: 5 days, May 31 - June 4

Cost (Estimate): \$750.00

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#### **47th MIDWEST FRIENDS OF THE PLEISTOCENE FIELD MEETING**

To be held Friday, June 1st to Sunday, June 3rd, 2001 in Thunder Bay, ON.

Hosted by Dr. Brian Phillips and colleagues, Lakehead University.

The meeting will focus on the deglaciation of the borderland region and the associated paleoindian presence. The interplay between Rainy River ice, the ice of the Marquette readvance, eastern outlets of Lake Agassiz and the sequence of lakes in the Superior basin will be highlighted. The Saturday field trip will explore the Arrow Lake / Whitefish corridor west of Thunder Bay. The Sunday morning field trip will go down the north shore to end in Grand Marais, MN.

Accommodation will be in residences and townhouses on campus. Towards the end of January please visit the Department of Geography web site at <http://www.lakeheadu.ca/~geogwww/geoghp.html> for further details.

Meanwhile, to ensure that the Midwest FOP database is up to date, please send any recent changes of email or street address to [bandjp@air.on.ca](mailto:bandjp@air.on.ca) if you are interested in being on the mailing list for the First Circular. Thank you.

Brian A.M. Phillips  
Dept. of Geography  
Lakehead University

#### **CANQUA FIELD TRIP**

**Easternmost Beringia- 3 Million Years of Environmental Change: Pre-glacial, Multiple Glacial and Interglacial Deposits of the Klondike goldfields, Tintina Trench and Southern Ogilvie Mountains, Yukon**

August 25 – 29, 2001 (Saturday – Wednesday)

Estimated cost: \$400 CDN including fieldtrip travel to and from Whitehorse by van, lodging (August 25, 26, 27, 28) in Dawson City, and bag lunches on all five days; \$800 CDN with optional 1 day helicopter trip to Tintina Trench. NOTE: Registration is limited to 20 participants excluding the leaders. Please book early to avoid disappointment. Registration will be closed after May 31, 2001 in any event.

Further conference details can be found at <http://www.beringia.com/canqua/index.htm>

Leaders: Duane Froese (University of Calgary), Alejandra Duk-Rodkin (GSC Calgary) and Jeff Bond (Yukon Geology Program), with contributions from: Rene Barendregt (University of Lethbridge), Brandon Beierle (Queens University), Grant Lowey (Yukon Geology Program), Charlie Schweger (University of Alberta), Scott Smith (Agriculture Canada), John Westgate (University of Toronto), and John Storer (Yukon Heritage Branch)

Research by the trip leaders in the last few years has resulted in major revisions to the established chronology and significance of multiple glacial and interglacial events in Yukon Territory. This five-day fieldtrip will examine the stratigraphy, sedimentology and chronology of pre-glacial, multiple interglacial, and glacial environments of the west-central Yukon. The trip will visit classic locales of central Yukon stratigraphy, but will focus on new field evidence to support: (1) an extensive late Pliocene (>2.6 Ma) Cordilleran Ice Sheet in Yukon Territory; (2) evidence of mid-Pliocene permafrost (>3 Ma); (3) multiple glaciations of the southern Ogilvie Mountains and Tintina Trench during the last 2.6 Ma; (4) changing forest composition between pre-glacial, multiple interglacials, and the Holocene in Yukon; (5) evidence for about 40 distal tephra in the Klondike and their stratigraphic and paleoenvironmental significance (including megafauna); and (6) past climate and the origin of the Klondike mega-placers.

The trip will begin in Whitehorse at 8 a.m. on Saturday, August 25th and travel by vans to Dawson City with stops to look at the soil chronosequence on the late Wisconsin (McConnell), Reid (mid-Pleistocene) and pre-Reid (multiple late Pliocene-early Pleistocene) drift surfaces, and the Quaternary history of the Stewart River valley. Day two will focus on the pre-glacial to glacial transition (ca.2.6 Ma) of the Klondike goldfields, and the record of distal tephra beds and their relation to Plio-Pleistocene environments. Day three will visit active mining exposures to look at megafaunal remains, early permafrost, and the relation between past

climates and formation of Klondike placer deposits.

Day four provides an option for field trip participants: for those wishing to see the most extensive mid-Pliocene to mid-Pleistocene record of multiple glaciations in North America, a 2.5 hours helicopter supported trip to the sites will be arranged (additional fee of \$ 400). This trip will take the participants to sections exposing over 100 metres of stacked tills, outwash, and loess with paleosols overlying older Tertiary fluvial deposits. These sites are located in Tintina Trench, north of Dawson. Maximum and minimum capacity is by groups of 4 persons per helicopter.

Other participants will travel to see the pre-Reid, Reid and McConnell features of the Southern Ogilvie and Tombstone mountains along the Dempster Highway, northeast of Dawson. On the final day, we will travel back to Whitehorse, arriving at the High Country Inn by 6:00 p.m. on Wednesday, August 29th.

Participants will need warm clothing and sturdy boots. Temperatures may well dip below freezing during this trip. There will be relatively few steep climbs, but please consult the leaders if you have physical problems or special needs. You will be responsible for buying your own breakfast and supper on all five days.

Duane Froese  
Department of Geography  
University of Calgary  
Calgary, Alberta T2N 1N4  
(403) 220-4891  
(403) 282--6561 (fax)

## CALENDAR

### 2001

#### **RGS/IBG Conference**

January 2-5, 2001

University of Plymouth, UK

This meeting on the "Numerical Analysis of Past and Present Biogeographical Data" is sponsored by the Biogeography Study Group Session. The

aim is to examine methods and applications of numerical analysis to palaeoenvironmental and contemporary ecological/biogeographical problems.

Contact: Dan Charman, Quaternary Environments Research Group, Department of Geographical Sciences, University of Plymouth, Plymouth, Devon, UK, PL4 8AA; 01-752-233-

058; fax: -054; dcharman@Plymouth.ac.uk;  
<http://www.geog.plym.ac.uk/>

### **Quaternary Research Association**

January 3-5, 2001

National Museum, Wales

This annual discussion meeting, "The use of modern analogues for reconstructing past environments," is organized by the National Museum & Galleries of Wales. Modern analogue studies and data from modern environments are frequently used to reconstruct events and environments through the Quaternary. The meeting will focus on current work on modern analogues, methodologies, assumptions made and the implications for data interpretation.

Contact: Mary Seddon, National Museum of Wales, Cathays Park, Cardiff; 44-2920-573-343; fax: 239-009; Mary.Seddon@nmgw.ac.uk

### **Society for Historical Archaeology**

January 10-13, 2001

Long Beach, CA

"Scientific Tools and Techniques in Historical Archaeology" is the theme of the Annual Meeting of the Society for Historical Archaeology. Topics include the use and abuse of science in historical archaeology, as well as geoarchaeology, bioarchaeology, DNA, chemistry, GIS, remote sensing, and materials analysis.

Contact: Timothy Scarlett, University of Nevada, Reno, Department of Anthropology / 096, Reno, NV 89557-0096; scarlett@unr.edu

### **Australasian Archaeometry**

February 4-9, 2001

Auckland, New Zealand

Issues and Developments in Australasian Chronology: New Directions for the New Millennium.

Details:

[http://car.ant.auckland.ac.nz/archconf/arch\\_feedb\\_ack.html](http://car.ant.auckland.ac.nz/archconf/arch_feedb_ack.html) Contact: PSheppard@auckland.ac.nz

### **Society of American Archaeologists**

April 18-22, 2001

New Orleans, LA

The SAA Student Affairs Committee is accepting abstracts for their 2001 sponsored symposium: Archaeology as Anthropology: Perspectives at the Start of the New Millennium. Contact: Heather Van Wormer, Anthropology Department, 354 Baker Hall, Michigan State University, East Lansing, MI 48824-1118; vanwor13@pilot.msu.edu

### **GAC-MAC/CANQUA Symposium**

May 27-30, 2001

St. John's, Newfoundland

Quaternarists from around the northern North Atlantic Ocean, working in terrestrial, or marine environments and successions, are invited to participate in the Quaternary Geology of the Northern North Atlantic Region symposium, organized by CANQUA, to be held as part of the Geological Association of Canada - Mineralogical Association of Canada Annual conference. We hope to bring together Quaternarists from all areas washed by the waters of the northern North Atlantic, to look at common issues, to compare and correlate chrono-stratigraphic events throughout the region, and to look at comparative analyses of sedimentary successions, palaeoenvironments, and Quaternary landforms.

Details: [geosurv.gov.nf.ca/stjohns2001](http://geosurv.gov.nf.ca/stjohns2001)

### **Canadian Association of Geographers**

May 29 - June 3, 2001

Montréal, Québec

This annual meeting will be a celebration of the 50th anniversary of the founding of the Canadian Association of Geographers. Our AGM will be held during the meeting.

Contact: Tim Moore;  
[Moore@felix.geog.mcgill.ca](mailto:Moore@felix.geog.mcgill.ca)

### **Millennial-Scale Events in the North Atlantic Region During Termination I**

June 13-18, 2001

University of Ulster, Northern Ireland

The conference will focus on evaluating the timing, signatures, and correlation of high-frequency hemispheric-scale climate and environmental changes during Termination I (last deglaciation) in the North Atlantic region,

as deduced from ice core, marine core, and terrestrial (glacial, peat, lake) records.

Contact: Jasper Knight; j.knight@ulst.ac.uk;  
<http://www.ulst.ac.uk/faculty/science/crg/home.htm>

**IAEG International Symposium “Engineering Geological Problems of Urban Areas**

July 30 – August 2, 2001

Ekaterinburg, Russia

Information: Secretariat, EngGeolCity-2001, UralTISIZ 79, Bazhov str., Ekaterinburg, Russia, 620075, tel. 3432-5599772, fax 3432-550043, e-mail UralTIS@etel.ru.

**Aggregate 2001 – “Aggregate and Economy”**

August 6-10, 2001

Helsinki, Finland

Information: Aggregate 20001, Tampere University of Technology, Laboratory of Engineering Geology, PO Box 600, FIN-33101, Tampere, Finland, fax +358-3-3652884, e-mail kuulavai@cc.tut.fi.

**Canqua meeting**

August 20-24

Whitehorse, YT

See information in this newsletter

**5th International Geomorphology Conference**

August 23-28, 2001

Tokyo, Japan

For information and registration see:  
[http://www.soc.nacsis.ac.jp/jgu/icp\\_hopa/indexicg.html](http://www.soc.nacsis.ac.jp/jgu/icp_hopa/indexicg.html)

**North American Diatom Symposium**

September 2001

Minnesota

Contact: John Kingston; 218-365-2246;  
jkingsto@nrri.umn.edu

**PAGES - PEP III Conference**

September 18-22, 2001

Aix-en-Provence, France

This conference is concerned with studies of past climate variability. Key aims are to assess variability on different time scales, to assess the impacts of past climate change on natural

ecosystems and human society and to provide a firm basis for the verification and testing of climate models.

Contact: Catherine Stickley, Environmental Change Research Center, University College London, 26 Bedford Way, London, WC1H 0AP;  
C.stickley@ucl.ac.uk;  
[www.geog.ucl.ac.uk/ecrc/pep3](http://www.geog.ucl.ac.uk/ecrc/pep3)

**6th International Paleopedology Workshop**

August 23-28, 2001

Moscow State University, Moscow

Themes will include paleosol-sedimentary sequences, magnetic properties of Quaternary and pre-Quaternary paleosols and sediments as paleoclimate indicators, polygenic models of pedogenesis in relation to Quaternary climate changes, biomorphs in paleosols, and paleopedology and archaeology.

Contact: Elizabeth Sollerio-Rebolledo; fax: +52 56-22-43-17; sollerio@geologia.unam.mx

**3<sup>rd</sup> International Conference on Cryogenic Soils**

August 27-31, 2001

Copenhagen, Denmark.

Information: Dr. Bjarne Holm Jakobsen, Institute of Geography, University of Copenhagen, Oster Volgade 10, 1350 Copenhagen K, Denmark, tel. +45-35322500, fax +45-35322501, e-mail [bhj@geogr.ku.dk](mailto:bhj@geogr.ku.dk).

**Geological Society of America Annual Meeting**

November 5-8, 2001

Boston, Massachusetts

Contact: GSA HQ, Box 9140, 3300 Penrose Place, Boulder, CO, 80301; 303-447-2020, x133; [meetings@geosociety.org](mailto:meetings@geosociety.org)

**2002**

9<sup>th</sup> International Association of Engineering Geology and the Environment (IAEG), “Engineering Geology for Developing Countries”

September 16-20, 2002

Durban, South Africa

Information: The Technical Committee, 9<sup>th</sup>  
IAEG Congress, P.O. Box 1283, Westville  
3630 South Africa.

### LINKS TO WEBSITES

2001 FRIENDS OF THE PLEISTOCENE  
FIELD TRIPS (see AMQUA website for up-to-  
date information on Friends trips:  
<http://vishnu.glg.nau.edu/amqua/>)

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

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

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

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>

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

### 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 either:  
ldredge@nrcan.gc.ca, or 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

**CGRG EXECUTIVE 2000-2001**

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**CANADIAN GEOMORPHOLOGY RESEARCH GROUP**

**Registration Form**

**2000**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Postal Code: \_\_\_\_\_

Phone numbers: (Home) \_\_\_\_\_ (office) \_\_\_\_\_

e-mail address: \_\_\_\_\_

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: Lynda Dredge, Secretary-Treasurer CGRG, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario, K1A 0E8