



NEWSLETTER OF THE CANADIAN
GEOMORPHOLOGY RESEARCH GROUP

BULLETIN DU GROUPE CANADIEN DE
RECHERCHE EN GEOMORPHOLOGIE

Number 21

January 2006

PRESIDENT'S MESSAGE - MOT DU PRÉSIDENT

The delayed publication of the CGRG newsletter gives me the opportunity on behalf of the executive to extend New Year's greetings to all our members – 161 members to be exact. With our new policy of free membership for students, we have seen a surge of new student involvement in our organization. Although we expect a slight loss in revenues as a result of the policy, we feel this is far outweighed by the participation of undergraduate and graduate students in CGRG activities. To reflect this increased student involvement we have taken the initiative to propose a new student position on the executive. This change requires a constitutional amendment which will be presented to the membership for approval in January/February (see more below); however, in the meantime we have asked Dan Shugar, a graduate student at Simon Fraser University (and recipient of an Olav Slaymaker Award in 2005), to be an observer on the CGRG executive.

Last summer I conducted an informal canvass of graduate students of executive members to find out how they would like to participate in CGRG and what CGRG might do for them. Responses were generally positive. Although some students were unaware of CGRG, they expressed a genuine desire to know more about it and

suggested ways in which the organization might work for them – here are several of their ideas:

- To facilitate student-to-student communication through a web-forum
- To create a listing of potential supervisors on the CGRG web site (for graduate recruitment purposes)
- To reach out to students through a "meet and greet" at sponsored meetings around the country

These are all excellent ideas and I will be working closely with Dan Shugar, Dan Smith and the executive to assess how we might implement these in the coming months. If you have suggestions on how CGRG might work more effectively for students, I encourage you to email me (tbell@mun.ca) or Dan (dshugar@sfu.ca) with your thoughts. Also, membership forms are available on the CGRG web site (<http://cgrg.geog.uvic.ca/>) and attached to this newsletter.

Amendments to CGRG's constitution and the CGRG-CGU (Canadian Geophysical Union) affiliation agreement, which were briefly introduced at the AGM this past summer, will be presented to the membership for ratification early in 2006. We have had several discussions on how we

might conduct a ballot in a fair and cost-effective manner, while taking advantage of internet technology. Our best compromise is to make the proposed constitutional amendments and affiliation agreement accessible to all our members through the web site (and paper for those who have requested newsletters in this form) and to ask each member to email their vote to our secretary, Kevin Driscoll, at the CGRG email address (cgrg@mail.geog.uvic.ca) for verification (of membership status) and counting. Emailed votes will remain confidential and in the possession of the secretary for 60 days, after which time they will be deleted/destroyed, as required by the constitution. The constitutional amendments will be available for viewing on the CGRG web site after January 16th, 2006 and the last day for submitting an email vote will be February 24th, 2006.

The Department of Geography at The University of British Columbia will be hosting a 90th birthday celebration for J. Ross Mackay on February 17th, 2006. There are six invited speakers and everyone is welcome to attend the full-day event. See the web site for details (<http://www.geog.ubc.ca/~jdaparc/premackay/index.html>). Each year CGRG celebrates the legacy and contribution of J. Ross Mackay through the presentation of an award in his honour. The J. Ross Mackay award recognizes significant achievement in research by young geomorphologists within Canada. The deadline for nominations for the 2006 award is February 24th and details can be found in this newsletter and on the CGRG web site.

I would like to bring to your attention Jeff Ollerhead's report on restructuring of the Canadian Geoscience Council in this newsletter. In November, Jeff agreed to

formally represent CGRG on the Canadian Geoscience Council - he was already attending council meetings on behalf of the Canadian Association of Geographers. We thank Jeff for his continued energetic involvement and optimism in the activities of the Canadian Geoscience Council and I know he would appreciate your feedback on the current restructuring (de-fragmentation) process. We would be happy to facilitate a broader discussion of these issues through the CGRG newsletter.

For those of you who are considering the organization of a special session on some aspect of geomorphology at a national or regional meeting in 2006 or 2007, I remind you that CGRG provides a range of sponsorship support for such sessions, upon approval by the executive. See the President's column in Newsletter #20 (May 2005) for details on how to apply, or email me directly. Recently, we have also been providing free CGRG t-shirts as awards for best presentation by students at regional meetings of our affiliated associations (see names and photos in this issue). This is an effective way to promote CGRG among our student geoscientists and has led to many new student memberships (the fact that it is free membership has helped too).

Since the last newsletter the CGRG executive has gone through its annual metamorphosis. Long-standing member and former president, Dave Sauchyn, formally left the executive, but as you can see from the current newsletter he is as active as ever, representing CGRG at the International Association of Geomorphologists (IAG) meeting in Spain in September (see also Andrew Goudie's IAG presidential address reproduced below). We welcome new member Patrick Lajeunesse (recently profiled as a new faculty member in the May

2005 newsletter) and thank Dirk de Boer for accepting the nomination for Vice-President. Last, thanks to Cheryl McKenna Neuman for doing such a great job as President last year.

Best wishes for 2006,
Trevor Bell
tbell@mun.ca
CGRG President

Le délai dans la publication du bulletin GCRG me donne l'opportunité, au nom du comité exécutif, de souhaiter la bonne année à tous nos membres, qui sont maintenant 161 pour être exact. Grâce à notre nouvelle politique d'adhésion gratuite pour les étudiants, nous avons vu une augmentation marquée de l'implication étudiante dans notre organisation. Bien que nous nous attendions à ce que cette politique induise une faible perte de revenus, nous sentons que cette perte sera largement compensée par la participation d'étudiants gradués et de premier cycle dans les activités du GCRG. Afin de refléter cette implication étudiante accrue, nous avons pris l'initiative de proposer un nouveau poste étudiant au sein du comité exécutif. Ce changement nécessite un amendement constitutionnel qui sera présenté aux membres pour approbation en janvier-février (plus de détails ci-bas); néanmoins, durant ce temps, nous avons demandé à Dan Shugar, un étudiant gradué de l'université Simon Fraser (et récipiendaire d'un prix Olav Slaymaker en 2005), d'agir à titre d'observateur sur le comité exécutif du GCRG.

L'été dernier, j'ai mené un sondage informel auprès des étudiant(e)s gradué(e)s de certains membres du comité exécutif afin de savoir de quelle façon ils souhaiteraient participer aux activités du GCRG et ce que

le GCRG pourrait faire pour eux. Les réponses furent généralement positives, et bien que certain(e)s étudiant(e)s n'aient pas été au courant de l'existence du GCRG, ils et elles ont exprimé un réel désir d'en connaître plus à propos de l'organisation. Les étudiant(e)s ont également suggéré des moyens par lesquels l'organisation pourrait leur venir en aide; voici quelques-unes de leurs suggestions:

- Faciliter les communications entre étudiants grâce à un forum web.
- Créer une liste des directeurs et directrices de recherche potentiels.
- Rejoindre les étudiant(e)s grâce à des rencontres commanditées à travers le pays.

Il s'agit d'excellentes idées et je travaillerai en collaboration avec Dan Shugar, Dan Smith et le comité exécutif afin d'évaluer les façons par lesquelles nous pourrions les mettre à l'œuvre au cours des prochains mois. Si vous avez des suggestions sur la manière dont le GCRC pourrait travailler de façon plus efficace pour les étudiants, je vous encourage les faire parvenir à moi-même (tbell@mun.ca) ou à Dan (dshugar@sfu.ca). Les formulaires d'adhésion sont disponibles sur le site du GCRC (<http://cgrg.geog.uvic.ca/>) et jointes à ce bulletin.

Des amendements à la constitution du GCRC ainsi que l'entente d'affiliation GCRC-UCG (Union Géophysique Canadienne), qui furent brièvement introduites lors de l'AG de l'été dernier, seront présentés, pour ratification, aux membres au début 2006. Nous avons eu plusieurs débats concernant la manière de conduire une consultation efficace et équitable en utilisant la technologie internet. Notre meilleur compromis est de rendre accessible à tous nos membres, sur notre site web et sur papier pour ceux et celles qui ont

demandé à recevoir le bulletin sous cette forme, les amendements constitutionnels proposés ainsi que l'entente d'affiliation, et de demander à chaque membre de faire parvenir son vote par courriel à Kevin Driscoll, notre secrétaire, à l'adresse courriel du GCRG (cgrg@mail.geog.uvic.ca), qui s'occupera de la vérification et du décompte. Les votes transmis par courriel demeureront confidentiels et resteront en possession du secrétaire pour une période de 60 jours, après quoi ils seront détruits, tel qu'indiqué dans la constitution. Les amendements constitutionnels seront disponibles sur le site du GCRG le 16 janvier 2006 et le dernier jour pour soumettre un vote par courriel sera le 24 février 2006.

Le département de géographie de l'université de Colombie-Britannique tiendra une célébration du 90^{ème} anniversaire de naissance de J. Ross Mackay le 17 février 2006. Six conférenciers ont été invités pour l'occasion et tous sont invités à assister à cette journée spéciale. Pour plus de détails, consultez notre site web : (<http://www.geog.ubc.ca/~jdaparc/premackay/index.html>).

Chaque année, le GCRG célèbre l'héritage et la contribution de J. Ross Mackay par la remise d'un prix en son honneur. Le prix J. Ross Mackay reconnaît l'accomplissement significatif d'un(e) jeune chercheur ou d'une jeune chercheuse au Canada. La date limite de nomination pour le prix 2006 est le 24 février. De plus amples détails peuvent être trouvés dans ce bulletin ou sur le site web du GCRG.

J'aimerais porter à votre attention le rapport de Jeff Ollerhead sur la restructuration du Conseil Géoscientifique Canadien que l'on retrouve dans ce bulletin. En novembre, Jeff a accepté de représenter formellement le

GCRG sur le Conseil Géoscientifique Canadien tout en étant déjà représentant de l'Association Canadienne des Géographes aux rencontres du Conseil. Nous remercions Jeff pour son implication énergique dans les activités du Conseil Géoscientifique Canadien et je sais qu'il apprécierait vos commentaires sur le processus actuel de restructuration (ou de défragmentation). Nous serions heureux de faciliter une plus large discussion sur ce sujet dans les pages du bulletin du GCRG.

Pour ceux et celles qui considéreraient l'organisation d'une session spéciale sur une question géomorphologique lors d'une rencontre nationale ou régionale en 2006 ou 2007, je vous rappelle que le GCRG offre une variété de commandites pour de telles sessions; ces commandites sont sujettes à approbation de la part du conseil exécutif. Les détails et la procédure d'inscription peuvent être retrouvés dans le Mot du président du 20^{ème} Bulletin du GCRG (mai 2005); vous pouvez également me contacter directement par courriel. Récemment, nous avons fourni des t-shirts gratuits du GCRG comme récompenses pour les meilleures présentations étudiantes lors des rencontres régionales des associations auxquelles nous sommes affiliés (voir les noms et les photos dans ce numéro). Il s'agit d'un moyen efficace de faire la promotion du GCRG auprès des étudiants en sciences de la terre et cette commandite a mené à de nouvelles inscriptions étudiantes (notons que le fait que l'adhésion soit gratuite a également aidé).

Depuis le dernier bulletin, le conseil exécutif du GCRG a connu sa métamorphose annuelle. Dave Sauchyn, membre de longue date et ancien président, a formellement quitté le comité exécutif, mais comme vous

pouvez le constater dans ce bulletin, il est aussi actif que jamais, représentant le GCRG à la rencontre de l'International Association of Geomorphologists (IAG) tenue en Espagne au mois de septembre (voir également la déclaration d'Andrew Goudie, président de l'IAG, reproduite ci-dessous). Nous souhaitons la bienvenue à Patrick Lajeunesse, nouveau membre dont le profil a été présenté dans le bulletin du mois de mai 2005. Enfin, merci à Cheryl McKenna

Neuman pour le fantastique travail mené en tant que présidente au cours de l'année dernière.

Meilleurs voeux pour la nouvelle année
Trevor Bell
tbell@mun.ca
Président du GCRG

[Ed.- Thanks to David Fortin for translation]

SECRETARY-TREASURER'S REPORT

The CGRG continues to maintain a strong financial position. Our current bank balance is \$1,857. Year-to-date revenues are \$2,557 and year to date expenses are \$3,528. Expenses are slightly higher this year because of the IAG registration. We are still anticipating funding from our sister societies which will bring the membership numbers and revenues up. The CGRG also has \$15,000 in two GIC accounts.

All of our t-shirts are gone and a new batch will be ordered shortly. By request, the new t-shirts will be white.

Membership stands at about 160 members from Canada, the U.S., England, Iran and Bangladesh. We have 17 new student members who have signed up with student membership now being free.

Kevin Driscoll

CAGONT STUDENT AWARDS

CGRG t-shirts were awarded to the two best student presentations at the CAGONT 2005 meeting October 28 and 29th, University of Ottawa. The winners were:

Jayson Childs, Wilfrid Laurier University
"An investigation into the spatial and temporal movement of the sand dunes in the West Lake Ecosystem of Sandbanks Provincial Park and the implications for management."

Denis Lacelle, University of Ottawa
"Middle Pleistocene-age glacier ice exposed in the headwall of a retrogressive thaw flow near Chapman Lake, Central Yukon Territory."

Congratulations to Jayson and Denis!

Kevin Driscoll

CALL FOR NOMINATIONS FOR THE J. ROSS MACKAY AWARD

The J. Ross Mackay award is to be presented annually by the CGRG in recognition of significant achievement in research by young geomorphologists within Canada. The purpose of this award is to encourage and foster the development of geomorphology in Canada and to provide public recognition of young scientists in this field.

Award criteria

The award is to be given for an outstanding contribution to geomorphology, which may be a synthesis or a regional study, a new concept, a significant advance in a subfield of geomorphology, or the development of a technique. The recipient normally will be: (1) a CGRG member or a member of one of the supporting societies; (2) either a Canadian citizen or resident and working in Canada; (3) within 12 years of graduation from a Ph.D., Masters or undergraduate program. The award can be made to an individual or research team, providing that the principal investigators fulfill these criteria. Full details are provided on the CGRG website: <http://cgrg.geog.uvic.ca/jrm1.htm>

Nominations for the Award

Nominations shall be made in writing to the Chair of the J. Ross Mackay Awards Committee by **February 24, 2006** and sent to:

Dr. Cheryl McKenna Neuman
Chair, J.R. Mackay Award Committee
c/o Dept of Geography
Trent University
Peterborough, Ontario K9J 7B8

Please email questions to: cmckneuman@trentu.ca

Nominations should be made by two CGRG members and must be accompanied by an up-to-date CV for the nominee. Letters of support by the Proposer and Secunder should outline the basis for the nomination. The Proposer and Secunder of the nomination may not be present or recent colleagues of the nominee nor may they have acted as supervisors (or directors) of the nominee's research. However, additional supporting letters may be included with the nomination.

The award winner will be presented with a suitable certificate of merit or medal, and invited to give a formal lecture at the annual CGRG meeting on a topic of his/her choice.

Organisers:

Peter Ashmore and Cheryl Pearce

Five sessions with a total of 18 papers covered a wide range of issues on the interactions between hydrology, biogeography, and geomorphology in fluvial/riparian processes and habitats. The sessions were highlighted by a fascinating keynote paper by Stewart Rood (Lethbridge) on the effects and management of dam-controlled flow regimes on riparian vegetation loss and recruitment along large streams in southern Alberta demonstrating that good science along with enlightened management can mitigate the adverse effects of flow regulation in some cases. Mike Church (UBC) followed with a wide-ranging account of the long-term study of the geomorphic and vegetation effects of dams and flow regime modification along the Peace River in BC and Alberta. Cheryl Pearce (Western) showed very convincingly, and alarmingly, how rivers have provided corridors for the spread of introduced invasive species. Human impacts were also prominent in talks on the evolution of Yamachiche Delta (Vitalie Bondue, Montreal) and the effects of urbanization on streams in the Toronto region (Leif Burge, Toronto). Environmental change and the effects of flow regime changes also appeared at several time scales from the post-glacial evolution of the lower Niagara River (Mariane Ferencevic, Brock [now Western]), to the 20th century changes in meander geometry on the east Humber River (Roger Phillips, York) and large floods and flow regime changes on the Massawippi River (Norman Jones, Bishops). Research on river morphology, hydraulics and sedimentology included quasi-experimental active tracer measurements of particle

movement in a braided river (Thomas Buffin-Belanger, U Quebec at Rimouski), flume experiments on braiding intensity and the proportion of braid channels transporting bedload (Roey Egozi, Western), links between modern and ancient anastomosed river deposits (Derald Smith, Calgary), the hydraulics and flow resistance in steep, boulder-bed channels (Don Reid, SFU), coherent flow structures over large dunes in the Parana River (Dan Shugar, Guelph), and turbulent flow structures in a (vertical) flow expansion in a gravel-bed river (Genviéve Marquis, Montreal). Finally, there was a theme of applications of fluvial hydraulics and erosion mechanics in topics such as geomorphic assessment of stream channels using the downstream distribution of stream power (Baxter, Western [now Environment Canada]), *in situ* hydraulic testing of cohesive bed material (Ray Kostaschuk, Guelph), the use of hydraulic design principles for improving and monitoring the performance and stability of in-stream habitat structures (Pascale Biron, Concordia), and the relationship between hydraulic conditions, habitat use and mobility of Atlantic salmon (Mathieu Roy, Montreal). Related to the sessions there was also a short walking tour of the nearby Medway Creek, an incising, till-bed stream channel, led by Peter Ashmore and Jane Bowles (Western, Biology Dept.), discussing erosion processes, channel morphology, hydrology, riparian vegetation and water quality. There was also a visit to the Western experimental river tray (housed in the Boundary Layer Wind Tunnel building, Western Civil Engineering Dept.) to see a physical model of a braided river in action in connection with PhD research by Roey Egozi and Tobi Gardner. Thanks to everyone who presented and attended,

making the sessions lively and successful and showing that river research is thriving in Canada and within CAG, CGRG and beyond.

Peter Ashmore and Cheryl Pearce



CGRG OLAV SLAYMAKER AWARDS

CGRG Slaymaker Awards were presented to two graduate recipients who gave papers in the CGRG special sessions during the 2005 CAG meeting at the University of Western Ontario. Selection of the awardees was made by a small committee of researchers with expertise in fluvial, coastal and aeolian geomorphology. The awards were given to:

McCann Special Session: **Chris Hugenholtz**, Department of Geography, University of Calgary (Ph.D. candidate, supervisor: Brian Moorman)

Rivers Special Session: **Daniel Shugar**, Department of Geography, University of Guelph (M.Sc. student, supervisor: Ray Kostaschuk)

The Award consists of a certificate, \$250, and a CGRG t-shirt. The decision was an extremely difficult one, as there were a large number of very good talks by student participants.

Cheryl McKenna Neuman

CGRG STUDENT AWARDS AT ACAG

More student success stories! **Jennifer Higdon** (left) and **Alison Copeland**, both MSc students in Geography at Memorial University of Newfoundland, received CGRG t-shirts for their award-winning presentations at the Atlantic Division of the Canadian Association of Geographers, hosted by Memorial University on October 14-16, 2005.

Trevor Bell



MACKAY SYMPOSIUM ANNOUNCEMENT

Professor J. Ross Mackay, Canada's foremost geocryologist, will turn 90 late in 2005. On 17 February 2006 a symposium will be held at the Department of Geography, University of British Columbia, to honour his continuing contribution to permafrost science and periglacial geomorphology.

There will be six oral presentations, lunch, a reception, and dinner. All are welcome to register and attend. Posters presenting recent research will be welcomed, and there will be plenty of time for discussion. Full details are available at www.geog.ubc.ca/mackay2006.

Chris Burn

EDITORSHIP CHANGE OF *PERMAFROST AND PERIGLACIAL PROCESSES*

Professor Emeritus Hugh French, Editor-in-Chief of the Wiley journal *Permafrost and Periglacial Processes* since he founded it some 16 years ago, stepped down from his position at the end of 2005. Hugh French's founding of *PPP* gave a focused outlet to the international permafrost community at a time when other specialized journals were disappearing. *PPP*'s high impact factor demonstrates its ongoing importance to geocryology and cold regions' engineering. Hugh will remain connected to the journal as Honorary Founding Editor and will contribute an annual review paper covering developments in different aspects of permafrost science.

The new Editor will be Professor Antoni Lewkowicz (University of Ottawa). He has been Associate Editor at *PPP* since 1995, was guest editor of *PPP* 16(1) in Honour of Hugh French and was also in charge of the

review process for the Seventh International Conference on Permafrost at Yellowknife. He has overseen submissions since mid-2005, so the formal transfer of responsibilities on January 1, 2006 will be straightforward and seamless.

Toni Lewkowicz will share responsibilities with Professor Charles Harris (Cardiff University) who has agreed to continue as Associate Editor, a position he has held since 2003. Membership in the Editorial Board, which has representation from 10 of the IPA countries, will be unchanged.

The mandate and reputation of the journal – to rapidly publish the very best international papers that advance permafrost science and engineering – will remain as Hugh French's enduring legacy.

Antoni Lewkowicz

CGRG ANNUAL GENERAL MEETING

The 2006 Annual General Meeting (AGM) will be held at the GAC-MAC annual meeting May 14-17 in Montréal (www.er.uqam.ca/nobel/gacmac/welcome). Details of the time and meeting room will be

available in the next newsletter and on the CGRG website.

Scott Lamoureux

CANADIAN GEOSCIENCE COUNCIL (CGC)

The Future (or not) of the Canadian Geoscience Council (CGC)

Over the past 2 years, I have attended 4 meetings of the Canadian Geoscience Council (CGC) as a representative of the Canadian Association of Geographers (CAG) and, as of the most recent meeting, representing the Canadian Geomorphology Research Group (CGRG) as well. The purpose of attending has been to ensure that a diversity of views on what constitutes geoscience is heard and to consider the future of the CGC. At present, the geoscience community (however you wish to define it) has a weak voice on the national stage. Our profession is "not on the radar screen of decision makers in Canada" (to quote a highly-placed bureaucrat in Ottawa). The question is - what to do?

What follows includes excerpts from a column written for *Reservoir* (a CSPG publication) by Jeff Packard, President of the Canadian Society of Petroleum Geologists. Jeff wrote (and I gratefully quote with his permission):

"Canada has had a national umbrella organization for the earth sciences since 1972. The Canadian Geoscience Council (CGC) was created by an order-in-council as a follow-up to recommendations from a report written by Dr. R.A. Blais, then affiliated with the Science Council of Canada. The CGC is the sum of its parts, that is, the constituent geoscience societies and/or organizations and their collective will and effort (i.e. CSPG, CSEG, GAC, CWLS, PDAC, GSC, etc). The 33 year history of the CGC is far from monochromatic, both good years and bad years, successes and failures have marked its existence. More recently,

despite successful outreach and international coordination efforts, the CGC as a whole has been slowly sliding into irrelevance" (Packard, 2006).

To many of us at the CGC table, it seems unthinkable that a country such as Canada would not have an energetic, positive, vibrant and effective national (and international) voice for the geosciences. So, as Jeff asks in his column "what to do - give up, or be part of the solution?" At a meeting of the CGC in June of 2005, a plan to create a new, national umbrella organization for the earth sciences was agreed to "in principle" by key representatives of nearly all the major geoscience-related societies in Canada (Figure 1). Obviously, any new organization will have to be relevant, effective, representative, accountable and 'owned' and this structure is designed to facilitate such an outcome.

As Jeff explains: "The "Canadian Geoscience Institute" is merely a placeholder name for the new organization. The spokes on the wheel are the major standing committees (e.g. Outreach, Communications), of which the most important is the one entitled National Geoscience Collaboration and Coordination. In all likelihood, the Geological Association of Canada will be given the key responsibility to staff and oversee this standing committee. All standing committees report to a Directorate (executive) that manages the overall business and programs of the organization" (Packard, 2006).



Figure 1: Schematic of proposed national umbrella organization for the geosciences.

The chair/president of the Directorate would rotate between a number of key geoscience sectors (e.g., energy) every year. The Canadian Geoscience Board would be a semi-autonomous arm of the new organization that reports to the Directorate. Its role would be primarily one of advocacy and advice (directed, or in response to, government and public policy), but it would also be the principal interface of the new organization with industry, special interest groups and the general public (Packard, 2006).

Jeff concludes his column by noting that "there is much more hard work that needs to be done. Finding satisfactory funding mechanisms remains a major hurdle, but progress is being made. In short there is a mood of optimism in the air and CSPG can be proud of the part it has played so far in bringing together ("de-fragmenting" is the buzz word), our rather disparate Canadian geoscience communities" and stating: "I firmly believe we [CSGP] have a

responsibility, if not a moral obligation, to support and help nurture an effective national umbrella organization. This is a "mission" worth undertaking" (Packard, 2006).

I have come to agree with Jeff's assessment. I think that CAG and CGRG members can also be proud of our role in helping to bring together different geoscience 'communities' in Canada. I also agree that it is in our collective interest to support the creation of an effective national umbrella organization. Other societies have done so to their mutual benefit. That said, CAG and CGRG members will not be surprised that many people, some geoscientists included, frequently equate geoscience with rocks and oil and not much else. It is, therefore, important in my view that CAG and CGRG members continue to participate in the reorganization (and hopefully revitalization!) of the CGC. Momentum is slowly building and at every recent meeting of the CGC, more societies are joining us at the table (e.g., a representative from the Canadian Meteorological and Oceanographic Society (CMOS) attended our most recent meeting).

Finally, to place Jeff Packard's optimism in context, consider that the CSPG withdrew its membership in the CGC from 1995 to 2002 because his society viewed the CGC as neither effective nor representative. If it were not for the efforts of a dedicated group of geoscientists, the CGC would likely have 'died' for good in 2002 or 2003. Thanks to the efforts of many (including Jeff Packard), the CGC is being rebuilt and there is new energy (and capital) being pumped into the organization (puns intended). Just as the CSPG is supporting efforts to bring the CGC back to life for the benefit of all geoscientists, so too should the CAG and

CGRG. If we succeed, we will all reap the benefits of having a strong, united umbrella organization to represent our interests here at home and around the globe.

Jeff Ollerhead
Mount Allison University
CAG and CGRG representative to the CGC

Reference:

Packard, J. 2006. The Role of the CSPG on the National Geoscience Stage. *Reservoir*, Vol. 33, Issue 1.

SIXTH INTERNATIONAL CONFERENCE ON GEOMORPHOLOGY

About 1000 scientists attended the Sixth International Conference on Geomorphology during September 7-11 in Zaragoza, Spain. The conference was held in the modern and spacious Congress Hall-Auditorium. The main theatre was large and comfortable but the other meeting rooms in the basement were too small to accommodate the audiences for some of the sessions. Otherwise the conference was well organized. The theme of the conference was "Geomorphology in regions of environmental contrasts". The Scientific Program consisted of six Plenary Lectures, 17 General Sessions, three Special Sessions and seven Working Group Sessions. There were several pre- and post-congress excursions and one-day mid-conference field trips.

The IAG Executive, and voting delegates from 42 countries, held Council Meetings on September 7 and 10. The agenda included:

- Reports from the President, Treasurer, Secretary and Publication Officer
- Discussion on a Declaration on Natural Hazards: whether geological hazards are to be included, where to publish the Declaration
- Information on Jan De Ploey Library
- Information on Jean Tricart Prize
- Proposals for new Working Groups - all approved
 - Sediment Budgets in Cold Environments
 - Carpatho-Balkan-Dinaric Regional Working Group
 - Human Impact on the Landscape
 - Rock Coast Geomorphology
 - Small Catchments
 - Global Change and Geomorphology
 - Geomorphological Hazards - incorporating the previous WG Volcanic Events
 - Earth System Science
- Nominations for positions - all candidates accepted
 - Vice-Presidents - Dan Balteanu, Romania; Lothar Schrott, Germany; Monique Fort, France; Franck Audemard, Venezuela; Michael Crozier, New Zealand; Ying Wang, China
 - Secretary - Morgan De Dapper, Belgium; David Higgitt, Singapore
 - Treasurer - Francisco Gutiérrez, Spain
 - Publication Officer - Leon Andrzejewski, Poland; Michael Slattery, USA
- Proposals for International (Melbourne; Denver) and Regional (Brazil, Romania,

Malaysia, Svalbard, Israel) Conferences
- all supported

- Election of Officers - 42 Members present are entitled to vote:
 - Vice-Presidents: Michael Crozier (25 votes), Franck Audemard (23 votes), Monique Fort (23 votes)
 - Secretary: Morgan De Dapper (32 votes)
 - Treasurer: Francisco Gutiérrez (42 votes)
 - Publication Officer: Michael Slattery (33 votes)

- Vote for International Conference—Melbourne: 38 votes, Denver: 4 votes
- Timing of regional conferences
 - September 2006: Goiânia, Brazil
 - August 2007: Kota Kinabalu, Sabah, Malaysia
 - August 2007: Svalbard
 - April 2008: Israel
 - September 2008: Bra^oov, Romania

Dave Sauchyn, Canadian Delegate

A MOMENT OF CULTURE...

Erosion: a sonata in c major

Ice.

The Isthmus joins the cut-off limbs of two ancient continents. Or rather one continent - Gondwana - with the oceanic floor of Iapetus. And when it's not shrouded in fog you can see two bays, one on either side of the Isthmus, crowding it with water, testing its rocky limits. The area is strewn with erratics, boulders that were plucked, carried and dropped by a retreating glacier, the erosive force of glacial ice. Now these erratics perch on rounded highlands, deep base notes grounding an ethereal landscape.

Waves.

From Chance Cove to Western Point at the bottom of Trinity Bay the coastline, a symphony in rock. On a quiet sea, kelp

gardens below the cliffs sway a lullaby, cobbled beaches drip arpeggios, and sea caves belch in timpanic splendour. Narrow sea arches, steep and chiseled, sing arias if tuned in a northwesterly.

Wind.

Parabolic, sinuous, curved, blow-out.

Dry, harsh, parched, draining.

Burgeo Sandbanks, Gooseberry Cove, Windmill Bight. The changing tempo of wind keeps their sand dunes limber, the synergy of granular timbre. These prized spots of erosive excess.

© Alison Dyer 2005

[First published in the Newfoundland Quarterly Summer 2005]

GRADUATE STUDENT PROFILE

Dan Shugar

Dan was born in Vancouver, grew up in Ottawa and is now living in



Vancouver again. He has always loved the outdoors and spends much of his free time hiking and climbing, which has helped define his career path. He says that ever since he was young, he wanted a job where he could spend as much time in the wilderness as possible.

He began his academic career studying Outdoor Recreation and Natural Resource Management at the University of Northern British Columbia in Prince George. During an introductory geography course however, he found he preferred that subject and transferred to Carleton University's Geography program. Midway through his BSc, Dan moved to southeast England and worked for a year as a journalist and photographer on a small-town newspaper. After his return to Canada, Dan worked two summers in the subarctic with Dr. Chris



environments. His MSc work however, would see him working under very different conditions – in fact about as far from cold weather and mountains as one can get.

Burn, collecting data for his undergraduate thesis on permafrost conditions in the peatlands near Mayo, YT. This experience, combined with Dan's love of cold weather and mountains, solidified his desire to work in northern

Upon graduation from Carleton in 2003, Dan switched gears and studied turbulent flow and sediment transport over river dunes at the University of Guelph under Dr. Ray Kostaschuk. This project brought Dan to the broad alluvial plain of the Paraná River in northeast Argentina. The work involved a variety of cutting-edge instruments including a multibeam echosounder, acoustic Doppler current profiler and laser in situ scattering transmissometer, in addition to exciting analytical tools such as wavelets. While at the University of Guelph, Dan also worked on a project addressing the impacts of urbanization on streams and sediment transport in the greater Toronto area. This project, which was headed by Dr. Kostaschuk, Dr. Joe Desloges (UofT) and Dr. Peter Ashmore (UWO) showed that urbanized streams in southern Ontario are very susceptible to erosion and that increased urbanization will likely result in accelerated erosion. The heat of the subtropics proved too much for Dan, and he has returned to studying northern environments for his PhD.



Dan is currently a doctoral student at the Centre for Natural Hazard Research (CNHR), housed in the Department of Earth Sciences at Simon Fraser University. The CNHR is the first scientifically based, natural hazard research facility in western Canada and aims to integrate the physical science of natural hazards with social policy research. Working under Dr. John Clague, Dan is investigating catastrophic landslides on glaciers in the St. Elias Mountains of Yukon, Alaska and northern British Columbia.



Research Interests

Dan is especially interested in geomorphic processes in high mountain environments, and is keen to understand the impacts of recent climatic change in glacierized basins.

Many slopes in the Canadian Cordillera have been destabilized and weakened due to loss of ice support during recent glacier retreat and, as a result, are likely sites of future rock avalanches. The potential for disaster from catastrophic slope failure is amplified in many mountainous regions where population centres are located adjacent to steep slopes, such as in the Andes and Himalayas. An important aspect of Dan's doctoral work will be the utilization of remotely sensed imagery, such as the Shuttle Radar Topography Mission launched in 2000, for the identification of large landslides in remote and rugged regions.

Graduate Issues at the CGRG

As graduate student representative to the Canadian Geomorphology Research Group, Dan is interested in the perspectives of the Canadian graduate student community. He invites all graduate students working on, or interested in, geomorphic problems to write him with any concerns, issues or ideas you might have which impact the graduate student body. He can be reached at dshugar@sfu.ca.

NEW IAG WORKING GROUP

The IAG has established a new Working Group on the "Geomorphic implications of global environmental change". Olav Slaymaker (UBC) and Tom Spencer (Cambridge) will co-chair this Working Group and they have as their primary task the production of a book on this topic to be available at the time of the next ICG in Melbourne, Australia in 2009. The book will be arranged in about 16 chapters addressing a variety of zonal and azonal landscapes and

a planning meeting will be held in Cambridge this fall. The starting point is that the IPCC reports, though excellent and comprehensive in their own terms, have done a poor job of addressing the landscape scale geomorphic effects of climate and land use changes. Advice, encouragement and potential contributions would be gratefully received by olav.slaymaker@ubc.ca.

Olav Slaymaker

THE FUTURE OF THE IAG

First of all let me say that over the last four years, and under the dedicated leadership of Mario Panizza (Italy), the IAG has undertaken some important activities which should continue. I particularly think of the splendid programme of grant provision to support young research workers, particularly from developing countries, to go to conferences and workshops, including this Congress. The role of Professor Mauro Soldati (Italy) in this has been crucial and I am delighted that he will continue in this role on the new Executive Committee. I also appreciate the importance of having an active and informative web site and a full list of the world's geomorphologists, and salute the work done on our behalf by Dr Zbigniew Zwolinski (Poland). He too is willing to continue this role over the next four years. In a similar vein, Carol Harden (USA) has done great work on producing the Newsletter with regularity and on time and I am delighted that Mike Slattery (USA) is willing to take on this role. I also remember with admiration the organization of the regional Conference that was run by Irasema Ayala Alcantara in Mexico City.

The Committee, and especially Denes Loczy (Hungary), our most able outgoing Executive Secretary, has also been active in encouraging the establishment of active geomorphological bodies in many countries, particularly less favoured ones. Through the good offices of President Mario Panizza (Italy), the IAG had a major presence at the International Geological Congress in Florence in 2004, and this is another initiative that needs to be repeated in Oslo in 2008. We also had a major presence shortly before that at the International Geographical Congress in Glasgow. The last four years has also seen a substantial number of IAG

publications produced, and I am particularly grateful to those colleagues who waived their royalties or fees so that the publisher of the Encyclopedia of Geomorphology (Messrs Routledge) could pay in around 32,000 Euros to IAG accounts. Our working parties have also been active, and over the next four years these will be coordinated by Mike Crozier (New Zealand).

With regard to the future, in addition to continuing the good work we are already doing, we need to take geomorphology forward in some new directions, and I have selected five collaborative research themes:

- 1) The landscape is one of God's greatest gifts to mankind, and landscape is the province of the geomorphologist. Landscape inspires the young and the public in general, but is I believe also becoming increasingly important in policy terms at the national and international levels. Increasing levels of foreign travel are exposing more and more people to great landscapes. The IAG needs to recognize the importance of World Heritage Site designations, of geosites and geoparks and of new agreements such as the European Landscape Convention. The developing fields of Geodiversity and Geomorphological Integrity are ones that need to be pursued. The IAG has been invited by IUCN to be involved in World Heritage Site selection, and we will be establishing a small ad hoc committee to take this forward, involving among others Denys Brunnsden (Founding President, UK) and Piotr Migon (former Executive Secretary, Poland).

- 2) Geomorphology is useful, and we need to encourage the development of applied or engineering/environmental geomorphology

through publications, setting appropriate standards of conduct, through developing our arsenal of techniques, and by transference of best practice. In the same vein, geomorphologists need to speak out more as geomorphologists and with alacrity when great natural disasters occur. Our web site could be developed to that end. We will establish a new working group on Geomorphological Hazards, under the leadership of Professors Irasema Ayala Alcantara (Mexico), Sunil De (India), and Mohamed Benazzouz (Algeria).

3) The world faces Global Change. The geomorphological community has not been sufficiently involved with the burgeoning global change agenda either in terms of the science, the policy or the management. Our input to the Intergovernmental Panel on Climate Change has, in comparison to that of life scientists and social scientists let alone climatologists, been modest, and it shows in IPCC reports. In sensitive areas, 'geomorphological hotspots', geomorphological changes may be enormous. I think of the recent paper in *Nature* by David Thomas and his colleagues, which suggests that by the end of the century almost the entire mega-Kalahari will become a reactivated aeolian landscape. Streamflow in many semi-arid areas will probably be reduced by 60% or more – what are the geomorphological implications? The IAG should produce, as a collaborative endeavour, a major statement on the geomorphological implications of future global change, and we will establish a new working group, chaired by Olav Slaymaker (Past President, Canada).

4) We need to reach out more than we have to the geophysical community, most especially in the USA, where the AGU is not affiliated to the IAG. The work that is

being done on denudation rates and geochemical cycling in relation to tectonics and climate is hard science of great importance, and the IAG needs to engage with its practitioners. Related to this is the need to be engaged in Earth System Science, and Professor Lothar Schrott (Germany) will chair a new working group in this area, which I hope will build upon the meeting to be held in Loughborough, UK, in 2006.

5) Planetary scale studies are another other frontier for geomorphological research. The remote sensing images coming back from Mars, and the information that can be gained about the nature of our sea floor from sidescan sonar and 3D seismic studies, are staggering. The latter area is connected with the exploitation of the sea floor for hydrocarbon resources, and areas like the Congo Fan and the Nile fan have the most extraordinary mass movement, fluvial and salt tectonic features. I have also been struck by the increasing availability of free images of our own home planet – the NASA Zulu website of Landsat 7 images, the new Google Earth site, the University of Maryland site and MODIS images, enable us to recognize and map global distributions of phenomena, such as the world's great ergs, dust storm hotspots, the oriented lakes of the tundra, the worlds deflation depressions, and many others. Here is another clear area for international collaboration.

So then, I have highlighted five main areas for development: landscape conservation; the application of geomorphology; the geomorphological implications of global change; the role of geomorphological processes in Earth System Science; and the development of planetary scale studies of Mars, our ocean floors, and our land surface using the new technologies associated with

remote sensing. We need to get the message across that geomorphology is an important and active discipline, and I am pleased to say that Professor David Higgitt (Singapore) will be our first Communications Officer.

However, I am very worried by the financial viability of the IAG. I believe that we need to continue to increase the financial resources of the IAG, which are still modest. Publications can do this, and I welcome the decision to produce a Handbook of Geomorphology under the chief editorship of Basil Gomez (USA), royalties from which will come to the IAG. How about a manual of applied geomorphology? How about a guide to the world's most spectacular landform sites? We should also consider a legacy programme and approaches to foundations and major corporations. It may also be that national subscriptions should be increased, at least in line with inflation but also to bring them more in line with comparable bodies such as INQUA. That will be something for Council

to consider at its next meeting. André Ozer (Belgium) has been an excellent Treasurer over the last four years and will be handing over to Francisco Gutierrez (Spain).

I am thrilled to have been given the honour to be President of the IAG, and I hope that you will all feel that you can approach me with ideas for taking the discipline forward between now and the next congress in Melbourne Australia) in July 2009. We have a very full series of regional meetings scheduled for the next four years and will have 12 working groups operating over that period as well.

Finally, may I pay a tribute to Mateo Gutiérrez-Elorza (Spain) and his colleagues for running such a splendid congress in Zaragoza? They will be a hard act to follow.

Andrew Goudie
IAG/AIG President

[reproduced from the IAG website]

CANQUA 2007 ANNOUNCEMENT

CANQUA Ottawa 2007

June 4-8, 2007

Carleton University, Ottawa, Ontario

The next Canadian Quaternary Association conference will be hosted at Carleton University, Ottawa, Ontario, on June 4-8, 2007. The conference is designed to provide a forum for those interested in the interdisciplinary field of Quaternary geoscience, including geologists,

geomorphologists, physical geographers, biologists, botanists, oceanographers, archaeologists, environmentalists, and others. The First Circular is available now for downloading from the conference website at www.canquaottawa2007.ca. For additional conference information please check the conference website or email Greg Brooks (gbrooks@nrcan.gc.ca).

Greg Brooks

CALENDAR

CAG Meeting, Lakehead University, Thunder Bay, May 29-June 2
<http://geography.lakeheadu.ca/CAG2006/>

CGU Annual Scientific Meeting, Banff, May 13-17
<http://www.cgu-ugc.ca/meetings>

LINKS TO WEBSITES

American Geophysical Union
<http://www.agu.org>

AQQUA
<http://cgcq.rncan.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/>

Canadian Geophysical Union
<http://www.cgu-ugc.ca>

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.geomorph.org>

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>

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, photographs, reviews of regional or national meetings and field trips, summaries of issues pertinent to geomorphology, and announcements of future meetings and workshops. We will also be profiling research groups, students and members of our group in future issues. Suggestions for future profiles are most welcome. Please forward your contributions to: lamoureu@post.queensu.ca

Dr. Trevor Bell, President
Department of Geography
Memorial University of Newfoundland
St. John's, Newfoundland A1C 5S7
Phone (709) 737-2525
Fax : (709) 737-3119
e-mail : tbell@mun.ca

Dr. Dirk de Boer, Vice-President
Department of Geography
University of Saskatchewan
9 Campus Drive
Saskatoon, Saskatchewan S7N 5A5
Phone (306) 966-5671
Fax (306) 966-5680
Email: deboer@duke.usask.ca

Kevin Driscoll, Secretary-Treasurer
71 Equestrian Drive
Kanata, Ontario K2M 1H7
Phone (613) 943-2168
Fax (613) 947-6371
e-mail kevin.driscoll@nserc.ca

Dr. John Gosse, Executive member-at-large
Department of Earth Sciences
Dalhousie University
Halifax, Nova Scotia B3H 4J1
Phone: (902) 494 - 6632
Fax: (902) 494 - 6889
Email: jcgosse@dal.ca

Dr. Patrick Lajeunesse, Executive member-at-large
Département de géographie
Pavillon Charles-De Koninck, local 6233
Université Laval
Phone: (418) 656-2131
Fax: (418) 656-3960
e-mail: patrick.lajeunesse@ggr.ulaval.ca

Dan Shugar
Student observer
Department of Earth Sciences
Simon Fraser University
Burnaby, British Columbia, V5A 1S6
Email: dshugar@sfu.ca

Dr. Scott Lamoureux, Newsletter Editor
Department of Geography, Queen's University
Kingston, Ontario K7L 3N6
Phone (613) 533-6033
Fax (613) 533-6122
e-mail lamoureu@post.queensu.ca

Dr. Cheryl McKenna-Neuman, Past President
Trent Wind Tunnel Lab
Department of Geography, Trent University
Peterborough, Ontario K9J 7B8
Phone: (705) 748-1011 ext 1307
Fax: (705) 748-1205
e-mail: cmckneuman@trentu.ca

CANADIAN GEOMORPHOLOGY RESEARCH GROUP
Registration Form
2005-2006

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.

Name: _____

Address: _____

_____ Postal Code: _____

Phone numbers: (Home) _____ (office) _____

e-mail address: _____

Institution: _____

Annual dues: \$15 (free for student members)

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

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

Student supervisor or Department head signature _____

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

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

(Photocopy application form as necessary)