

CGRG NEWSLETTER NO. 5

(June 1996)

INDEX

- [President's Message](#)
- [1996-1997 CGRG Executive](#)
- [Call for Nominations for the J.Ross Mackay Award](#)
- [Update on Professional Registration: Geoscientists of Ontario](#)
- [Registration of Ontario Geoscientists: A Further Update](#)
- [CGRG Activities at the 1996 CAG Meeting at the University of Saskatchewan](#)
- [CAG 96: Special Aeolian Session](#)
- [CAG 96: Palliser Traingle Special Session](#)
- [CAG 96: Landscapes of the Palliser Triangle Field Trip](#)
- [CGRG Aeolian Working Group](#)
- [Report of the International Association of Geomorphologists](#)
- [Upcoming Conferences](#)
- [New Books from CGRG Members](#)
- [Contributions to Future CGRG Nesletters](#)

PRESIDENT'S MESSAGE

The practice of geomorphology in Canada remains rooted in a passionate appreciation of the Canadian landscape. This fervour to understand how, why and when things geomorphological happen remains our greatest legacy. It provides the inspiration for each generation of Canadian geomorphologists and the motivation for promoting the discipline.

The stated goal of the CGRG is to foster and promote the research, teaching and application of geomorphology in Canada. We agreed in 1993 that this intention was best served by retaining our affiliations with the Association Quebecoise pour l'Etude du Quaternaire (AQQUA), the Canadian Association of Geographers (CAG), the Canadian Quaternary Association (CANQUA), and the Geological Association of Canada (GAC). The success our joint annual meetings with CANQUA (1995) and CAG (1996) serves as notice of the value of these relationships.

Canadian geomorphologists need to recognize, however, that their discipline is undergoing a process of accelerated evolution. This transfiguration is a consequence of paradigm shifts, politics and necessity. Fundamental shifts in how geomorphologists are trained will follow changes occurring within the Canadian university system and to meet the requirements of professional geoscience registration. Continuing depletion of funding will further alter the ability of Canadian geomorphologists to undertake research. The final area of concern is professional registration which will have a large effect on the application of geomorphology in Canada. While the future for Canadian geomorphology and geomorphologists continues to hold promise, we are at a juncture that requires serious thought.

Hopefully, the CGRG can act as voice for expressing the concerns of Canadian geomorphologists. I encourage you retain your CGRG membership and to encourage your colleagues to do the same. A potential mechanism for collective discussion and thought is the CGRG listserv ([CANGEORG](#)) and I would invite you to subscribe. Further information on CGRG and related information is accessible on the [CGRG homepage](#):

La pratique de la géomorphologie au Canada demeure enracinée dans une passionnée évaluation du paysage canadien. Cette ferveur de comprendre comment, pourquoi et quand la formation du paysage s'est produite demeure notre plus grand héritage. Elle est une source d'inspiration pour chaque génération de géomorphologues canadiens et elle fournit une motivation pour promouvoir la discipline.

L'objectif permanent du GCRG est de promouvoir la recherche, l'enseignement et l'application de la géomorphologie au Canada. Nous avons admis en 1993 que cet objectif serait mieux servi si nous retenions nos affiliations avec l'Association Québécoise pour l'Étude du Quaternaire (AQQUA), l'Association Canadienne des Géographes (CAG), l'Association Canadienne pour l'étude du Quaternaire (CANQUA), et l'Association des Géologues du Canada (GAC). Le succès des réunions annuelles avec la CANQUA (1995) et la CAG (1996) est un bon indicateur de la valeur de ce partenariat.

Les géomorphologues canadiens reconnaissent cependant que leur discipline est en pleine mutation. Cette transformation est une conséquence dans les changements de paradigmes, de politique et d'économie. Des changements fondamentaux dans la manière dont les géomorphologues sont formés découleront des modifications du système universitaire canadien et aussi des prérequis pour l'accréditation professionnelle des géoscientifiques. La réduction continue du financement altérera la capacité des géomorphologues canadiens à entreprendre des recherches. L'

accréditation professionnelle aura aussi de larges effets sur l' application de la géomorphologie au Canada. Tandis que l' avenir pour la géomorphologie et les géomorphologues canadiens continue d' être prometteur, nous sommes à une croisée qui mérite une profonde réflexion.

Heureusement, le GCRG peut agir d' une seule voix pour exprimer les inquiétudes des géomorphologues canadiens. Je vous encourage à renouveler votre affiliation au GCRG et à convaincre vos collègues à faire de même. Un moyen pour échanger nos idées et pour discuter est le serveur [CANGEORG](#). Je vous invite à vous y inscrire. Des informations supplémentaires sur le GCRG et sur des activités en géomorphologie sont accessibles sur la page Internet [GCRG](#)

1996-1997 CGRG EXECUTIVE

Dan Smith

President CGRG (GAC representative)

Department of Geography, University of Victoria

P.O. Box 3050, Victoria, BC V8W 3P5

phone: (604) 721-7328, fax (604) 721-6216, E-mail:smith@uvvm.uvic.ca

Chris Burn

CGRG Vice President (CAG representative)

Department of Geography, Carleton University

Ottawa, Ontario K1S 5B6

phone: (613) 520-2600 ext 3784, fax (613) 520-4301, E-mail crburn@ccs.carleton.ca

Paul Egginton

Past President (CANQUA representative)

601 Booth Street, Ottawa, Ontario K1A 0E8

phone: (613) 992-2451, fax: (613) 992-2468, E-mail egginton@gsc.nrcan.gc.ca

Greg Brooks

Secretary-Treasurer (GSC representative)

601 Booth Street, Ottawa, Ontario K1A 0E8

phone : (613) 996-4548, fax: (613) 992-0190, E-mail brooks@gsc.nrcan.gc.ca

Yves Michaud

Newsletter Editor (AQQUA representative)

Geological Survey of Canada, Centre géoscientifique de Québec

2535 boul. Laurier C.P. 7500, Sainte-Foy, Québec G1V 4C7
phone:(418) 654-2673, fax:(418) 654-2615, E-mail michaud@gsc.nrcan.gc.ca

Olav Slaymaker
Councilor CGRG, and Executive committee member IAG
Department of Geography, University of British Columbia
6328 Memorial Road, Room 200, Vancouver B.C. V6T 1Z2
phone: (604) 822-5159, fax:(604) 822-3134, E-mail olav@UNIXG.UBC.CA

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.

Criteria

The award is made on the basis of contributions to the discipline as demonstrated by publication of a significant new method/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) under the age of 40 at the time of nomination for the award. The award can be made to an individual or research team, providing that the principal investigators fulfill the above criteria.

Adjudication of the award

Recommendations for the award are made to the Executive of CGRG by the J. Ross Mackay Award Committee.

1996-1997 J. Ross Mackay Award Committee

John Shaw (chair), University of Alberta
Michel Allard, Université Laval
Paul Egginton, Geological Survey of Canada
Mike Roberts, Simon Fraser University
Chris Smart, University of Western Ontario

Nominations for the Award

Nominations shall be made in writing to the Chair of the J. Ross Mackay Awards Committee by November 1st and sent to:

Dr. John Shaw
Chair, J.R. Mackay Award Committee
c/o Department of Earth & Atmospheric Sciences
University of Alberta
Edmonton, Alberta T6G 24H

Please E-mail questions to: jshaw@GEOG.UALBERTA.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 Seconder should outline the basis for the nomination. The Proposer and Seconder 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 J. Ross Mackay Award

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. The text of this lecture would subsequently be published in an appropriate Canadian Journal and clearly identified as, for example, the 1997 J. Ross Mackay Lecture of the CGRG.

UPDATE ON PROFESSIONAL REGISTRATION Geoscientist Registration in Ontario (from the Association of Geoscientists of Ontario)

Geoscientists in Ontario are trying (once again) to achieve professional registration. This time, the chance of success appears to be significantly greater.

As of March 10, 1996, the Association of Geoscientists of Ontario was formed, following from the Committee for Professional Registration of Geoscientists in Ontario. The inaugural meeting, held to coincide with the PDAC, was attended by some 60 geoscientists. The aim of this organization is to promote establishment of a system for geoscientist registration in Ontario and to provide a formal channel for communication with the geoscience community in Ontario as the registration process develops.

The Association is now participating in a combined Task Force with the Professional Engineers in Ontario (PEO) to develop a licensure model for geoscientists within the PEO through an amendment to the Professional Engineers Act of Ontario. The intent is to develop a mechanism similar to that now available in BC, Alberta, Newfoundland and NWT. The geoscientists on the Task Force committee are Bill Pearson, Andy Cooper and John Bowlby. The Task Force is proceeding well towards developing a conceptual framework on how geoscience registration can be implemented under a revised Act, incorporating geoscientists, to the Ontario legislature in late 1996. Details relating to implementing and administering registration would be developed over the next year or more.

The Association is intended to be an interim organization whose principal objectives are identifying individual geoscientists in Ontario; facilitating discussion and development of the registration system; providing a formal organization to support the jointly prepared Assoc. Geosc. of Ontario/PEO submission to the Ontario government; and providing a financial resource for this phase of the process.

Following the March meeting a Board of Directors was elected, and an executive formed. The Board is comprised of Bill Pearson (President), John Bowlby (Vice-President), Janet Haynes (Secretary-Treasurer), Mike Cosec, Brian McKay, Bob Leech, Gary Pringle, and Bill Stiebel. By the end of March, over 300 geoscientists from across Ontario have joined the Association.

Membership is open to all geoscientists. The annual individual member fee is \$25; full-time students can obtain a non-voting membership at \$10 annually. For a membership application and additional information, please contact:

Janet Haynes
Charlesworth & Associates
Suite 101, Mowat Ave.
Toronto, Ontario M6K 3E3
Fax: 416-536-7724.

Registration of Ontario Geoscientists - a further update

The Professional Engineers of Ontario have established a Task Group to submit a final proposal outlining the framework for registration of geoscientists in Ontario. The chair of the Task Group is His Worship John R. Fisher, CET, Justice of the Peace and is comprised of selected members of the Committee for the Professional Registration of Geoscientists in Ontario (CPRGO). The chair of CPRGO and member of the Task Group is Bill Pearson of Pearson, Hoffman & Associates.

The following tentative timetable is in place.

May 31, 1996 - Task Force receives feedback from 30+ groups/organizations (this includes the Ontario Association of Geomorphologists) expressing opinions and specific ideas regarding registration of Ontario geoscientists.

June 11 - Task Force meets to consider all submissions and starts to draft a proposal document.

June/July - feedback from groups on draft document

August - draft document goes to PEO.

Autumn 1996 - Final document is up for legislative approval.

While formulating the registration processes in Ontario is now again in high gear, the autumn outcome will not be a static document. Future changes are anticipated as the processes evolves.

A basic question of some importance is how does registration affect industry professionals, academics (who also consult) and academic programs which produce the highly qualified personnel? I cannot speak for the first group. The Task Group is comprised of several practicing geomorphologists and their feedback will be solicited. In B.C. the Engineers and Geoscientist Act states that "teachers and research workers operating entirely within public institutions are not required to be registered". I suspect that many have anyway. Similar wording has been discussed for Ontario. There is some potential in all this for academic programs in Ontario Universities to be affected. From my perspective as an educator/researcher, minor to major adjustments may be required to allow students to take the appropriate courses. On the other hand industry professionals may have to consider continuing education programs and return to university to complete the appropriate courses (as an aside PEO at this point is against "grandfathering").

The current registration regimes in B.C., Alberta and Newfoundland are being looked at very carefully as possible models for Ontario. An important component is the development of syllabi (compulsory and optional training lists) for specific geoscience sub-disciplines. In the area of Geomorphology, the title for the syllabi in Ontario will most probably be "Environmental Geoscience" along with several others (geophysics, geochemistry, oil and gas, etc.). For comparison PEO has 18 syllabi for the engineering disciplines. Lynda Bloom is heading up the committee developing some of the syllabi. She was at the recent GAC/MAC meeting in Winnipeg receiving feedback from the GAC.

Anyone in Ontario, or from other provinces, who would like to contribute opinions and ideas about: 1) registration in general and; 2) the importance of geomorphology in the "Environmental Geoscience" syllabi; are welcome to submit them to me and I will ensure that they are forwarded to the Task Group.

Joe Desloges
Dept. of Geography, University of Toronto
100 St. George ST., Toronto, Ontario M5S 3G3
Phone: 416-978-5234, FAX: 416-978-6729

**CGRG ACTIVITIES AT THE 1996 CAG MEETING
UNIVERSITY OF SASKATCHEWAN
SASKATOON, SASKATCHEWAN**

CAG: Special Aeolian Session

It has recently been suggested that a "resurgence" is underway in aeolian geomorphology. While there has been a renewed interest in desert aeolian processes and landforms (resulting in several compilation volumes and texts), it is debatable if research in non-desertic environments has witnessed this same rejuvenation. Nevertheless, there is presently considerable research into aeolian processes in semiarid, subhumid and cold-climate regions. In Canada, much of this research has been conducted in coastal, arctic and boreal environments, commonly by geomorphologists from a variety of sub-disciplines.

A recent session on Aeolian Processes and Environments was held at the Canadian Association of Geographers Annual Meeting in Saskatoon, sponsored by the Geological Survey of Canada (GSC) and Canadian Geomorphology Research Group. The session represented the largest gathering of aeolian scientists in Canada in the last decade (since the 17th Annual Binghampton Symposium, Guelph, 1986). Of the 20 talks and posters presented, 15 were by Canadian scientists, by far the largest representation to date. Participants included 13 researchers from nine Canadian Universities; government participants from Saskatchewan Research Council, Agriculture Canada, US Geological Survey, and the GSC. Two university scientists from Finland and New Zealand travelled to Canada specifically to attend the session. Although the session ran concurrently with the Palliser Triangle session, there were typically 30 to 50 people in attendance.

Presentations dealt primarily with aeolian processes in cold-climate and subhumid environments where vegetation, moisture and other binding agents typically limit sediment supply to the aeolian system. The presentations were divided into four major headings. Holocene Records of Aeolian Activity provided a suitable introduction, and addressed the role of aeolian processes in the last 10 ka. A broad range of environmental settings, from subhumid and semiarid to arctic and subarctic, were represented. Contemporary Aeolian Processes provided significant insight into supply limiting mechanisms including vegetation, moist sand, snow and ice, common in aeolian settings in Canada, that were clearly contrasted with a presentation from the transport limited, arid region of Nevada. Three additional presentations dealt with the largely neglected issues of prairie dust storms and aeolian processes in alpine regions. Mechanics of Wind Erosion examined a scope of issues including moist sand, wind speed variability and shrub vegetation. Each of the papers addressed the resulting modifying effects on the wind erosion process. Similarly, the role of pebbles, moisture, bacteria and algae in limiting sediment supply to the aeolian system were addressed in Stabilizing Mechanisms. These concluding papers presented some of the complex issues that must be addressed when dealing with aeolian processes in humid and cold-climate environments. In short, the papers presented represent the scope of aeolian research by Canadian scientists, with comparable research by international representatives.

During the 3 1/2 day field trip preceding the meeting ("Landscapes of the Palliser Triangle" lead by Don Lemmen and Stephen Wolfe; see field trip report (below)), 38 participants had an opportunity to view active aeolian processes in the Great Sand Hills region. All were impressed by the extent of aeolian activity in the Palliser Triangle and USGS scientists indicated that comparable levels of sand dune activity on the Great Plains are found only in Texas.

Both the field trip and the paper session raised stimulating discussions, and gave many scientists an opportunity to meet people they formerly knew only from the literature. The success of the aeolian session and field trip translated into the establishment of an aeolian working group under the CGRG which will oversee a number of products in the next two years (see report below). These include a set of thematic papers stemming from the aeolian session to be submitted to Canadian Journal of Earth Sciences and contributions to the Aeolian Processes component of the GSC's National Geological Hazards Synthesis Project. In the mean time, those interested in obtaining abstracts from the session may contact Stephen Wolfe via E-mail at swolfe@gsc.nrcan.gc.ca.

"Global Change in the Palliser Triangle: Lessons from the Past to Prepare for an Uncertain Future" was the theme of a 1 day (13-14 May 1996) special session sponsored by the Canadian Geomorphology Research Group at CAG '96. Consisting of 20 oral and 13 poster presentations, 27 featuring research conducted as part of the Geological Survey of Canada - coordinated Palliser Triangle Integrated Research and Monitoring Area (IRMA), the session catered to presentations on individual research programs, setting the stage for integration of this new work in the final phase of the project. The formal presentations were preceded by a 3 day field trip to many of the study sites discussed in this session.

We (D. Lemmen and R. Vance) opened the special session with an overview of the Palliser Triangle project, and were followed by three presentations, none of which were formally a part of the IRMA, but all provided different perspectives on the region and issues under consideration. M. Colenutt (U of Western Ontario) discussed high-resolution tree ring records in the Rocky Mountains and P. Roberts-Pichette (Environment Canada) outlined a national ecological monitoring program currently being set up, a possible vehicle for continuing at least some of the monitoring programs that are currently part of the Palliser Triangle IRMA. I. Saunders (U of Lethbridge; Nat Christie Project) discussed his recent efforts to place 2X CO₂ GCM simulations in a regional framework for southern Alberta, employing a scaling down process. While emphasizing significant uncertainties exist, Saunders concluded that although a mean annual temperature increase of 4-6 C may be involved, it will have little impact on the sustainability of prairie agriculture. Considerable discussion ensued that highlighted some of the contrasts of modelling versus analogue approaches to impact studies.

The remaining presentations in the session reflected the three major components of the project: i) records of past climatic and hydrologic change; ii) the impacts of climate on geomorphic processes, and iii) spatial analysis of landscape sensitivity and geomorphic response. Ten talks and several posters on the first day dealt with paleoclimatic and paleohydrologic reconstructions for the region. B. Last and his student Y. Shang (U of Manitoba) outlined problems and advances in deriving paleohydrologic and paleoclimatic signals from salt lake sedimentary sequences, highlighting Shang's recent work at North Ingebright Lake. J. Birks (Queen's) discussed her contribution to salt lake groundwater regimes, focusing on Chappice Lake, southeastern Alberta. C. Yansa (U of Wisconsin), A. Beaudoin (Alberta Provincial Museum), B. Beierle (U of Calgary) and J. Smol (Queen's) each made presentations outlining the value of using a variety of proxy indicators and non-traditional paleoecological sites to unravel details of the rapid environmental change that occurred in the south of the prairie provinces through early and mid-Holocene times. R. Vance and K-A Richmond (U of Manitoba) discussed mid- and late

Holocene paleolimnological records from the eastern Palliser Triangle, outlining significant fluctuations in water resources to minor excursions in climate that are characteristic of recent millenia. P. Leavitt (U of Regina) closed the first day with a discussion of his efforts to assess impacts of land use and climate change on lakes in southern Saskatchewan in the last century.

Geomorphology and process responses were the focus of the second day of presentations. The importance of spatial scale was emphasized by W. Vreeken (Queen's), and served to emphasize a recurrent theme concerning attempts to model regional scale landscape response to climate change. However, the importance of studying past geomorphic responses was clearly illustrated in subsequent talks on controls on landsliding and aeolian activity by D. Sauchyn (U of Regina) and S. Wolfe's (GSC), respectively. Considerable evidence for climatically-induced regional sand dune activity in southwestern Saskatchewan in the last 200 years was one of the most striking examples of the responsive nature of this subhumid landscape. The session concluded by examining the applied aspects of geomorphological research to agriculture within the Palliser Triangle. An overview of the complexities of the current present agricultural setting was provided by T. O'Brien (PFRA). D. Pennock (U of Saskatchewan) followed with a review of soil (wind, water and tillage) erosion, emphasizing that redistribution processes reduce soil quality and that the prospect of recurrent drought could have devastating impacts on regional soil resources. The final presentation by D. Sauchyn and D. Lemmen discussed efforts to address issues of sustainability and landscape sensitivity by integrating geomorphic modelling, records of past geomorphic response, and modern process monitoring.

A sizable portion of the global change research concentrates on the analysis of existing databases that are widely recognized as inadequate. In contrast, the Palliser Triangle IRMA was set up to identify critical knowledge gaps and to promote new studies to gather essential data to address these needs. The '96 CAG provided an excellent forum to discuss this new data and its implications. CGRG sponsorship of the session highlights the critical role geomorphology has to play in multidisciplinary studies of environmental change.

As coordinators of the project and organizers of this session, it was exciting to see the variety of studies and breadth of analyses focussed upon a common objective coming to fruition. Evidently, the session was not only of value to those directly associated with the project, but was also appealing to a much broader audience beyond the realm of earth sciences. Feedback has been extremely encouraging, and we close with a quote from B. Rogerson (U of Lethbridge), who declined our attempts to pawn off the task of writing this session summary - "...write the darned thing yourself, and when you do, don't forget to use an appropriate abundance of superlatives because it really

provided us, the audience, with one of the best conference academic experiences that I have ever had."

Don Lemmen and Bob Vance
Terrain Sciences Division
Geological Survey of Canada
3303-33rd St. NW
Calgary, Alberta T2L 2A7
Ph. 403-292-7184 Fax 403-292-7034

Landscapes of the Palliser Triangle Field Trip

Many Canadians who have traversed the country by car have commented that the prairies represents a somewhat boring section of the trip. The attitude of such people probably would change if they had participated in the CGRG sponsored field trip "Landscapes of the Palliser triangle". After having covered vast tracts of backroads in southern Saskatchewan and been introduced to a wide variety of interesting stops and landscapes over the four day field trip, one can only conclude that the area is anything but boring and in fact represents a beautiful and diverse landscape.

The field trip was organized by Don Lemmen and Steve Wolfe (GSC), Dave Sauchyn (U. of Regina) and Alec Aitken (U. of Saskatchewan). They were ably supported by the hardworking team of Abigail Burt and Brenda Sorenson (U. of Saskatchewan) who tackled some of the less glamorous, but important tasks such as assembling lunches and Todd Rodenbaugh who assisted with the driving. Because of the combined efforts of all of these individuals, the field trip was very well organized and coordinated over the entire four day period.

The field trip really started at the Regina airport as the organizers kindly met the out-of-province participants at the luggage reclaim area and then shuttled them to a U. of Regina residence. Things got underway officially the next day when the 38 participants climbed into vans and were driven off. The first stop was near Clearbank where Don Lemmen (GSC) generally summarized the Palliser area and pointed out the near-by ice-pushed ridges of the southern Dirt Hills. The next stop was at the Claybank Brick Plant museum which operated between 1914-1989 making firebricks from local clay deposits. Although an anthropogenic part of the landscape, this stop represented literally a step back in time since much of the machinery was the original which had been installed in 1914 and used over the entire 75 year operational history of the plant. Succeeding stops were at Oro and Willow Bunch lakes where Bill Last (U. of Manitoba) made the most enthusiastic presentations that we have every heard

on any a field trip about the palaeolimnology of the lakes. Both lakes are saline, but interestingly, the brine of Oro Lake is dominated by Mg^{2+} rather than Na^{+} unlike most other lakes in the region. After lunch at the Victor petroglyphs, we proceeded to Table Butte on the Wood Mountain Upland where Rudy Klassen (GSC) discussed the local glacial geology based upon his mapping in the area. Other stops this day included the Killdeer Badlands and Wood Mountain Uplands before we proceeded to the hotel at Swift Current.

Day two began with a stop at the Seward Sand Hills just west of Swift Current where Steve Wolfe discussed his work on aeolian dunes. Although subject to local degradation by blowouts, most of the dunes here presently are stabilized by vegetation. Optical dating of deposits, however, indicates that the dunes were active within the past 200 years. The group then split into two groups with one heading off to stops nearby at Antelope Lake esker, Antelope Lake and Gull Lake while the other stayed behind to continue looking at the dunes. The two groups later met for lunch and then headed south towards the Cypress Hills. At several stops along the way, Willem Vreeken (Queen's U.) discussed an array of landforms on the Swift Current Plateau which he interprets to have been formed by a subglacial mega-flood. Needless to say, this interpretation precipitated an interesting debated and it become clear that several participants fell into extreme 'camps' supporting completely different hypothesizes for the formation of the local features i.e., floodites versus glacialists.

Further stops on day two included Frenchman River Valley, a breathtaking view of the Frenchman Valley from Jones Peak, a view of cyroturbated gravel of the Cypress Hills Formation in a gravel pit, and examination of Quaternary and Miocene deposits along the Bélanger Canal. At all of these stops, relatively low temperatures combined with strong winds made for rather cold conditions which thoroughly chilled everyone to the bone. We overnighted in a hotel in the Cypress Hills Provincial Park and had a delicious supper of beef and lamb at the nearby Spring Valley guest ranch.

On day three, everyone awoke to discover fresh snow(!) outside which no one had expected or anticipated when packing for the trip. After breakfast and then a somewhat cold and cloud-impaired view from Bald Butte, we proceeded north to Fort Walsh where David Sauchyn (U. of Regina) gave an overview of the local geomorphology along Battleford Valley and his research into local landslide activity. Unfortunately, impassable roads prevented us from visiting the Police Point landslide. We then proceeded north to Gap Creek where Willem Vreeken summarized the local Holocene stream incision and showed us a thick sequence of lacustrine sediments overlain by loess deposits. This sequence represents an interesting accumulation of late Quaternary sediments and contains Glacier Peak and Mazama tephras and 40 palaeosols. Next stop was in the Bigstick Sandhills where Steve Wolfe again discussed his dune research. The group then split into the same two groups as on day

two with one heading to the Great Sand Hills for a continued dose of aeolian landforms. Meanwhile, the other group visited the saline Ingrebright and Freefight lakes hearing presentations from Bill Last and Yuqiang Shang (U. of Manitoba) and then finally the Lancer ice-thrust moraine described by David Sauchyn. Everyone later met up at the hotel in Leader.

For the fourth and final day, stops were at the Great Sand Hills, Lancer Palaeosol, a landslide complex along the lower Swift Current Creek, and Clearwater Lake. Over lunch at Clearwater Lake, Cathy Yansa (U. of Wisconsin-Madison) described her palaeoenvironmental work at the nearby Missouri Coteau. The formal field trip was now completed and we then proceeded to Saskatoon for the conference.

Overall the field trip was excellent. As with all good field trips the secondary discussions amongst the participants at the various stops and between sites provided very interesting insights into, in some cases, geomorphic features completely aside from the main theme of the stops. The diverse range of backgrounds amongst the participants no doubt contributed to these discussions. Although naturally dominated by Canadians, there were a number of international participants coming from China, New Zealand, Finland and the United States.

For all of those who were unable to attend this field trip, the next time you are in southern Saskatchewan get off the TransCanada Highway and checkout the backroads. The countryside is alluring!

AEOLIAN WORKING GROUP

The first official sub-group of the Canadian Geomorphology Research Group was formed during the annual meeting held at the Canadian Association of Geographers, Saskatoon meeting. The Aeolian Working Group's mandate is to improve our understanding of aeolian processes in non-desertic environments and to strengthen aeolian research in Canada. With that objective in mind, the Group will work toward two major outputs. The first is a set of thematic papers to be published by the year's end in the Canadian Journal of Earth Science. The papers will come from those presented at the Special Session at the Canadian Association of Geographers Meeting. The second output will consist of a contribution to the Geological Survey of Canada's National Geological Hazards Synthesis Project. As well, the working group may organize a smaller, more focussed aeolian session in two years time. This session will likely be a presentation of papers examining the role that moisture and other supply limiting mechanisms play on aeolian processes in Canada.

The working group consists of the following participants:

Mary-Louise Byrne

Department of Geography and Environmental Studies
Wilfrid Laurier University, 75 University Avenue West
Waterloo, Ontario N2L 3P5
mbyrne@mach1.wlu.ca

Louise Filion

Commission de la recherche, Pavillon Jean-Charles-Bonenfant
Universit e Laval, Ste-Foy, Quebec, G1K 7P4

Linda Halsey

Devonian Botanical Garden, University of Alberta
Edmonton, Alberta T6G 2E1

Jukka Kayhko

Laboratory of Physical Geography, P.O. Box 9, FIN-00014
University of Helsinki, Finland

Frank Larney

Agriculture and Agri-Food Canada, Research Centre, P.O.Box 3000
Lethbridge, Alberta T1J 4B1

Jane Law

Department of Geography, University of Waterloo
Waterloo, Ontario N2L 1O8

Marianne Maljaars

Department of Geography, Trent University
Peterborough, Ontario K9J 7B8

Brian McCann

Geography Department, McMaster University
Hamilton, Ontario L8S 4K1

Hamish McGowan

Department of Geography, University of Canterbury
Private Bag 4800, Christchurch, New Zealand

Cheryl McKenna Neuman
Department of Geography, Trent University
Peterborough, Ontario K9J 7B8

Yves Michaud
Quebec Geoscience Centre/Geological Survey of Canada
2535 Laurier Blvd., Sainte-Foy, Quebec G1V 4C7

Dan Muhs
United States Geological Survey, Box 25046 M.S. 974
Denver Federal Centre, Denver, Colorado, U.S.A. 80225

Bill Nickling
Department of Geography, University of Guelph
Guelph, Ontario N1G 2W1

Gary Running
United States Geological Survey WRD, 6417 Normany Lane
Madison, WI. 53719

Olav Slaymaker
Department of Geography, University of British Columbia
Rm 217-1984 West Mall, Vancouver, B.C. V6T 1Z2

John E. Stout
United States Department of Agriculture, Agricultural Research Service
Lubbock, Texas 79401

Deanna van Dijk
Department of Geography, University of Waterloo
Waterloo, Ontario N2L 1O8

Willem Vreeken
Department of Geography, Queen's University
Kingston, Ontario K7L 3N6

Elaine Wheaton
Environment Division, Saskatchewan Research Council
15 Innovation Blvd., Saskatoon, Saskatchewan S7N 2X8

Davina White
Department of Geography, University of Guelph
Guelph, Ontario N1G 2W1

Virginia Wittrock
Environment Division, Saskatchewan Research Council
15 Innovation Blvd., Saskatoon, Saskatchewan S7N 2X8

Stephen Wolfe
Geological Survey of Canada, P.O. Box 35
Yellowknife, NT X1A 1S5
swolfe@gsc.nrcan.gc.ca

V.E. Wyatt
Department of Geography, University of Guelph
Guelph, Ontario N1G 2W1

REPORT ON THE INTERNATIONAL ASSOCIATION OF GEOMORPHOLOGISTS

1. *Regular reports* on the activities of the IAG are appearing in *Zeitschrift fur Geomorphologie*, *Earth Surface Processes and Landforms*, *Geomorphology*, *Transactions of the Japanese Geomorphological Union* and *Revue de Géomorphologie Dynamique*. Check there for details.

2. *IAG Activities*- Since Hamilton in 1993, the IAG has held two Regional Conferences (in Singapore in June, 1995 and in Hungary in April, 1996) and is now preparing for the 4th International Conference to be held in Bologna, Italy from August 28-September 3, 1997. Early registration and abstract deadlines are in October, 1996 so it is not too soon to be making plans. The main conference will be preceded by 3 major field trips and 5 symposia and will be followed by 13 field trips to all parts of Italy and Greece. In preparation for the conference, Canadian geomorphologists are asked to consider making nominations for the Executive to serve from 1997-2001(!) and also to develop a position on the most appropriate venue for the 5th International Conference to take place in 2001. In order to remind you of the present members of the Executive (1993-1997), here is the list:

President: Dietrich Barsch, Heidelberg
Vice-President: Olav Slaymaker, Vancouver
Secretary: Bob Allison, Durham

Treasurer: Vic Baker, Tuscon
Publication Secretary: Avijit Gupta, Singapore
Members at Large: Marie-Francoise Andrée, Limoges; Takasuke Suzuki, Tokyo.

Coopted Members (after results of voting are declared, the Executive attempts to improve international representation by coopting additional members)

Mohamed Benazzouz, Constantine
Mike Crozier, Wellington
Lawrence Jeje, Ife
Danes Loczy, Budapest
Mario Panizza, Modena
John Ludvig Sollid, Oslo
Dario Trmbotto, Puerto Madryn
Ying Wang, Nanjing

Positions vacant are: Vice-President, to become President (2001-2005), Secretary, Treasurer, Publication Secretary, 2 Members at Large

Our nominees can come from any country other than Canada which has declared its national membership of the IAG and is in good standing. The constitution declares that only one person from any one country may be a member of the Executive and given that the constitution also requires that the Vice-President proceed to become President, Canada has its quota in the form of the incoming President.

UPCOMING CONFERENCES

CGRG Annual Meeting, GAC/MAC'97, Ottawa, Ontario, May 19-21, 1997. The 1997 CGRG annual meeting will be held under the umbrella of the GAC/MAC'97 meeting to be held May 19-21, 1997 at the Ottawa Congress Centre, Ottawa, Ontario. The CGRG will be sponsoring two related events in this meeting:

- a symposium on the engineering geomorphology of landslides in Eastern North America being organized by Steve Evans, Jan Aylsworth and Ted Lawrence, Terrain Sciences Division, Geological Survey of Canada.

- a one day field trip examining the Slope stability and settlement problems in sensitive marine clay, Ottawa Valley hosted by, the same, Jan Aylsworth, Ted Lawrence and Steve Evans.

Climatic Change- The Karst Record. University of Bergen, Department of Geology, Bergen, Norway, 1-4 August 1996. For more information contact: S.E. Lauritzen, Department of Geology, Bergen University, Allegaten, 41, N-5007, Bergen, Norway, Fax: 47 55 32 44 16. E-mail: Stein. Lauritzen@geol.uib.no.

Fourth I.A.G. International Conference, Bologna, Italy, August 28- September 3, 1997

NEW BOOKS FROM CGRG MEMBERS

Fluvial Geomorphology, *Edited by* E.J. Hickin (Simon Fraser University) Wiley, 1996(?).

Based upon papers presented in fluvial geomorphic sessions at the Third International Geomorphology Conference in August 1993.

Geomorphic Hazards. *Edited by* O. SLAYMAKER, (University of British Columbia) Wiley, 1996, 224pp.

Examples of geomorphic hazards discussed in this book are accelerated soil erosion, desertification, floods, landslides, seismicity, soil salinization, thermokarst erosion and volcanic eruptions. The examples are drawn from Algeria, Canada, Cape Verde Islands, Egypt, Italy, Japan, Mexico, Netherlands, Philippines and Russia.

Plenary Lectures and Debate. *Edited by* D. FORD and S.B. McCANN. (McMaster University) Wiley, 1996.

Based on the plenary addresses and debates presented at the Third International Geomorphology Conference in August 1993, the particular focus of this volume is on the debate concerning ten principles of geomorphology propounded by Denys Brundsen and his closing academic address as retiring president of the association.

Steepland Geomorphology. *Edited by* O. SLAYMAKER, (University of British Columbia) Wiley, 1995, 290 pp.

Using thirteen independent steepland field investigations, this book illustrates the differing conceptual frameworks that are used at four different temporal scales of investigation - southern Africa, Yukon Territory, the German Alps, and a Columbian volcano. There are examinations of the sediment production problem in Spitzbergen and northern Norway; sediment storage phenomena in Iceland, Bolivia, the Himalayas

and the Apennines; and methods of interpreting environmental change from Japan, the Canadian Rockies, Ecuador and Bolivia.

CONTRIBUTIONS TO FUTURE CGRG NEWSLETTERS

The CGRG newsletter is published twice annually. As with all such newsletters, its success is directly dependent upon 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:

[Yves Michaud](#) or [Dan Smith](#) or [Greg Brooks](#)