Notes from the Chair

It is the best of times; it is the worst of times. Recent promising breakthroughs in science and technology make this an exciting time to be practicing geomorphology. For example, the use of cosmogenic nuclides for surface-exposure dating and measuring erosion rates may begin to provide stratigraphic information about erosional surfaces analogous to the breakthroughs in depositional sequences that followed Liddy's development of $^{14}$C dating in the 1950s. In Quaternary science, Greenland ice-core data are providing a high-resolution measure of environmental change that indicate more rapid and frequent climate shifts than was previously supposed.

Understanding of modern geomorphic processes is being greatly facilitated by the development of data sensors and data loggers and by analytical process-response models. When coupled with geographic techniques, these models can be made linked to cartographic data bases; and spatially distributed process modeling is finally coming into its own.

Even as major breakthroughs are being made in our knowledge of Quaternary environmental change, earth surface processes, and technologies with which to monitor them, so lean economic times in Academe are to be anticipated. OK, so it may not be the worst of times... but budget cuts at high levels of government to both higher education and granting institutions will soon be making their way down to geography departments. We should recognize that tight budgets are likely to continue and respond by taking proactive measures to insure the continued vitality of our discipline. I recommend three general areas where geomorphologists can work to maintain a solid institutional standing: (1) emphasize our long-held, broad traditions in

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Introduction

*Geomorphorum* is issued twice a year by the *Geomorphology Specialty Group* (GSG) of the Association of American Geographers (AAG). (see Mission Statement) If you are a member of the GSG and download the newsletter from Geomorphlist, to help save mailing costs, please notify the editor that you do not need a hard copy of the newsletter. (Just send an e-mail communication with your name and the message "no hard copy "). The contents of this newsletter depend on contributions from members and from anyone who has an interest in geomorphology. Please send to the editor relevant thoughts, comments, reports, news, lists of recent publications or activities, program updates, or any other item you would like to have considered for inclusion in the next edition.
earth science, (2) continue to develop in the technical, geophysical, and geochemical aspects of our field, and (3) maintain communications and out-reach with others.

We have a long tradition in landscape evolution stemming from the old-time physiographers. An understanding of and fascination with landform changes, geomorphic processes, and interactions between humans and the Earth’s surface are not mere fads for us. Geographers have been engaged in these endeavors since before our Association was founded. General training in allied earth science fields such as soils, climate, hydrology, and ecology gives geomorphologists an earth view that is indispensable as research needs emphasize global change and environmental concerns. When combined with our traditional concerns and training in human-land interactions, this background becomes particularly relevant to the modern national research and education agenda.

While maintaining pride and constancy with our geomorphic traditions, we should also embrace modern technologies such as GIS, GPS, remote sensing, mathematical modeling, automated data-collection platforms, and geophysical and geochemical methods of dating and materials analysis. There is a delicate balance between attaining an appropriate level of understanding of how a technology works and maintaining concentration on initial research objectives. Historically, some poorly conceived work is associated with the use of any incipient technology, and we must not become infatuated with the tools at the expense of our research questions. Yet, there are considerable gains to be made through the use of these techniques and the use of any sophisticated technology requires some basic level of understanding.

In particular, the use of GIS, remote sensing, and GPS is no longer severely constrained by lack of software, data, and expertise, but provides an operational set of spatial data management, mapping, and modeling tools that, once installed, can be utilized with a modicum of computer training. For example, digital soil, geologic, vegetation, and elevation maps, as well as remotely sensed imagery, can simply be overlain onto one another or algebraically manipulated. Such a database can be queried at a variety of scales as a seamless map through a moving window. Mapping and modeling can be done without these tools, but the information and capabilities gained not only facilitate our work, but also reveal relationships that are difficult to discover with conventional paper maps. To this end, let me point out an opportunity to participate in a training session on the use of digital elevation models (DEMs) for hydrologic, geomorphic, and ecologic modeling. John Wilson is offering a workshop on "Terrain modeling and analysis" to be given from 1:00 to 5:00 p.m. on Tuesday, April 9th at the Charlotte meetings. Not only will this workshop be relevant to those interested in DEMs, but John has generously offered surplus proceeds to our group.

As a final strategy for maintaining our institutional well-being, we should maintain and broaden communications with others. This can include interactions with government officials, other scientific disciplines, local communities, and our students. It will not be enough to simply speak to ourselves by presenting research at geography meetings and publishing in geography journals. Our traditions and environmental perspective should be emphasized by publishing in journals of other disciplines and by communicating what we do with Deans, Provosts, government agencies, politicians, and the media. From a pragmatic standpoint, we should emphasize the practical aspects of our work in such out-reach efforts, while asking the broad questions that motivate our basic research. Finally, the vitality of a discipline may best be measured and communicated by the students it produces. Students are best encouraged by enthusiasm, creativity, and example in the classroom, the field, and academic venues. When was the last time you took students to a professional meeting? Further, advanced students should be encouraged to participate in meetings. The GSG now has two new student research awards in addition to the paper competition; each with a substantial cash prize. Participation in meetings can also serve to resolve another burning issue; that is, what ‘real geomorphologists’ do. I will not attempt to resolve this complex question in such a short column, but if you really want to know, come to Charlotte, attend as many geomorphology paper and poster sessions as possible, come to the business meeting, and talk to the people around you. I suspect there is no better measure of the creed to be found.

Allan James - South Carolina
Treasurer's Report

No activity has taken place on the GSG funds (other than a small charge for printing checks) since I opened up a new account in July after receiving the funds from the previous treasurer, Allan James. We should receive our 1996 allocation from the AAG Central Office in mid-March. Upcoming expenses will include copying and mailing of the newsletter and student awards.

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Musings from the Secretary

I write this after having just read Allan James' Notes from the Chair and Claude Allegre's response to being named the 1995 Bowie Medalist by the American Geophysical Union. These two messages, while different in detail, stress some common themes: 1) the influence of modern technology on the earth sciences, 2) the need to consider the practical importance of earth-science research in today's political climate, 3) the growing emphases on analyses that cover large (global) scales and on the use of mathematical models and modeling, 4) the increasing influence of geophysics and geochemistry on earth-science research, and 5) the importance of intradisciplinary and interdisciplinary collaboration. Allegre, in particular, emphasizes the last point and calls for more "border-crossing" meetings.

This past year I had the pleasure of attending two scientific meetings that demonstrated firsthand the value of interdisciplinary interaction. In early April I traveled to Leeds, England for a conference on "Coherent Flow Structures in Open Channels". The organizers of this meeting were Phil Ashworth and Stuart McLelland from the Department of Geography and Sean Bennett and Jim Best from the Department of Earth Sciences, University of Leeds. The purpose of the conference was to explore the origins of coherent flow structures at various scales in open channels and to examine the role that these structures play in sediment movement and channel dynamics. The intensive program included 54 papers presented over 3 days 2E The papers, which covered topics ranging from grain-scale processes to planform-scale processes, were divided into 4 sessions - 1) Coherent Flow Structures and Particle Entrainment in Flat Bed Turbulent Boundary Layers, 2) Grain Roughness and Bedform Initiated Flow Structures , 3) Bar-Scale Flow Structures and Their Impact on River Morphology, and 4) Channel Scale and Planform-Controlled Flow Structures (a proceedings volume will be published by John Wiley in 1996).

Academic affiliations of the speakers included geography, geology, earth science, ocean science, civil engineering, environmental science, mechanical engineering, hydraulic engineering and hydrodynamics, freshwater ecology, environmental engineering, applied mathematics and theoretical physics, hydromechanics and water resources management, hydrology, and earth systems science. In addition, several private consulting firms and government agencies were represented at the conference. Attendees came from many countries throughout the world, including Austria, Canada, Denmark, France, Germany, Israel, Italy, Japan, Mexico, the Netherlands, Russia, Switzerland, the US, and the UK.

Although the schedule was exhausting, the exchange of diverse ideas and perspectives generated an enthusiastic, intellectually enlivening atmosphere. On the last evening of the conference, after all of the papers had been presented, a large group assembled to relax, unwind, and socialize. As I listened to the informal conversations within this group, it was clear that many felt it was one of the best conferences they had ever attended. I was struck most by the comments offered by the engineers, who were genuinely impressed by the high quality of scientific research presented by the geographers, geologists, and earth scientists. Moreover, when making these comments, the engineers did not identify the affiliations of these scientists; instead, they merely mentioned the quality of a specific paper. This "border-crossing" conference achieved an important goal - it increased the respect of earth-science research among a broad community of international scholars and at the same time broke down disciplinary barriers by producing an inclusive sense of scientific camaraderie.

In October, I attended the 26th Binghamton geomorphology symposium on "Biogeochemistry, Terrestrial and Freshwater Systems" organized by Cliff Hupp, Waite
Osterkamp, and Alan Howard. This symposium, while less diverse than the Leeds conference, nevertheless had somewhat of an interdisciplinary flavor in that it included geomorphologists, biologists, and ecologists. The symposium upheld and enhanced the reputation of excellence associated with the Binghamton symposia. It demonstrated that the integration of ecology and geomorphology is a fertile area for future research and interdisciplinary collaboration. Once again, I experienced firsthand the value of such interdisciplinary themes for enhancing the visibility of, and respect for, geomorphology. I attended the conference with a Ph.D. student from the Plant Biology Department here at Illinois who is interested in the interaction between riparian vegetation and fluvial processes. This student came away impressed by the high quality of the research presented at the symposium and excited about geomorphology and what it has to offer.

Demonstrating the value of geomorphological research to the scientific community at large is an activity in which all of us should assume an active role. Nevertheless, to be an effective ambassador for geomorphology, it is important to have a clear sense of disciplinary identity. An exploration of this identity will serve as the theme for the upcoming Binghamton symposium on "The Scientific Nature of Geomorphology" to be hosted by myself and Colin Thorn in Urbana-Champaign, Illinois. The symposium is offered in the belief that it is as important to attend to our intradisciplinary health as it is to promote interdisciplinary ties. I invite you to join us in this exploration of geomorphology. (Further details are provided below under the section on meetings and conferences.)

**Awards**

By the time this newsletter reaches you it will probably be too late to nominate someone for this year's GSG awards, but don't let this stop you from nominating a deserving colleague. The Awards Committee will accept nominations at any time.

The Geomorphology Specialty Group of the Association of American Geographers invites geomorphologists to nominate a worthy individual for its Gilbert Award and its Distinguished Career Award, as well as applications for student awards. A Best Student Paper award will be presented at the Charlotte AAG meeting, based on presentations in a special session already organized. The Gilbert Award is given on the basis of a major research contribution in the form of a paper, monograph, or book, whereas the Distinguished Career Award recognizes the geomorphic contributions of a career. Nominations for the Gilbert and Distinguished Career Awards, and requests for information concerning student awards, should be sent to:

Dr. David R. Butler, Department of Geography, University of North Carolina, Chapel Hill, NC 27599-3220 USA, butler@geog.unc.edu

The Honors/Awards Committee of the Geomorphology Specialty Group for 1995/96 is comprised of David Butler, Bill Nickling, and Ron Dorn.

**AGU Awards and Honors**

*(contributed by Alan Howard)*

William E. Dietrich won the 1995 Horton Award from the Hydrology Section of the American Geophysical Union. The citation is as follows: For major contributions to the understanding of sedimentary processes in rivers and the hydrology and geomorphic evolution of headwater drainage basins. On behalf of the GSG, congratulations, Bill!

The Spring 1995 AGU meeting in Baltimore featured two sessions and a post-meeting field trip honoring the geomorphic and hydrologic accomplishments of M. Gordon (Reds) Wolman. The Fall 1995 AGU meeting had a similar session honoring Ronald Shreve on his retirement.

**Student Research Grants**

Two research grants are being offered by the GSG for Spring 1996 to facilitate graduate research. The awards will be presented at the Charlotte business meeting of the GSG 2E. Proposals are requested from student members of the GSG who are enrolled full-time in a graduate degree program and who matriculated into the program less than 20 months prior to the
Prizes: $200 for the best Master's thesis research proposal; $400 for the best Ph.D research proposal.

To enter submit a completed application form, a short proposal (5 pages or less), and three letters of recommendation to David Butler, Chair, Awards Committee, at the address above. Application forms can be obtained from Dave Butler or from the WWW site: [obsolete address]
The deadline is two months prior to the meeting, but if you hurry the committee may consider it.

Business Meeting

The Business Meeting of the GSG at the Charlotte AAG meeting is scheduled for 6:45 to 8:00 p.m. Friday, April 12, 1996. Be sure to look for the room location and any last minute time changes when you pick up your registration materials at the meeting. The refreshments following the meeting so be sure to attend.

Important Agenda Item for the Business Meeting

Randy Schaetzl submits the following item for consideration at the business meeting.

To the members of the Geomorphology Specialty Group:

I am requesting your input, either now or at the Charlotte meeting, regarding your views on current GSG officer election protocol. In the past, GSG officers (secretary-treasurer, and hence, president elect) have been nominated and elected at the GSG business meeting. This process, while democratic enough, does not allow everyone to vote, or to nominate. Those who may be absent from the meeting cannot participate in this important process. (More importantly, they may be elected!) I expect to bring this topic up for discussion at the business meeting.

Many other specialty groups have mail ballots and/or nominations, allowing for all members of the specialty group to participate. Obviously, this also comes at a cost.

I suggest that nominations be made either of two ways: (1) solicited in the spring Geomorphorum (which usually comes out a few weeks prior to the AAG meeting), and (2) from the floor at the meeting. Perhaps more importantly, I also suggest that election of the nominees, if there be more than one, be by mail ballot in the six (?) weeks immediately following the meeting.

Let's hope this matter is not so complicated as to require a task force or working group to study it over the winter and bring recommendations forward at Fort Worth. Nonetheless, this remains an option. I welcome your input on this important matter.

Randy Schaetzl, Dept. of Geography, Michigan State University

East Lansing, MI 48824-1115, 517-353-7726 (voice) 517-432-16 71 (fax)
(schaetzl@pilot.msu.edu)

Meetings and Calls for Papers

Association of American Geographers Annual Meeting.

Charlotte, N.C.; Apr 9-13, 1996:
Sessions of interest to geomorphologists include (asterisk denotes session sponsored by GSG):
Tuesday April 9  - Terrain Modeling and Analysis* (4 hr. workshop, requires preregistration)
Wednesday April 10  - Coastal Geomorphology*, Coastal Aeolian Systems*, Drylands Geomorphology, Student Honors*, Coastal Hazards, Geomorphology: Weathering
Friday April 12  - Fluvial Forms and Processes*, Geomorphological Investigations: Linking Form and Process, Fluvial Geomorphology and Sediment Dynamics, Soil Geomorphology I: Arid Regions, Soil Geomorphology II: Humid Regions, Sediment,
Soil, and Fire Dynamics
Saturday April 13 - Geomorphology:
Anthropogenic Impacts and Consequences,
Sediment Storage and Remobilization in Rivers*,
The Environment of Gender and Science: Women
in Physical Geography, Biogeomorphology in
Fluvial Systems*, Landslides, Debris Flows and
Block Gliding

27th Binghamton Geomorphology
Symposium

"The Scientific Nature of Geomorphology",
September 27-29, 1996 Urbana-Champaign, IL,
Bruce L. Rhoads and Colin E. Thorn, Organizers.
The slate of participants has been finalized for
this meeting, which will explore methodological
and philosophical issues in geomorphology. If you
are interested in receiving registration
information please contact me at the address on
the front of this newsletter. Preparations are
now being made for local arrangements. Detailed
information will be sent out in the early summer.

List of Participants and Paper Topics:

**Philosophical Issues** -
The Methodological Roles of Theory in Science,
Harold I. Brown
Observation in Geomorphology, Bruce L. Rhoads
and Colin E. Thorn
Hypotheses and Geomorphological Reasoning,
Victor R. Baker
Fashion in Geomorphology, Douglas J. Sherman
Toward a Philosophy of Geomorphology, Bruce L.
Rhoads and Colin E. Thorn

**Methodological Issues** -
Space, Time and the Mountain -- How Do We
Order What We See?, Michael Church
Samples and Cases: Generalisation and
Explanation in Geomorphology, Keith Richards
Climatic Hypotheses of Alluvial-Fan Evolution in
Death Valley are not Testable, Ronald I. Dorn
Physical Modelling in Fluvial Geomorphology:
Principles, Applications, and Unresolved Issues
Jeff Peakall, Phil Ashworth, and Jim Best

**Modeling: Prospects and Problems** -
A Role for Theoretical Models in Geomorphology?
Michael J. Kirkby
Physically Based Modelling and the Analysis of
Landscape Development, Deborah Lawrence
Equifinality and Uncertainty in Geomorphological
Modelling, Keith Beven
Deterministic Complexity, Explanation, and
Predictability in Geomorphology, Jonathan Phillips

Limitations on Predictive Modeling in
Geomorphology, Peter K. Haff

**Interdisciplinary and Intradisciplinary
Contexts** -
Derivation and Innovation in Improper Geology,
aka Geomorphology, C. Rowland Twidale
Geomorphology, Geography, and Science,
Bernard O. Bauer
The Evolution of Geomorphology, Ecology, and
Other Composite Sciences,
Waite R. Osterkamp and Cliff R. Hupp
Geomorphology and Policy for Restoration of
Impounded American Rivers: What is "Natural?"
William L. Graf

**International Conference on Geography and
Environmental Consultancy** :

**Present Problems and Future Prospects,**
The University of Birmingham, UK, 9 - 10 April
1997, Preliminary Announcement and Call for
papers - Dr. Damian Lawler and Professor Geoff
Petts of the University of Birmingham, UK, are
convening the above 2-day conference on behalf
of The Environmental Research Group (ERG) of
the Royal Geographical Society/Institute of
British Geographers. The aim of this meeting is to
examine, through critical reviews of past
experiences (good and bad!), present problems
and future prospects, the ways in which
Geography is responding to the challenges
associated with Environmental Consultancy.

Specific objectives, reinforced in a linked edited
volume, are to:
1. Stimulate debate between geographers, other
scientists, professional consultants,
environmental regulators, planners and industry,
illustrated from international perspectives;
2. Exchange consultancy experiences and
solutions, and highlight outstanding needs;
3. Evaluate and publicise geographical
contributions to environmental research and
consultancy, and to alert geographers to
consultancy opportunities;
4. Assist progress towards a 'Code of Best
Practice'. Contributions from all areas of
Geography and cognate disciplines are invited.

The convenors are aiming to produce a coherent,
fully refereed, edited volume based on the
conference papers. Please send titles and 250-
word Abstracts by 30 April 1996 to:
Dr Damian Lawler, School of Geography, The
University of Birmingham, Edgbaston,
Birmingham, B15 2TT, UK. Tel: +44-121-414-
Full papers will be needed in December 1996.

Other meetings:


Apr 22-26, 1996: 8th **International Conference on Luminescence and ESR Dating**. Canberra, Australia. Contact: Secretary General, International Glaciological Society, Lensfield Road, Cambridge, CB2 1ER, U.K.

May 2-3, 1996 **Northcentral Sectional Meeting of Geological Society of America, Symposium on the Soil-Geomorphology Projects of Robert V. Ruhe** Half-day session on the original projects, invited speakers from the projects, volunteer paper session for those currently involved in soil-geomorphology research based on the principles of Ruhe's approach to soil-geomorphology. Pre-meeting field trip to Greenfield Quadrangle, one of the original projects in Iowa. Field trips May 1 and May 4,5. Web site info http://www.public.iastate.edu/~geat/nc gsa/intro.html. Also watch next issues of GSA Today newsletter for details on abstract submission.


May 20-24 **American Geophysical Union Spring Meeting**, Baltimore, MD SM-REQUEST@EARTH.AGU.ORG


Aug 17 - 23,1996 **Workshop on: The Geomorphic, Kinematic, and Climatic Significance of Rock Glaciers**, D. H. Clark, N. Potter, E. Steig, B. Whalley, conveners. This workshop will be based in northwest Wyoming adjacent to the Absaroka Mountains east of Yellowstone National Park, at the Northwest College Field Station on Dead Indian Hill next to Sunlight Basin. The conference schedule tentatively includes 3-4 days of talks and discussions at the field station, with a 2-day field trip to inspect the Galena Creek rock glacier sometime during the meeting. For further information, please contact Brian Whalley (b.whalley@qub.ac.uk).


Aug 18 - 19 June 1997, **Late Quaternary Coastal Tectonics**, Geological Society of London, Burlington House, London, UK. Convenors: Dr Ian Stewart (Brunel University, Borough Road, Isleworth TW7 5DU, UK; tel: 44 181 8910121; fax: 0044 181 5699198; e-mail: iain.stewart@brunel.ac.uk) & Prof. Claudio Vita-Finzi (University College London, Gower Street, London W1E 6BT, UK; tel: 44 171 3877050 x2383; fax:0044 171 38876 14; e-mail: ucfbcvf@ucl.ac.uk) Abstract deadline is January 1, 1997, but early proposals are welcome. A conference volume is planned.

Aug 28-Sept 3, 1997: **4th International Conference on Geomorphology. Bologna, Italy**. Second announcement will be sent to those who request information before Sept 30, 1996. Contact: I.C.G., Planning Congress s.r.l., Via Crociali 2, I-40138 Bologna, Italy email: forti@geomin.unibo.it. **28th Binghamton Geomorphology Symposium, Engineering Geomorphology**, will be held at the 4th ICG in Bologna. Contact: Rick Giardino (giardino@stra.tamu.edu).

Glacier Borehole Video.

As part of a research project on the Arolla Glacier in Switzerland we have used a miniature borehole video camera to look at the internal structure of
a glacier. We have produced a 22 minute composite video ("A Glimpse at the Guts of a Glacier") that we think will be useful in teaching geomorphology and glaciology. It includes sections on: 1. The process of hot water drilling through a glacier 2. A journey down a borehole to look at changes in ice structure 3. Englacial voids and channels 4. The glacier bed 5. Changes in water turbidity in a borehole 6. Drilling problems. If you would like a copy of this video they will be available at the AAG meeting in Charlotte (April, 1996) or we can mail you a copy. Send inquiries to:

Luke Copland / Jon Harbor, Dept. Earth and Atmospheric Sciences, Purdue University, West Lafayette IN 47907-1397.

We are asking for a contribution of $10 to help with costs of production and mailing to North American addresses, and to help cover the cost of providing free copies to scientists and educators who are not able to make a donation. A donation is not required to receive a copy of the tape. If you can make a donation, please make checks payable to Purdue University and add a note on the check that reads "unrestricted gift to Harbor's research" (this allows us to get around lots of red tape). For international requests we are able to translate the tape to any standard format - please contact us by email with tape translation requests (luke@geo.purdue.edu or jharbor@geo.purdue.edu).

WWW SITES

For those of you who "cruise" the Web, you may be interested in the following sites.


A massive, international listing of scientific conferences (including those in the earth sciences and geomorphology) can be found at: http://www.lib.uwaterloo.ca/society/meetings.html


Larry Mayer, Miami University of Ohio maintains a nice Web resource page for geomorphology at: http://tgl.geology.muohio.edu/gbook/gresources.html

Also, check out the Geomorphology Lab at the University of Iowa at: http://weirich320h.geography.uiowa.edu/geomorphology.html

One of the best pages I have found is the Color Landform Atlas of the United States, which contains color shaded relief maps of all 50 states. Nice!! See them at: http://fermi.jhuapl.edu/states/states.html

And of course be sure to visit the GSG and Geomorphlist (I.A.G.) home pages at: Geomorphology (GSG): http://www.cla.sc.edu/geog/gsgdocs/index.html Geomorphology: http://www.ttu.edu/~geomorph [obsolete]

If you come across, or have developed, an interesting home page that you think may be of interest to geomorphologists please send me the server information so I can report it in the next newsletter.

News from Members and Friends

David Butler (University of North Carolina) spent two weeks in August in Glacier National Park, continuing his collaborative research on beaver pond sedimentation with George Malanson of the University of Iowa. He is also engaged in a study with a graduate student on the effects of trampling on the subalpine environment in the Park. In February 1995 he visited the Park with doctoral student Forrest Wilkerson, and observed several recent and in-
Grant from the Natural Hazards Research and Applications Information Center, 1995-1996, in the event of major snow-avalanche closures of transportation links along southern Glacier National Park; a UNC University Research Council Grant on Assessing the Historical Role of Trampling as a Disturbance at Alpine Treeline; and a UNC Institute for Research in Social Sciences Grant in support of a summer research assistant for Impact of Tourism on the Alpine Landscape. In March, David Butler served as a Consultant to The College Board and Educational Testing Service, which are examining the question of an Advanced Placement Exam for Geography, at a meeting in New York City. He has recently been reappointed to the Editorial Advisory Board of the AAG's Resource Publications in Geography Series for 1995-1998, and has just been appointed Book Review Editor for the Journal of Geomorphology, effective January 1, 1996.

Recent publications include:

Pascale Biron and Andre Roy (Universite de Montreal)

Geomorphology at Purdue -- Jon Harbor
Purdue University is located in the topographically-challenged landscape of north central Indiana, but is home to a number of good research facilities, including the USDA National Agricultural Research Service, the Department of Geology and Geophysics, and the Department of Civil Engineering.
Soil Erosion Lab, the Purdue Rare Isotope Measurement Lab (PRIME Lab) for AMS measurements of cosmogenic nuclides, and the Laboratory for Applied Remote Sensing (LARS). I joined the Department of Earth and Atmospheric Sciences at Purdue in Fall 1994, and now have a thriving Geomorphology Lab research group involved in two discrete areas of study: Environmental Management and Glacial Geomorphology.

In environmental management we are focusing on assessing and managing the impact of development on both the quantity and quality of surface water runoff. In particular we are working with several of my former colleagues at Kent State University on detailed monitoring of runoff from construction sites, including evaluation of management practices designed to reduce off-site pollution. On a larger scale, John Teufert (Ph.D. student) and Budhendra Bhaduri (Ph.D. student) are involved in remote sensing, GIS and watershed modeling to assess the impact of management techniques on watershed-wide water quality. In addition we are working on techniques and products for planners and land managers to use in assessing probable impacts of land use change on hydrology, and to use in designing management practices. Finally, Wes Hawthorne (sophomore professorial research assistant) and Martha Herzog (MS student) are involved in an integrated watershed study examining a wide array of geomorphic and hydrologic problems associated with rapid land use change in a wetland watershed near the Purdue campus.

In glacial geomorphology we are working both on field/modeling studies of ice flow and landform development, and on using cosmogenic isotope studies to refine glacial chronologies and to investigate long term rates and patterns of glacial erosion in alpine areas. Luke Copland (MS student) and Marie Minner (undergraduate) are involved in a field program in Switzerland to collect detailed information on glacier flow and sliding, and are working with Andrew Elmore (undergraduate) on numerical modeling of these data to better constrain the forms of glacier flow and sliding laws.

In cosmogenic nuclide studies, Melanie McQuinn (MS student) is collecting exposure age data for glacial deposits in Indiana to refine the deglaciation history of the state, and Linda Horn (Ph.D. student) is collecting samples in alpine valleys to assess valley-scale patterns and rates of glacial erosion.

1995 Publications


**Physical Geography at the University of South Carolina - Allan James**

I am happy to report a young, vigorous, and rapidly growing program in physical geography here in Columbia. Last year we grew to three full-time physical geography professors (two assistant professors and an associate). David Cairns is involved in landscape ecology and is involved in modelling alpine tree-growth processes. Greg Carbone is a climatologist and does research on water budget modelling and the integration of doppler radar data into geographic information systems to aid in flood forecasting. Allan James is a fluvial geomorphologist studying flood hydrology, historical sedimentation, and Quaternary landforms. In addition, we are well represented in environmental studies with Susan Cutter (chair), who is in involved in hazards research, and Bob Janiskee who teaches environmental courses. We are presently interviewing candidates for an additional position in environmental geography to begin in the fall of 1996. In addition to our faculty strengths in physical geography and environmental studies,
USC is internationally known for its research expertise and educational program in geographic information processing (GIP), including GIS, cartography, and remote sensing. Our reputation in GIP is based on research productivity, six full-time GIP faculty, excellent computing facilities including three labs in the building and the college lab nearby (directed by Dave Cowen a member of our faculty), and a quality graduate-level educational program in these fields.

We are a large department soon to have 20 faculty and with about 60 graduate students in residence, and are very well endowed with equipment and facilities. A large lab is dedicated to research and teaching of physical geography and has a wide variety of equipment for the analysis of sediments, soils, tree rings, and other earth materials. Equipment includes a large-capacity fume hood, binocular microscope, gravity oven, muffler furnace, hotplate, magnetic stirrer, glassware, soil grinders, seive-shaker, sonic sifter with micro-sieves for precision grain-size analysis, oscillating agitator, hydrometers, pipettes, timer, balances, still, bueh nell filters, vacuum pump, centrifuge, dessicators, gas, water, refrigerator, data logger, and 486 PC. The lab also functions as a storage and staging area for field work. Field equipment includes a transit, tripod, surveying rod, plumb-bob, pins, tapes, stakes, rain gages, PVC bottles, PH wand, increment borers, soil augers, slip-spoon probes, brass and plastic sieves, and a Munsell color chart. Two high-precision DGPS units are available within the department in the Geographic Hazards Lab.

We have abundant computer facilities in the department including a Unix-lab with a Sun Server, seven Sun Sparc stations, Numonics Digitizing table, and tape back-ups in various formats. We expect a major up-grade of Unix facilities in the near future. A PC lab in the building has 8 IBM 486s and a Mac lab has 22 Mac IIci's and a Microtek Scanmaker IIxe Color scanner with resolutions up to 1200 dpi. Software available on line includes Arc Info (GIS), ERDAS (remote sensing digital image interpretation), and an array of PC applications. The computer equipment and software are networked and are accessible across the University.

If you are interested in visiting the department during the Charlotte meetings (we're about a 2 hour drive away), let me know and I'll make arrangements to have someone available to show you around.

From Randy Schaetzl, Michigan State University

The Geography Department at Michigan State University is currently undergoing two exciting developments, and has just completed a third. First, we are nearing completion of our new Geomorphology Laboratory. A converted Cartography darkroom, this newly refurbished lab will house standard lab equipment needed for soil and sedimentological analyses. Equipment (most newer than 3 years) includes two petrographic microscopes, a binocular microscope, image analysis software for one of the petrographic scopes, a Pentium laptop PC for the image analysis, a sieve shaker, a 4-decimal a 2-decimal balance, centrifuge, pH and ion-specific meter, EC meter, ovens, muffler furnace, dessicators, etc. Field equipment in support of the new lab includes our John Deere backhoe and a new Honda ATV (both including trailers). Second, the Department is in the middle of a major faculty and equipment initiative involving Digital Remote Sensing, which will have a strong emphasis on physical systems analysis. We expect to hire three or more faculty with interests in these areas over the next few years, with at least one hire at the Associate Professor level or higher. Third and last, we hired Alan Arboqast (PhD Kansas) this year. A geomorphologist, he is interested in late-Quaternary landscape evolution and climate change, with a particular focus on desertification and eolian sand mobilization in the continental interior. Although he is continuing to do some research in the Great Plains, Alan is developing a research agenda in the Great Lakes region by concentrating on the Holocene development and paleoclimatic significance of inland dune fields.

Physical Geography at the University of Illinois (i.e. shameless plug by the editor)

The geography department at Illinois now offers a graduate program in Environmental Studies in Physical Geography. Areas of specialization within the program include fluvial geomorphology (Bruce Rhoads), periglacial geomorphology (Colin Thorn), soil geomorphology and geochronology (Donald Johnson), physical climatology and aerobiology (Scott Isard), biophysical remote sensing (Tom Frank), and ecological/environmental modeling (Bruce Hannon). In each of these areas of specialization faculty members pursue research directed at evaluating interaction between natural processes and human activity. The program is designed to provide students with sets of skills they can use to help achieve solutions to important scientific problems related to the natural environment. Courses in the program train students in the
multiple dimensions of environmental issues, theoretical aspects of natural processes, field techniques, laboratory methods, GIS/remote sensing, and mathematical and statistical modeling. Facilities in the department include: 1) a modern GIS Laboratory maintained in collaboration with the Departments of Anthropology, Landscape Architecture, and Urban Planning, and with the U.S. Army Corps of Engineers’ Construction Engineering Research Laboratory (CE RL), which is located near campus, 2) an Image Processing Laboratory, 3) a Computer Mapping Laboratory, 4) a Soils/Sedimentology Laboratory, and 5) a full array of modern field equipment for microclimatic and geomorphologic research (I will forgo the itemized list of equipment in these facilities; if interested contact me). Other major research facilities and laboratories are available at the Illinois Geological Survey, the Illinois Natural History Survey, and the Illinois Water Survey, all of which are located on campus. Faculty in the department have strong ties with scientists at these surveys and with colleagues in other academic units on campus including Anthropology, Environmental Engineering, Hydrosystems Engineering, Natural Resources and Environmental Sciences, the Institute for Environmental Studies, and the Illinois Water Resources Center. The University of Illinois has the third largest academic library in the United States (behind Harvard and Yale) and also is home to the National Center for Supercomputing Applications (NCSA). For more info see the WWW Pages:

http://ux1.cso.uiuc.edu/~jejd/
http://www.uiuc.edu

Jeff Lee (Texas Tech University)
I continue to moderate IAG-GEOMORPHLIST and maintain the IAG WWW page. These duties have landed me a position on the IAG Executive Committee.

Recent publications:
The Journal of Geography paper was written as a fairly thorough introduction to SI for students and others. It concludes with my recommendations for how units should be used in geographic research.

Richard Marston, Professor of Geography at the University of Wyoming, has been appointed as Director of the Foundation for Glacier and Environmental Research (FGER). FGER is a non-profit, tax-exempt corporation organized to provide expeditionary field training and multidisciplinary research in earth system science of arctic and alpine environments. In particular, FGER has served as the organizational structure for the Juneau Icefield Research Program (JIRP) which celebrates its 50th anniversary year in 1996. FGER and JIRP have been directed since their inception by Dr. Maynard M. Miller of the University of Idaho. Over 3000 participants have benefitted from JIRP experience which involves a 7-8 week traverse of the 4000 km2 Juneau Icefield. Each summer, 50-75 talented students and an international team of researchers move between 17 permanent camps and utilize equipment to study glaciology, geomorphology, hydrology, geophysics, meteorology, geology, and field surveying and mapping. Over 1000 technical reports, refereed publications, and theses/dissertations have been produced as a result of this program.

From Dorothy Sack (Ohio University)
The History of the Earth Sciences Society (HESS), founded in 1982, is an international society whose membership includes historians of science as well as earth scientists interested in the history of their fields. HESS publishes the refereed journal, Earth Sciences History, twice a year. Recent issues have featured such authors as David Stoddart, Leo L aporte, Ellis Yochelson, and Keith Young, and papers on Darwin, Simpson, Agassiz and Lyell, the Continental Drift debate, the history of Canadian geoscience, and the history of oceanography, to name a few. More information may be obtained by writing HESS Secretary Ron Rainger at the Dept of History, Texas Tech University, Lubbock TX 79409, or you may become a member (i.e., subscribe to the journal) by sending a check made out to HESS to...
Dorothy Sack, HESS Treasurer, Dept of Geography, 122 Clippinger Labs, Ohio Univ, Athens OH 45701. Dues are $30 per year ($35 for members outside the U.S.). Institutional subscriptions are also inexpensive, $50/yr within and $55/yr for institutions outside the U.S.

From Stuart McLelland, Leeds University
Postgraduate Research in Geomorphology: Selected Papers from the 17th BGRG Postgraduate Symposium. Edited by: Stuart J. McLelland, Andrew R. Skellern and Philip R. Porter (106 pp.) This book is a collection of 15 papers from the BGRG Postgraduate Symposium, held at Leeds University, 17-19 March 1995. The book contains a summary of research being undertaken by postgraduate members of the BGRG and covers a wide range of topics from environmental reconstruction and conservation to monitoring and modelling of flow processes and sediment dynamics. Copies of the book can be ordered from the Editors at: School of Geography, The University of Leeds, Leeds LS2 9JT. At a cost of 5 pounds sterling each (Cheques made payable to 'The University of Leeds').

From Lisa Wells
Beginning in January, 1996, Jay Noller and Lisa Wells will join the faculty of the Department of Geology, Vanderbilt University. These new positions will build a strong emphasis in Geomorphology, Quaternary Geology and Geoarchaeology. We hope to attract high quality Masters students to the programs to work on ongoing projects in: Quaternary Stratigraphy of the San Francisco Estuary, Geoarchaeology and Human/Landscape Interactions in Peru and Cyprus, Neotectonics of Northern California.

From Brian Whalley, University of Belfast
GLACIAL GEOLOGY and GEOMORPHOLOGY is a fully refereed electronic journal, published by John Wiley and Sons on behalf of the British geomorphological Research Group. It seeks previously unpublished, high quality articles in the general field of glacial processes, sediments and related landforms. Each article will be reviewed by at least two referees. Reviewers will be asked to return articles within 4 weeks of receipt and the intention is to speed publication in all ways possible by using electronic media. Articles are published in English. Volume 1 will start in March 1996. For more info contact: Prof. W. Brian Whalley, School of Geosciences, The Queen's University of Belfast, Belfast, BT7 1NN, UK b.whalley@qub.ac.uk e.journal@qub.ac.uk

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