

# GEOMORPHORUM

## Newsletter of the Geomorphology Specialty Group of the Association of American Geographers

Issue No. 1, 1994

Allan James, editor

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### NOTES FROM THE CHAIR - Vatche Tchakerian, Texas A&M University

The National Geography Standards was recently published by the AAG. It was developed by assistance from the American Geographical Society, AAG, National Council for Geographic Education and the National Geographic Society, as part of Goals 2000: Educate America Act (section 102) of our government. These geography standards identify what students should learn about our discipline and set some voluntary benchmarks for educators to use in their classes. It is particularly aimed at K to 12 levels and the standards are grouped for grades K-4, 5-8, and 9-12. Physical geography is well represented and I was especially

pleased to see emphasis on the physical processes that shape the patterns of earth's surface. For example, by the end of the 12th grade, students should know:

" ... the dynamics of the four basic components of Earth's physical systems: the atmosphere, biosphere, lithosphere and hydrosphere; the interaction of Earth's physical systems and the spatial variation in the consequences of physical processes across Earth's surface".

It was equally refreshing to read that this will be primarily accomplished by using the systems approach. System, threshold, feedbacks, storage of energy, complexity, etc. are all included. I think they deserve kudos from all of us as well as our encouragement. I highly recommend that you take a serious look at this document. We can all use some of this information in our introductory physical geography classes.

I would like to thank Jeff Lee and Allan James for starting the Geomorphlist and Jeff for his supervision of the mailings from his throne at Texas Tech. It has facilitated communications between geomorphologist all over the world. Also, by mailing the newsletter on email to those on the list, we will save a lot of money which can be used for other purposes. People can still receive hard copies if they prefer so. If you are not on the email list and want to join, contact Jeff Lee at [adgil@ttacs.ttu.edu](mailto:adgil@ttacs.ttu.edu).

Also, Carol Harden at Tennessee is continuing her quest for assembling a list of irritating "Geo-myths" that appear primarily in textbooks. Please continue sending her materials. It is relatively easy considering that we all have access to email. Also keep in mind the upcoming International Association of Geomorphologists (IAG) meetings

in Singapore (June 18-23) in 1995, and in Bologna, Italy in the summer of 1997.

If there are any issues that you would like me to follow or activities that we should participate in, please let me know. You can reach me via email at VPT7728@zeus.tamu.edu. I look forward to hearing from you and good luck.

*Vatche Tchakerian, Texas A&M University  
VPT7728@zeus.tamu.edu*

### **MINUTES of the 1994 San Francisco Business Meeting**

1. Opening remarks by Andrew Marcus, chair of the GSG. The GSG membership is 375 with 141 student members.
2. Geomorphlist is healthy and being coordinated by Jeff Lee of Texas Tech University. If you would like to be included on the mailing list, contact Jeff at adgil@ttacs.ttu.edu
3. Concern was expressed by V. Baker about geomorphology being not well represented in the Global Change Program of the National Academy of Sciences.
4. The GSG awards committee is headed by Will Graf with members Dave Butler and Bill Nickling. Representatives to the American Geomorphological Coordinating Board are Dick Marston and Carol Harden. Our GSG representative to the AAG committee on Standards for Geographic Data is John Wilson, Montana State Univ.
5. The outgoing secretary-treasurer, Vatche Tchakerian, announced that the GSG will have about \$1755. We will provide \$350 for the International Association of Geomorphologists (IAG). This will be matched by a similar contribution from our colleagues at the

Geological Society of America (GSA).

6. The AAG is willing to publicize events such as the USC geomorphology workshop and other similar activities by our members. There is a \$4,000 pool of money for such endeavors. Contact Ron Abler at the main office. There are also Specialty Group archives for reference, and a summer institute for minorities. The AAG is also considering a public issue response team (PURSE) to coordinate geographic issues with congress and the present administration.
7. Jim Knox, physical geography editor of the Annals, indicated there were 22 physical geography articles submitted out of a total of 111. There is a new society: History of Earth Sciences Society, and keep in mind the AAG Resource Publications in Geography for papers or monographs with David Butler as editor. Physical Geography is coming out 6 times per year and is now listed in GeoAbstracts. Contact John Dixon or Tony Orme for details.
8. No student award was given this year. **Nominate worthy students.**
9. The Distinguished Career Award was given to Theodore M. Oberlander, University of California, Berkeley.
10. The G.K. Gilbert Award was given to Nel Caine, University of Colorado, Boulder.
11. The GSG is sponsoring sessions at the '95 Chicago meeting. The following announced they will be organizing sessions: Carol Harden (fluvial), Linda O'Hirok (drylands), and Andrew Marcus (heavy metal transport in streams). I'm sure there will be other sessions (there is a weathering session being organized by the ASU group, contact Greg Pope).
12. Allan James, Univ. So. Carolina, was elected new Secretary- Treasurer of

the GSG. Vatche Tchakerian, Texas A&M Univ., will replace Andrew Marcus, Montana St. Univ., as chair of the GSG.

Respectfully Submitted, Vatche Tchakerian,  
Secretary-Treasurer, 1993-1994

### TREASURER'S REPORT

There has been little activity on the account thus far this year.

#### Income

Funds carried forward (VT)	1755.95
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#### Expenditures

Internat. Ass. Geomorph., 1994-95	350
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Internat. Ass. Geomorph., 1995-96	350
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Subtotal:	700
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Total:	1055.95
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We presently have a little more than a thousand dollars but there will soon add income from AAG membership fee rebates and two \$200 donations and pay for newsletter costs and awards.

Respectfully submitted, Allan James, Sec.-  
Treasurer, 1994-95.

### AWARDS

The GSG traditionally bestows three awards each year: the Distinguished Career Award, the Gilbert Award for Excellence in Geomorphic Research, and a Student Paper Presentation Award. A Graduate Student Research Grant, being initiated for 1995-96, will be awarded next spring at the business meeting. Nominations are sought for the 1996 Distinguished Career and Gilbert awards to be presented at the

GSG business meeting in Charlotte. The Gilbert Award is presented to the author(s) of a significant contribution to the published research literature in geomorphology during the past three years. Only books, monographs, maps, or refereed journal articles will be considered, with the emphasis on refereed research articles. Nominations should include a copy of the relevant publication and a statement as to why the publication deserves the award.

The Distinguished Career Award is for an individual who has made significant scientific contributions to geomorphology over their career. Nominations should include: (1) a description of the candidate's contributions to geomorphology, (2) a brief biographical sketch, (3) a selected bibliography, and (4) three letters of support from colleagues. Send nominations to Dave Butler, Geog. Dept., Univ. N.Carolina, Chapel Hill, NC 27599. Bill Nickling is also an awards committee member and a third will be determined at the spring business meeting.

### **DISTINGUISHED CAREER AWARD, 1994 - Theodore M. Oberlander, Univ. California - Berkeley**

Citation by Ron Dorn, Arizona State

Theodore M. Oberlander has had a distinguished career in geomorphology. From his Annals paper on inclined contours to his ongoing work on desert landscape interpretation, TMO has never been satisfied to look at a problem from the conventional perspective. Oberlander is a perfectionist, and each one of his contributions to geomorphological research and teaching is like a finely sculpted landscape. They need to be viewed in varying lights to be appreciated fully.

TMO's classic Syracuse monograph on the transverse drainages of the Zagros Mountains shed the first new light on this fluvial conundrum in decades. Every fluvial geomorphologist who looks out from an airplane window is constantly staring down at the problem of how streams get across transverse structures. Attacking the issue from a new perspective, Oberlander worked in Iran and determined a new solution. He deduced that thick flysch beds in orogenic structures can make their

own cover mass, allowing streams to be 'structurally superimposed' across more resistant strata.

In the midst of the quantitative revolution, when many geomorphologists were diving into streams as places to obtain numerical data, TMO didn't hesitate to take another path, jumping into the difficult problem of slope development in deserts. When Oberlander views a slope in the desert, he doesn't see it as it is today. He sees it first as an aesthetic entity that bears the imprint of countless environmental changes. With his 'bookend' papers in the *American Journal of Science* and the *Journal of Geology*, TMO met the challenge of putting together a meticulous story on the development of granitic pediments in the Mojave landscape. He explained boulder slopes in the Mojave Desert as core stones, manufactured by subsurface weathering, and let down as grus is stripped away.

Many geomorphologists are unaware that he has a strong climatological dimension. His *Journal of Arid Environments* paper on water balances in deserts develops a new index, and illustrates its utility in distinguishing truly arid regions from semi-deserts. Although rarely used in geography, Oberlander's new index has seen extensive use in agricultural fields.

Among the geomorphologists who work in the Colorado Plateau of the Southwest, few have tackled the problem of slope development in this cuesta-form landscape. Here are many elements that tend to scare others away: lack of time control; slow evolution; interaction with long-term climatic change; and the need to deduce events. Yet it was here that the 'Sherlock Holmes' of arid slopes tackled the evolution of sandstone slopes. His logic and deduction were flawless. A curved slick rock slope in sandstone is a thing of beauty, and a geomorphic problem to be solved. TMO explained that sandstone slope morphology can be driven by even the tiniest structural weaknesses, thus opening up fascinating research questions on the implications of those forms for the morphological evolution of the Colorado Plateau. These themes have been taken up by only a few others. Oberlander's papers on dryland slopes in 1977 and 1989 are a core of papers in the field.

In this short accounting, it is impossible to relate all of Oberlander's research accomplishments. For example, his paper on discharge measurements in Death Valley showed once and for all that he would rather leave his visitors wet than miss a rare opportunity to obtain data. His papers on rock varnish reveal his attention to the nitty-gritty detail in a desert landscape.

One of Oberlander's longest-lasting contributions to geomorphology is his ability to recruit young geomorphologists by teaching a holistic vision of a landscape. To his students, "Mr. Oberlander" was an amazing lecturer. He could pack more in a single hour lecture than most instructors could in a week. Like his published papers, each of his lectures was carefully crafted. Yet, his ability to inspire students was not just his classroom eloquence, but rather his visions, painted landscapes on a classroom chalk board, that pulled dozens of quality young scientists into geography and geomorphology. TMO has the uncanny ability to allow the student to 'see' the big picture. Geography was not compartmentalized into various subjects. Whether he taught a regional arid lands class, topographic map interpretation, cartography, landform analysis, or introduction to physical geography, he presented the essence of what gets people excited about geography.

Those of us who were drawn into geomorphology and geography by TMO will certainly lament his retirement from Berkeley. We only hope that he puts down his painter's brush every once in a while to write some more of that geomorphology that never goes out of style.

*Ronald I. Dorn, Arizona State University*

## **ACCEPTANCE OF CAREER AWARD**

by Ted Oberlander

[Ted was in Africa at the time of the award and was unable to attend. His acceptance was read by Herb Eder.]

At this moment I think wistfully of the grace and sincerity of Ross Mackay's words when he accepted the first Gilbert Award in 1983. My own promising start in Canada was so thoroughly undermined by my high school years in the coal and brickyard culture of central Pennsylvania that I have no hope

of finding equivalent phrases to express my appreciation for this recognition from my peers. Worse yet, unfortunate timing causes me to be half a world away at just this moment. I chose this spring to pursue a 30-year interest in the scarps of Southern Africa and the strange views of both L.C. King and Julius Budel concerning them. Beyond this, I yearned to lay hands on a real African bornhardt, a landform long dear to my heart due to its striking resemblance to myself above the eyebrows. And I hoped to see some of the unique features of the Kalahari and Namib deserts. If fortune smiles, I will have accomplished some of these objectives by the time you gather.

This is the time to express thanks, and foremost I must place my late wife Lucille, a cancer victim whose heart was among the ponderosa pines, but who spent half her life wiling the hours away by our bare-bones Econoline van, surrounded by desert brush, as I pranced with horned lizards in the Mojave or determined my angle of sliding friction on slickrock slopes in Utah. I would also like to thank the old van itself, which never stranded me and still stands rusting but ready in my driveway at an age of 25 years. Then there are the few thousand undergraduate and graduate students I have force fed my slides and who enthusiastically tried to read my mind on various types of exams for three decades. Many were possessed of intellects I truly feared to offend with foolishness or sloppy thinking. My debt to them is overwhelming.

I must concede a fatal attraction to bright, colorful places, with landforms that are easy to appreciate and enjoy. I tip my hat to the truly dedicated among you who practice geomorphology amid the awful cover of vegetation and soil in our more humid climes. I vividly recall the slippery mud and the hum of insects in the ravines of New York where I embarked on my first project in landform analysis. It was the realization, between mosquito bites, that the mud was varved that launched my career.

My greatest regret is that I was too much a part-time geomorphologist. I put too much time and effort into other academic responsibilities, either because they needed to be done or were too interesting to let go. If I had shed these distractions, some of the half-finished studies in my files could have been concluded, and I might be more deserving of the

award you are conferring upon me. As Ron Dorn knows, I always wanted to have one of those "Outrageous Hypothesis..." titles. Mine would have dealt with the Pali on Oahu. Would you believe island subsidence bringing a smooth caldera wall into the rains below the trade wind inversion? There is some evidence! Perhaps there is still time!

My extreme gratitude to you all,

Ted Oberlander

### **G.K. GILBERT AWARD FOR EXCELLENCE, 1994**

Nelson Caine, University of Colorado, Boulder, "Sediment Transfer on the floor of the Martinelli Snowpatch, Colorado Front Range", *Geografiska Annaler* 74A:133-144, 1992.

#### **Citation by John Dixon, University of Arkansas**

It is my pleasure to nominate Professor Nel Caine as the recipient of the 1994 G.K. Gilbert Award of the Geomorphology Specialty Group of the A.A.G. based on his paper entitled "Sediment Transfer..." This paper reports on a long term study of the pattern of movement of sediment onto, across, and out of a hillslope hollow in the Colorado Rocky Mountains. The paper is significant from a number of perspectives. Most importantly it reports on a longterm data set and examines in some detail the interannual fluctuations in sediment flux. Such studies are extremely valuable in helping us understand the longterm evolution of landscapes in general, and in alpine environments specifically. Analysis of interannual fluctuations of sediment movement provides a more realistic assessment of the variability of processes over the long haul compared to short term (Ph.D. time) studies. Secondly, the paper provides information on the specific nature of hillslope processes in alpine environments, especially those which are presently non-glacierized. It points to the essentially low magnitude of sediment transport in an environment where such processes are generally regarded as being far more geomorphologically significant. Thirdly, this study contributes substantially to a pre-existing body of information on the geomorphic processes operating in a particular "nivation hollow" in the Colorado Front Range. In this

manner it has increased our knowledge of the processes of formation of a particular landform feature at a particular place. The study corroborates results from similar studies in Scandinavia and as such contributes to a building of understanding of the generally poorly understood processes of "nivation". The paper also contributes to our understanding of stream channel development and behavior on alpine hillslopes.

The research methodology employed in this study, and for that matter the entire body of Nel Caine's scientific publications, is an outstanding reflection of that of G.K. Gilbert. The study involves the meticulous collection of field data over a long period, often under less than ideal field conditions. Following data collection, the study employs appropriate statistical analysis to identify and interpret the patterns of sediment transport. Finally, results of the study are interpreted in the light of the appropriate theoretical framework. Nel examines the significance of his results to understand the nature of long term landscape evolution in terms of the Thorns and Brunsden decay model of landscape evolution.

This paper is another in the steady stream of significant scientific contributions by Nel Caine dealing with the geomorphic processes and evolution of periglacial landscapes. Nel's work, however, is more broadly relevant to geomorphology as a whole than just to those of us who prefer to work in cool climes. His work represents a model for field investigations and for careful analysis of data and cautious interpretations of results. In addition, his work presents a strong theoretical framework for all those geomorphologists who work in the general area of hillslope processes.

*John Dixon, University of Arkansas*

### **ACCEPTANCE OF GILBERT AWARD**

by Nel Caine

Thanks you, John, for such kind comments that have solved a puzzle for me. When I was informed of this award a few weeks ago, it provoked three reactions. First, it was a great, but pleasant, surprise so it provoked Australian-style swearing. Second came the question 'what for?' since I had some idea

that the Gilbert Award was for recently published work. You have now answered that question for me, by describing a paper in such glowing terms that I no longer recognise it as the one I wrote! The second question also initiated my third reaction. To try to answer, I went to a copy of my vita but that did not help since it had not been updated since 1991. This award gives me a real incentive to update my vita!

I am especially happy to accept this award as a means of saying thanks to the many colleagues and, most important, graduate students who have helped work in Green Lakes Valley. This help has varied from the pleasures of skiing and face-plants in the snow to those of continually digging holes in the same snow.

It is also a great personal pleasure to accept the G.K.Gilbert award. I accept it as an honor in three ways: first, because it comes from the GSG; second, because it links my name with those of distinguished former recipients of the award; and third, because it associates my name, albeit tenuously, with that of G.K. Gilbert, the source of so much inspiration for modern geomorphology. For all of these reasons, I am happy to accept the G.K.Gilbert award and thank you all so much for the honor.

Nel Caine

### **STUDENT PAPER AWARDS**

No nominations or awards were made last year (1993-1994). Four student papers, submitted for consideration in this year's competition, will be read Wed., March 15th at 8:00 A.M. in a session chaired by Will Graf. Authors are Scott Ladd (Montana St.), Greg Pope (Arizona St.), Robert Voight & Bob Pavlowsky (Carthage College), and Jianchun Yi (U. Southern Cal.). The award will be presented at the business meeting Wed. evening.

Next year's competition will be held at the national meeting in Charlotte, NC. Dave Butler is the new chair of the awards committee. To enter next year's competition send Butler the entry form on the back of the cover page (please post).

## STUDENT RESEARCH GRANTS

It's time to initiate a student geomorphology research grant. A proposal will be advanced at the up-coming business meeting to establish an award of at least \$200 for the best research proposal at the Masters or Ph.D. level. The award is intended to help cover costs of data, field work, lab supplies, etc. needed to complete the proposed research. Requirements should include full-time enrollment in a geography graduate program, matriculation into the program no more than 20 months prior to the award, and student membership in the GSG. Two letters of recommendation from faculty should accompany the proposal which should be received no more than one month prior to the business spring meeting. Proposals will be judged by the awards committee. I have pledged \$200 of personal funds to insure availability of at least that amount for an award next spring at the business meeting. The present balance of our treasury suggests we should be able to make such an award on an on-going basis, particularly if other contributions are forth-coming (hint). Specialty Group awards are subject to AAG Council approval, but Ron Abler, exec. Dir., does not feel that will be a problem. I will draft a letter of intent upon approval by the GSG. (AJ)

## CONFERENCES & ORGANIZATIONS

### BINGHAMTON GEOMORPHOLOGY SYMPOSIA

- 1994 in Binghamton. This conference on Geomorphology and Natural Hazards was dedicated to the late Marie Morisawa who organized the conference and edited the proceedings volume.
- 1995 Charlottesville, VA. The 26th Binghamton Symposium at the Univ. of Virginia Oct. 6-7 will focus on Biogeomorphology: Terrestrial and freshwater aquatic systems. The paper program is set, but poster abstracts will be considered until June 1st, 1995. For information contact Cliff Hupp, USGS Suite 160, Holcomb Bridge Rd., Norcross, GA,

USA, Tel.: (404) 409-7700, fax: (404) 409-7725.

- 1996 Champaign, IL. The 27th Binghamton Symposium Sept. 27-29 is concerned with "The Scientific Nature of Geomorphology". The symposium is being organized by Bruce Rhoads and Colin Thorn and will examine the philosophical and methodological underpinnings of the discipline. Details to be in future newsletters or contact Bruce (rhoads@vmd.cso.uiuc.edu).

### INTERNATIONAL ASSOCIATION OF GEOMORPHOLOGISTS

IAG Southeast Asia Conference, June 18-23, Singapore. Contact Avijit Gupta, IAG-SEA Conference, Kent Ridge, P.O.Box 1135, Singapore 9111, Singapore.

IAG Newsletter. Dick Marston notes: The 11th Newsletter of the IAG, printed in Zeitschrift fur Geomorphologie 38, 1, 121-124, reports on the new structure of IAG, the 3rd Int. Geomorph. Conference (Aug., 1993 in Hamilton, Ontario), and the new Executive Committee for 1993-97. Marston@uwyo.edu

### INTERNATIONAL UNION FOR QUATERNARY RESEARCH

INQUA-Berlin. The 24th Int. Union for Quat. Res. Congress will be held in Berlin, Aug. 3-10. For registration information contact:

Congress Partner GmbH, Emmastr. 220, D-2813 Bremen, Tel.: (49)421/219073; fax: (49)421/216419; email: inqua@pkdb.botanik.uni-hohenheim.de; <http://www.uni-hohenheim.de/~pkdb/inqua/>

### BRITISH GEOMORPHOLOGICAL RESEARCH GROUP

This from Brian Whalley (Whalley@queens-belfast.ac.uk): The BGRG is the oldest and largest academic society for geomorphologists in the world. Although established by British geomorphologists it now has members world-wide. Members' subscription rates are: Ordinary (#10/yr); Student/unwaged/retired (#4/yr), Student (#10/3 yrs), Overseas (#35/5 yrs). Send to: Dr. Jim

Griffiths, Dept. Geological Sciences, Univ.  
Plymouth, Plymouth PL4 8AA, Fax: (0)752 233117.

Privileges include:

- o reduced subscription rates for Earth Surface Processes and Landforms,
- o three main meetings per year plus specialist/theme meetings,
- o copies of Geophemera,
- o research and publications fund,
- o postgraduate support, and
- o a postgraduate training workshop.

The BGRG granted the following awards in 1994:

- o the D.L. Linton Award went to M.G. Wolman,
- o the Gordon Warwick Award went to Jim Best, and
- o the Wiley Award (best paper in ESP&L) went to J.R. French.

Whalley, who recently stepped down as chair of the BGRG, encourages future interactions between our groups.

## NEWS ABOUT PROGRAMS

### EAST CAROLINA UNIVERSITY (Greenville, NC)

The coastal and coastal plain surficial processes program at the Geog. Dept., ECU continues to grow. We added two new faculty this year. Mike Slattery (Oxford) specializes in soil erosion mechanics and fluvial and hillslope processes. Yong Wang (UCSB) supplies much-needed remote sensing expertise. Slattery is working on several projects with geomorphologists in the U.S., U.K., and Canada concerning mechanisms of rill formation, global patterns of soil erodibility, and sediment source fingerprinting. Paul Gares is working on dune dynamics and sediment budgets on the N.C. Outer Banks (with grad students M. Lampe and R. Beachley), on storm responses in New Jersey dunes (with Rutgers scientists), and field projects from the

Aeolus Program. Jonathan Phillips has forest service funding to examine post-European landscape change in the Croatan Nat. Forest, NC, and continues work on nonlinear dynamical systems approaches to geomorphology and pedology. He's front man for the famed, ECU-based Tobacco Road Research Team. Wang is involved in a variety of NASA-funded projects, including remote sensing of carbon storage in the terrestrial biosphere. Gares, Slattery, Phillips, and Wang are beginning collaborative work on fluvial and eolian sediment dynamics of coastal plain uplands.

[A reference to owing Phillips a six-pack over an ill-fated football wager was clearly in poor taste and was cut - Editor]

Jonathan Phillips, Dept. Geog. & Planning, ECU, Greenville, NC 27858-4353; Tel.: 919/757-6082; email: [gephilli@ecuvm1](mailto:gephilli@ecuvm1).

## NEWS FROM MEMBERS

**Jake Bendix** took a position at Syracuse University where he will be following in some large footsteps (e.g. Oberlander). Congratulations Jake! He may have trouble adapting to the winning athletic program and is already boasting about the 'Orangemen'.

*Jacob Bendix, Dept. Geog., Syracuse Univ., 144 Eggers Hall, Syracuse, NY 13244-1090, tel: 315/443-3819; fax: 315/443-4227; [jbendix@maxwell.syr.edu](mailto:jbendix@maxwell.syr.edu)*

**David Butler** ([dbutler@uncv1.oit.unc.edu](mailto:dbutler@uncv1.oit.unc.edu)) continues work on geomorphic processes at alpine treeline in Glacier National Park (GNP) and a prolific publishing rate. He guest edited a special issue of Physical Geography on Alpine Treeline which includes papers by himself, D.M. Cairns, D.G. Brown, L.A. Scuderi, G.P. Malanson, and S.J. Walsh. Last summer, he conducted fieldwork in GNP with George Malanson (U. Iowa) and Ph.D. student F. Wilkerson on sedimentation in beaver ponds. He's working with Walsh, Konrad, and Peet of UNC on environmental effects of dams on the lower Roanoke River (funded by Nature

Conservancy) extending work by Walsh that established a GIS/remote sensing database for the basin.

Other recent publications:

- **Butler, D.R., 1994.** Repeat photography as a tool for emphasizing movement in physical geography. *J. Geography* 93(3): 141-151.
- **Butler, D.R., and G.P. Malanson, 1994.** Beaver landforms. *Canadian Geographer* 38(1): 76-79.
- **Butler, D.R., G.P. Malanson, and D.M. Cairns, 1994.** Stability of alpine treeline in GNP Montana, U.S.A. *Phytocoenologia* 22(4): 485-500.
- **Walsh, S.J., D.R. Butler, T.R. Allen, and G.P. Malanson, 1994.** Influence of snow patterns and snow avalanches on the alpine treeline ecotone. *J. Veg. Science* 5(5): 657-672.
- **Walsh, S.J., D.R. Butler, D.G. Brown, and L. Bian, 1994.** Form and pattern in the alpine environment: an integrative approach to spatial analysis and modeling. In: *Mountain Environments and GIS (I.* Heywood and M. Price, eds.), pp. 189-216, Taylor and Francis, London.
- **Brown, D.G., D.M. Cairns, G.P. Malanson, S.J. Walsh, and D.R. Butler, 1994.** Remote sensing and GIS techniques for spatial biophysical analyses of alpine treeline through process and empirical models. In: *Environmental Information Management and Analysis (W.K. Michener, J.W. Brunt, and S.G. Stafford, eds.)*, pp.457-485, Taylor and Francis, London.
- **Allen, T.R., D.G. Brown, D.R. Butler, and S.J. Walsh, 1995.** Local and Regional patterns of modern glacier equilibrium-line altitudes in GNP northwest Montana. *Proc., 1995 ASPRS/ACSM Annual Mtg.*, Charlotte, NC, in press.
- **Townsend, P.A., S.J. Walsh, and D.R. Butler, 1995.** Beaver pond identification through a satellite-based ecological habitat classification. *Proc., 1995 ASPRS/ACSM Ann. Mtg.*, Charlotte, NC, in press.
- ....and finally [!]..

- **D.R. Butler.** *Zoogeomorphology: Animals as Geomorphic Agents*, Cambridge Univ. Press for \$49.95, hardback, 225 pp. "examine[s] the role animals play in sculpting the Earth's surface,.. integrating... ideas and literature from... geomorphology and wildlife ecology... how animals of all kinds... can act as agents of erosion, transportation, and deposition of sediment..."

[ok Griz, now that you're done lazing around; what're you going to do this year?]

**Allan James** [Shameless Plug] and Jerry Davis led a field trip to the Sierra Nevada last spring to look at glaciation, drainage diversion, and hydraulic mining sedimentation. The weather held and we got in a lot of sites. Field guides, *Glaciation and Hydraulic Gold-Mining Sediment in the Bear and South Yuba Rivers, Sierra Nevada* (123 pp.), are available at cost from A.James (Geog., USC, Columbia SC 29208). Please include a check for \$14 (includes shipping).

**Jeff Lee** (Texas Tech. Univ.) continues to run GeomorphList. He got tenure last year [Congratulations Jeff!] and continues his work on blowing dust on the Southern High Plains.

**Recent publications:**

- **Lee, J.A., Allen, B.L., Peterson, R.E., Gregory, J.M., and Moffett, K.E., 1994.** Environmental Controls on Blowing Dust Direction at Lubbock, Texas, USA: *Earth Surface Processes and Landforms*, v. 19, p. 437-449.
- **Ervin, R. T. and Lee, J. A., 1994.** Impact of Conserving Practices on Airborne Dust in the Southern High Plains of Texas: *J. Soil and Water Conservation*, v. 49, p. 430-437.
- **Lee, J. A., 1994.** Book Review: 'The Dynamics and Environmental Context of Aeolian Sedimentary Systems': *Geomorphology*, v. 8, p. 337-338.
- **Lee, J. A. and Jones, L. L., 1993.** Teaching the Process of Science in Geography Courses: *Jour. Geogr.*, v. 92, p. 223-226.
- Jeff Lee, Dept. Economics & Geography, Texas Tech. Univ., Lubbock, Texas; Phone: 806-742-3838, Fax: 806-742-1137; e-mail:

adgjl@ttacs.ttu.edu or  
jefflee@unicorn.acs.ttu.edu

**Vatche Tchakarian** - Vatche got a three-year grant of \$473,000 from NSF along with College of Geosciences colleagues Neil Tindale (Meteorology) and Robert Duce (Oceanography), for a study on the production, transport and flux of desert dust from Saudi Arabia, Oman, UAE and Yemen into the Arabian Sea, as part of the ongoing Joint Global Ocean Flux Study (JGOFS) of NSF. He is editing a book for Chapman & Hall, London, Desert Aeolian Processes, with 15 chapters on various topics in aeolian geomorphology. It should be out in summer, 1995.

#### Recent publications:

- **Rendell, H.M., Lancaster, N. and Tchakerian, V.P. (1994)** Luminescence dating of late Quaternary aeolian deposits at Dale Lake and Cronese Mountains, Mojave Desert, California, Quaternary Science Reviews, v. 13, p. 417-422.
- **Zimbelman, J.R., Williams, S.H., and Tchakerian, V.P. (1994)** Sand transport paths in the Mojave Desert: characterization and dating, Desert Research Institute Nevada, Quaternary Sciences Center Occasional Paper No.2, p.127-131.

#### IN MEMORIA

This year, geomorphology experienced significant losses through the deaths of two leaders in our field. **Clyde Wahrhaftig** passed away in his sleep on April 7th, 1994. **Marie Morisawa** died in an automobile accident June 10th, 1994. Their contributions to geomorphology go well beyond their extensive written works, to their substantial leadership and penetrating intellectual insights. Our challenge is to carry on the high level of scientific inquiry and devotion to students that they showed throughout their illustrious careers.

#### Mission Statement

Geomorphorum is issued twice a year by the Geomorphology Specialty Group (GSG) of the Association of American Geographers (AAG). The purpose of this newsletter is to exchange ideas and news of geomorphology, and to foster improved communication within our community of scholars. The editor welcomes news, comments, suggestions, and assistance from all members of the geomorphological community. Geomorphorum circulates to about 500 scientists on our surface mail list, is listed on Geomorpholist (the listing service you are reading which was originally conceived for this purpose), and on the [South Carolina Geography Dept.'s](http://www.cla.sc.edu/geog/gsgdocs/home.html) home page on the World Wide Web (WWW) at: <http://www.cla.sc.edu/geog/gsgdocs/home.html>

The contents of this newsletter depend on members' contributions, so send relevant thoughts, comments, reports, etc. that you'd like to have considered for the next edition to the editor. Please include your Name, Institution or Agency, Recent Activities, Recent Publications, Issues to Raise at AAG GSG business meetings, and/or other items.

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#### FROM THE EDITOR Allan James - AJames@sc.com

It has been a pleasure to put this newsletter together, and I apologize for it being so late. Although lack of material had no bearing on the late arrival (for which I take full responsibility), I must renew the incessant plea heard from all editors of such newsletters everywhere: Send information about your work or the discipline! Mail or email contributions such as biographical snippets, hires, moves, deaths, promotions, grants, descriptions of academic programs in geomorphology, conference announcements, book or symposia reviews, or other items of interest to our readers. If you are dissatisfied with the material presented in this issue, you have only yourself to blame for not submitting better material! I hope to produce a late spring issue

a month or two after the business meeting, so this is an opportunity to get your information out quickly.

### **GSG Attains Demi-KiloMember Status**

So what if the DOW broke 4000? So what if the 49ers won the Super Bowl? So what if the Kobe quake generated debris flows and the seismicity on the East Pacific Rise has been linked to El Nino events...? Such earth-shaking events PALE before the monumental fact that the GSG membership has reached 500... even! This represents an increase of more than 100 since spring of 1993. We are growing rapidly and this bodes very well for geomorphology. It also raises the potential for saving mailing and photocopying costs through the use of Email (see 'Cyber Spuds' section below).

### **Try Low Bytes**

This section is for those who think a 'cursor' is the part of a computer that elicits expletives. Actually, the new GeomorphList (GL) service on the Internet has become so useful that notices normally sent to the Geomorphorum editor have begun going there instead. In fact, I received so little information by conventional snail mail that there is little to put in this section. Try out the GL. [obviously, since you're reading this on GeomorphList, you don't need this advice.]

### **Cyber Spuds**

This section is for those who think the electronic highway can actually get you and your gear out to the field and back; well, perhaps to 'virtual fieldwork'...

### **Putting the Newsletter on-line.**

As you read this issue of Geomorphorum (go4m) on the GL, take a moment to think about the effort that Jeff Lee puts into maintaining it. We owe Jeff Lee continued thanks, enthusiasm, and support for establishing and maintaining the GL so that this is possible.

In addition to the GL, this newsletter is being loaded onto the [Univ. So. Carolina](http://lorax.geog.scarolina.edu/gsgdocs/home.html) Geog. Dept's [home page](http://lorax.geog.scarolina.edu/gsgdocs/home.html) of the World Wide Web (WWW) located at:

<http://lorax.geog.scarolina.edu/gsgdocs/home.html> o... rev up your hypertext viewers, get out there on the info-super-exposure, and explore virtual geomorphology by taking a look at the Geomorphorum in deep cyber-time! While you're there, browse the other features at the site. Future issues will also be loaded at this site.

### **Receiving GO4M by Email.**

An initial purpose of establishing the GL was to reduce costs of reproducing and mailing issues of go4m. With 500 members, the cost of a single hard-copy issue is > \$350. The newsletter is an important voice of the GSG and of our discipline as a whole, but does it need to be printed and sent to all members?

Transmission via electronic media has the potential of saving the GSG money that could be used for student awards and other useful purposes. Unfortunately, difficulties have prevented us from taking full advantage of this capability.

This issue was copied and mailed to most of our 500 members because few (about 30 so far) have contacted me indicating they would be willing to forego receipt of a hard copy. An email message was sent in the 12th hour for volunteers willing to forgo hard copies, and a list is being developed that will be passed on to future editors. If you are a GSG member and do not need to receive a hard copy, email the message 'I don't need a hard copy' to [GeoAJames@aol.com](mailto:GeoAJames@aol.com) (please include your postal zip code). I anticipate rapid advancements in the capability of information technologies to pass formatted text and graphics, so that readability of electronic text soon will be improved. In addition, listing of the newsletter on the WWW may improve readability.

### **GL Policy**

The GL has grown beyond my greatest expectations and is no longer simply a list of GSG members' email addresses. What we have is far better and we shouldn't try to change it. A question was posted on the GL as to the role the GSG should play in the GL and the distinction between the GL and a list of GSG membership. The limited response (Lee, Marcus, and Tchakerian) seemed to agree that we

should continue to send our messages to the entire GL because it was established for this purpose, that we should continue to sponsor it, but that we must let it continue to expand as an international forum. As the only(?) purely geomorphology list service, and as a viable means of communicating with geomorphologists all over the world and in all walks of professional life, the GL has become a valuable asset to all geomorphologists and this usage should be encouraged.

Should the issue arise as to why we would circulate the newsletter to non-paying individuals, the answers are simple. First, it's free to list. Second, the GL is being read so widely by such a diverse readership that making the newsletter available to non-members affords an opportunity to get our message out as far as it will go. Our policy on public circulation should reflect the views of the membership, however, so if this is an issue to anyone, the question can be raised at the spring meeting.

The other side of the coin is the inclusion of information from the GL in the Newsletter. We can anticipate relevant input from across the net (e.g., the BGRG announcement this issue); after all, the

information highway is a two-way street (sorry). The nature of material produced in the go4m has traditionally fallen under the purview of the editor, but given this information 'revolution', feedback from the membership would be welcomed. To what extent should we reproduce in a paper newsletter what has come over the net? Your comments will be welcomed at the business meeting, on-line, or by any means convenient.

See you in Chicago at the AAG meeting! Allan James, Editor 1994-95

### **Acknowledgements**

The GSG is thankful to Susan Cutter and the University of South Carolina Geography Department for donating \$200 toward costs of producing this newsletter and for making possible the listing of the newsletter on the WWW. Also to Michael Scott and Martin Roberge for installing this newsletter on the WWW.