GEOMORPHORUM

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

Issue No. 1, 1998

Jeff Lee, editor

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1. Old Business

- A. 1997 Business Meeting Minutes were approved B. Membership Report: approximately 400 members
- C. Treasurer's Report: A savings account was opened at the Texas. Tech Federal Credit Union in July, 1997 with an opening balance of \$2491.45. Interest for 1997: \$22.14; for 1998

(to date): \$15.53. Deposit from AAG on 23 March 1998: \$1477.00. Balance on 25 March 1998: \$4006.12.

2. New Business

- A. Report from Specialty Group Chairs meeting: NSF has an increased budget and a new program which might appeal to geomorphologists called 'Life in Earth's Environment.
- B. **Report from AAG Council** (from Dick Marston):
- a. AAG will begin to give book awards in more categories.
- b. For the first time, AAG is providing subsidized child care at annual meetings.
- c. AAG is seeking volunteers to be available to help K-12 teachers.
- d. AAG is preparing a contact list for the news media- a directory of names and expertise on various topics.
- e. There is a new AAG membership category- retired/life.

C. Announcements:

Journals:

- a. Will Graf discussed AAG publications and asked for suggestions on changes which can be made to make the '*Annals*' and '*Professional Geographer*' more appealing to physical geographers.
- b. Andrew Marcus encouraged submissions of physical geography articles to the '*Annals*'.
- c. Bernie Bauer noted that John Paul Jones (editor of the '*Annals*') is receptive to physical

articles.

- d. Carol Harden encouraged submissions of physical article to the '*Professional Geographer*'.
- e. John Dixon says that '*Physical Geography*' is doing well.
- f. Dave Butler seeks volunteers for book reviews for '*Geomorphology*'.

Up Coming Meetings:

- a. Paul Gares announced that the next **Binghamton** meeting will be on coastal geomorphology and held at Woods Hole, 12-15 November.
- b. Norb Psuty discussed the *IGU meeting* in Lisbon, 28 August- 2 September.
- c. Jonathan Phillips announced that the second *Texas Geomorphology Symposium* will be held 11-13 February, 1999 in Junction, Texas. d. Jess Walker mentioned the *International Deltas Conference* in New Orleans on 23-29 August.
- e. Tom Paradise noted that the *field trips for the next AAG meeting in Hawaii* are not yet finalized, but will be well worth the effort. At that meeting, Jon Harbor mentioned that there will be more *sessions on 'Human Impacts on Geomorphology'* and Mike Slattery will put together *sessions on sediment transport*. There will be two abstract deadlines for the 1999 AAG meeting: an early one for regular paper presentations and a later one for posters and less time consuming presentations.

Other Announcements: Pat Gober encouraged all to attend the Presidential Plenary Session during the 1998 Boston Meeting.

D. Miscellaneous

- The book 'Geography in America' is to be redone in 2000. Dave Butler seeks feedback on what should be included in the geomorphology section.
- o *IAG representation* for the USA is shared by the AAG and GSA, with voting representatives to IAG meetings alternating between the two groups. GSA was offered the voting position for the 1997 Bologna meeting, but no one from GSA showed up to the business

- meeting. The AAG representative (senior member of the past three Specialty Group Chairs) will be the voting representative at the 2001 meeting in Japan.
- o The newsletter 'Geomorphorum' is now produced only in a digital version and sent out over IAG-GEOMORPHLIST and to any member who requests a paper copy. There was general agreement that this was the best way to distribute the newsletter.

E. Awards

- Anne Chin, acting as head of the committee in the absence of Ron Dorn: There were no submission of Master's Proposals, so that award was not given. The PhD proposal award (\$400) was given to Charles E. Allen of the University of Illinios. The winner of the student paper award (\$200) was not determined at the time of the business meeting. [Note: Patrice Carbonneau, University of Quebec was later given the award.]
- Dick Marston presented the G.K. Gilbert Award to Dave Butler, for his book "Zoogeomorphology." [see presentation below]
- 3. No Mel Marcus Distinguished Career Award was given.
- 4. Anne Chin becomes the chair of the awards committee, along with Bill Renwick and Mike O'Neal (new member).

F. Election of new GSG Secretary/Treasurer

- Joann Mossa was elected, by voice vote.
- **G. Other Business** The GSG will likely provide some aid to students for travel to the 1999 AAG meeting in Hawaii, but the details were not worked out. Most likely the Awards Committee, Secretary/Treasurer and Chair will determine how the awardees will be chosen and how much the awards will be.

H. Welcome Jeff Lee as new GSG Chair for 1998/99

AWARDS

Presentation of the G.K. Gilbert Award to Dave Butler by Dick Marston

Grove Karl Gilbert has been described as 'a great engine of research' because of his masterful writing on so many topics in geomorphology. Many of the concepts he developed are still accepted today as fundamental in our discipline. Gilbert wrote about fluvial processes (at a range of scales), coastal processes (e.g., spits, barrier beaches, deltas), glacial activity (east of Mississippi River AND in Alaska, landforms from intrusive igneous activity, faults/scarps/earthquakes, Lake Bonneville, groundwater and even the Earth's Moon. The AAG Geomorphology Specialty Group is proud to have named our annual award for outstanding research contributions in Gilbert's name.

HOWEVER, in Gilbert's writings it would be difficult to find descriptions and explanations of the geomorphic impacts of aardvarks in South Africa and the yellow sweetvetch in Glacier National Park, soil movement by the duck-billed platypus, and the erosional effects of grizzly bears. Animals burrow, build mounds, remove vegetation, trample, wallow and generally play a role in landscape development that few had appreciated until the appearance of David Butlerfs book, ZOOGEOMORPHOLOGY: ANIMALS AS GEOMORPHIC AGENTS. The role of animals as geomorphic agents must be treated now more than just a trivial subject or novel curiosity. Butler has accomplished a thorough job of reviewing the literature, writing in an effective and entertaining style that is clear, comprehensive and well organized.

In the Great Plains-Rocky Mountain region, I know first-hand that Butler's book has had a measurable impact on natural resource management decisions that deal with issues of overgrazing, fish habitat, and the reintroduction of beaver. ZOOGEOMORPHOLOGY has garnered

overwhelmingly favorable reviews in a large number of top-ranked and diverse journals. As one colleague noted, Dave's book anticipated the recommendations of the National Research Council's high-profile report, REDISCOVERING GEOGRAPHY, by developing 'integrative, interdisciplinary geographic research initiatives, discovering and pursuing new directions for geography', and 'engaging in cross-cutting projects' that appeal to other disciplines.

You all remember the diagrams of the cycle-oferosion drawn by William Morris Davis, with no vegetation. We have moved a long way from that perception of landscape change to one that now not only recognizes the fundamental role of vegetation but also the very significant role of animals in geomorphology at a variety of scales.

Fellow colleagues, when you are worn-out at the end of a tough day at work, pull Dave's book off the shelf and take a look at the superb photographs where you will often see Dave, George Malanson and other field colleagues smiling and waving and generally reminding us of how fortunate we are to be employed in the field sciences. Thank you, Dave, for that, and congratulations on your fascinating and timely book, ZOOGEOMORPHOLOGY.

It is my pleasure to present you with the 1998 G.K. Gilbert Award for Excellence in Geomorphological Research.
Sincerely from your friend and colleague, **Dr. Richard A. Marston**, Professor

Dave Butler thanked Dick and the supporting letter writers, and dedicated the award to his wife Janet and son William.

Student Travel Support for 1999 AAG Meeting, Hawaii:

From **Anne Chin**: The Geomorphology Specialty Group of the Association of American Geographers announces a competition for travel funds for graduate students to attend the 1999 AAG meeting in Hawaii. Graduate students who are members of the AAG and GSG, and who are presenting papers at the meeting are eligible. In addition, applicants must first apply for student travel support from the AAG (\$200 grant). The deadline for the AAG travel grant is June 30; see

the AAG Newsletter, Feb. 1998, p.6 for further instructions.

The number of GSG awards and specific amounts will depend on the number of applications and on the results of the AAG travel award process, but we expect to support about 10 students at \$200 each. Preference will be given to those who did not get funding from the AAG lottery system, if such a system is necessary.

Students wishing to be considered for a GSG travel grant should submit 3 copies of the following materials to Anne Chin, Chair, GSG Awards Committee, Department of Geography, Texas A&M University, College Station, TX 77843 (a-chin@tamu.edu):

- The AAG travel grant application, including the 250-word abstract
- An extended abstract of the paper presentation (800-1000 words).
- Two short letters of recommendation

Because these requirements are essentially the same as those for the GSG student paper competition, applicants should consider entering the paper competition. See separate announcement (below) for details. The deadline for receipt of all application materials is August 20, 1998. No late requests for travel funds will be accepted. Awards will be announced on or about October 1, 1998.

Graduate Student Competitions for 1999 Meeting, Hawaii

The Geomorphology Specialty Group announces a competition for the best geomorphology graduate student paper presented at the 1999 Annual Meeting of the Association of American Geographers. The award is \$200.

There is also a competition for the best PhD (\$400) and Master's (\$200) research proposals (watch for guidelines in a future announcement). To be eligible for any of the student awards, graduate students must be members of the AAG and GSG.

Applicants for the student paper competition will be placed into special sessions organized for

the competition, sponsored by the Geomorphology Specialty Group. Students participating in the paper competition must submit the following materials to Anne Chin, Chair, GSG Awards Committee, Department of Geography, Texas A&M University, College Station, TX 77843 (a-chin@tamu.edu):

- 1. The program participation fee
- 2. One copy of the standard AAG program participation form
- 3. One copy of the standard abstract required by the AAG
- 4. One disk containing the abstract required by the AAG
- 5. Three copies of an extended abstract of the paper, consisting of 800-1000 words.

All materials for the paper competition must be received by August 20, 1998. Prizes will be presented at the Geomorphology Specialty Group business meeting in Honolulu, HI.

Notes from Individuals/Departments

Dick Marston

Dick was awarded a 1997 Certificate of Appreciation from the Partners for Education Program of the Geological Society of America for volunteer services in K-12 geoscience education. Marston was also elected by the GSA Council to become a Fellow of the GSA. Marston has been invited to serve as a peer review panelist for proposals submitted to the 1998 EPA/NSF/USDA Partnership for Environmental Research in Water and Watersheds. The panel will meet in Washington, D.C., in late July, 1998. The emphasis in this year's multidisciplinary program will be on restoration of water quality, hydrology and habitat, and biological diversity. Approximately \$9 million is available for 2-3 year projects that will range in awards from \$100,000 to \$300,000 per year.

Marston has been selected by UNESCO to author articles on "Climate-Related Hazards" for an Encyclopedia of Life Support Systems. Topics include: droughts, dry winds/dust storms, cyclones/hurricanes/typhoons/tornadoes, hail/glaze/frost/ice coatings/snow storms/snowdrifts, floods, soil erosion, fires in

forests/steppes, underground fires, effects of fires on the atmosphere.

Graduate students who have recently completed masters theses at the University of Wyoming under Marston's supervision have achieved noteworthy accomplishments. For example, Kevin Bayer has received at 3-year assistantship to pursue a doctoral degree at the University of Denver; Wendy Berelson is a GIS Research Associate at the Spatial Data and Visualization Center at the University of Wyoming. Marcos Borges and Ernesto Camelo de Castro, both natives of Brazil, have received offers to pursue doctoral studies in the United States. Dave Clarendon ranches, farms, conducts snow surveys in the Bighorn Mountains, and guides hunters...a man for all seasons. Larry Dolan is a Water Program Supervisor with the Montana Department of Natural Resources; he checks to make certain that Montana is receiving their proper share of water from rivers in Wyoming (traitor!). Mark Greer is an Instructor of Geography at Laramie County Community College in Cheyenne and has built a top-notch physical geography teaching lab. Dave Haire has gained success as a self-employed Consulting Hydrologist, working most recently on water quality projects with Indian reservations in Montana and Wyoming. Kevin McNamera is a Systems Analyst with Plangraphics, Inc., in Syracuse, NY. John Thorburn is a Groundwater Education Project Coordinator with the Upper Elkhorn Natural Resource District in Nebraska. Dave Wick is District Manager of the Warren County Soil and Water Conservation District in NY. Marjorie Varuska just returned from the Ivory Coast where she served for several years as Air Attache to the American Embassy. Sarah Marshall just completed her assignment as a Seasonal Ranger conducted hydrological research and environmental interpretation with Denali National Park.

Terry Toy:

I was elected the President-elect of the American Society for Surface Mining and Reclamation which includes a three year gig on the National Executive Committee.

Mick Day - A couple of recent publications:

 "Conservation issues in Stone Forest karst" In: Stone Forest: A Treasure of Natural Heritage, edited by Song Linhua, Tony

- Waltham, Cao Nanyan and Wang Fuchang, pp. 17-21.
- "The influence of parent material, geomorphology and land use on physical and chemical properties of Belize River Valley soils" (with P. Reeder and E. Alt). In Caribbean Geography 7(2), pp 113-131. Mick Day, University of Wisconsin-Milwaukee.

Jose Lugo

On September 25-28 is the First National Congress (Mexico) on Earth Science in Mexico City, special section of Geomorphology. Dead line for abstracts May 30th. sgm@geologia.unam.mx

Robert Brakenridge

The Dartmouth Flood Observatory is in its 4th year and includes 4 in-house staff and collaborators at three other universities. We are hosted by the Geography Department here at Dartmouth, and supported by NASA Office of Earth Science grants, including an EOS Interdisciplinary Science grant now in its second year. Our "active archive" of extreme flood events, world wide, can be reached on the www at: http://www.dartmouth.edu/artsci/geog/floods and one can download each year's catalog into your favorite spreadsheet program using the instructions provided there.

We are currently using the synthetic aperture radar satellites (ERS-2 and Radarsat, mainly) and, especially, the NOAA weather satellites AVHRR sensor for detection and mapping of inundation extent on major floodplains. We have a collaborative project underway with Chinese workers to use Radarsat and, once EOS-AM is launched, the ASTER sensor to map and measure floods in near real-time. By combining the remote sensing images with detailed digital topography, it is possible as well to measure flood depths and even flood discharge (by the use 2-d modeling approaches and some groundbased information). Year-to-year patterns are already emerging concerning the geographic distribution and frequency of large flood events. Because river discharge data, unlike rainfall data, are not freely shared among nations, some of our catalog entries may be the only archived record of such events that can be accessed by researchers outside the nation of occurrence. The importance of extreme floods as agents of geomorphological change has long been debated within our discipline. We solicit membership input concerning how to make this Flood Observatory

archive of most utility to researchers, including those interested in river floods as natural and also as anthropogenic phenomena. -- G. Robert Brakenridge Brakenridge@Dartmouth.edu