

Quaternary Geologist & Geomorphologist

Newsletter of the Quaternary Geology and Geomorphology Division

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If we ever doubt that getting our work and careers recognized by our peers might not quite be worth the effort – take a look at these guys at last October's QG&G Awards Ceremony in Houston. Pictured left-to-right are **Rich Madole** (Distinguished Career Award), **Jon Major** (Kirk Bryan Award), **Martin Williams** (Farouk El-Baz Award) and **Alan Gillespie** (Easterbrook Distinguished Scientist Award). Photo courtesy of Paul Bierman.

Quaternary Geology & Geomorphology Division Officers and Panel Members – 2009

Officers – 6 Members, three of whom serve one-year terms: Chair, First Vice-Chair, and Second Vice-Chair; and three of whom serve two-year terms: Secretary, Treasurer, and Newsletter Editor/Webmaster.

Management Board – 8 Members: Division officers and the Chair of the preceding year; also includes the Historian as an *ex officio* member.

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GSA Council Liaison to QG&G Division:

(Appointed by the GSA President)

Monica Gowan

Message from the Division Chair

Spring 2009

This year has certainly been an exciting one, calling to mind the proverbial curse, "May you live in interesting times!" Our science is thriving and branching out, as may be seen in the very busy schedule of QG&G related and sponsored sessions at the joint 2008 GSA and Tri-Societies of Soils meeting in Houston. Unfortunately, the planned Kirk Bryan field trip examining coastal geomorphology and hurricane hazards had to be cancelled, due to the fulfillment of some of those hazard predictions by Hurricane Ike just prior to the meeting. The Portland 2009 meeting is sure to be as busy and stimulating, with a natural focus on volcanic, coastal, fluvial, and tectonic processes and hazards; its theme is "***From Volcanoes to Vineyards: Living with Dynamic Landscapes***." Currently, QG&G is planning to sponsor or co-sponsor 35 sessions ranging from "Colossal Floods" to "Glacial Mars" to fold kinematics to paleoseismicity to *terroir*, along with several proposed field trips, including paleo- and modern landslides, Mt. St. Helens, coastal archaeology and geomorphology, Missoula Floods and the Channeled Scabland, and volcanic geomorphology and sedimentation. Check the April edition of *GSA Today* for a complete list. The October meeting will also include the 4th annual mid-week Kirk Bryan Field Trip. The goal of these 1-day trips is to bring participants to a selection of intriguing or controversial field sites to spark lively discussion. The Kirk Bryan field trips are intentionally kept at an informal level to allow for more interaction and discussion among the participants. This year's trip to the Columbia River gorge will view and discuss Missoula Flood features, as well as landslide and lava-flow dams of the Columbia River. The Division has money available to subsidize student participants on the Kirk Bryan field trip on a first come, first served basis. As if the meeting needed more attractive features, did I mention great brewpubs, local wines, and *terroir* field trips?!

An issue discussed at length in our board meeting in Houston, at the request of GSA Council, was how to set up closer liaisons between the **QG&G Division and the Section Meetings**. Our consensus was that we would participate in sectional meetings we thought were of strong mutual benefit, but that we may not push to formally participate in all sectional meetings. We discussed trends in attendance at sectional meetings, the pros and cons of attending sectional meetings, and how we felt those meetings fit into the bigger picture of scientific conferences. The Board

decided that the QG&G Division chair will serve the role of being the liaison with GSA Council regarding section issues, and that an agenda item at each annual meeting will be to identify people to contact section representatives to discuss potential QG&G involvement at upcoming section meetings. For the 2010 Section meetings, Faith Fitzpatrick agreed to take on the role of serving as the overall board liaison with sectional representatives. Faith will also contact the North-central section representative, Joel Pederson will contact the Rocky Mountain section representative, Marith Reheis will contact the Cordilleran section representative, and Frank Pazzaglia will contact the Northeastern section representative. If you have suggestions or proposals for QG&G-sponsored field trips and topic sessions at your regional meetings, please contact these Board members as well as the section representatives. We'd also like to get your feedback on how these new arrangements are working, and to solicit you as volunteer representatives to your Sections in future years.

I am very happy to report that the **Marie Morisawa Award** for female graduate students will be given for the first time in 2009, due to the generosity of an anonymous donor who will supplement the amount currently available in the Morisawa Fund for the next three years. The Board agreed to use the application process used for the other student awards. Thus, female graduate students will be automatically considered for the award if they check the Quaternary Geology and Geomorphology Division affiliation when submitting an application for a student research grant. If they have not previously received a GSA student research grant for a given degree, their research grant application will automatically be forwarded to the Division for consideration for the Morisawa, Mackin, and/or Howard award. If a student has already received a GSA student research grant for a given degree, they can apply for any of the student research awards by filling out a research grant application and sending it to the Division secretary (presently, Jon Major, jjmajor@usgs.gov). Please advise your female graduate students of this new opportunity.

International Association of Geomorphologists (IAG) 2009 meeting: QG&G and the Geomorphology Specialty Group of the American Association of Geographers will have two representatives, a voting representative (Anne Chin) and an alternate (Alan James), at the 2009 IAG meeting in Melbourne, Australia, this summer. These two will present our proposal to host the 2013 IAG meeting here in the United States. Two people have voiced preliminary interest in volunteering their areas and organizations as

venues for this meeting: Scott Burns in the Portland, Oregon, area, and Nick Lancaster in the Reno, Nevada, area. They are in the process of preparing pre-proposals, from which our two associations will choose the strongest to present in Melbourne (to compete with proposals from several other countries). GSA has indicated that they would consider helping with logistical organization. Those of you who live in or work near these two areas could pitch in to help them with these pre-proposals. And if you plan to attend the IAG in Melbourne, please help advertise the proposed U.S. Meeting!

– Marith Reheis

QG&G DIVISION AWARDS – 2008

QG&G Award Funds Current Status and Appeal

One of the many ramifications of the current economic crisis directly impacts your Division. The various Foundation funds that provide monetary awards for the QG&G student and professional awards, just like your own investments, have been severely impacted by the stock market and on average are valued at two-thirds or less of their worth a year ago. Because GSA calculates the distribution amount based on the value of these funds two years ago, the amount available for most of these funds this year (2009) is enough to sustain past award levels. However, in out years (2010 and beyond), the funds cannot sustain past award levels until the principals are rebuilt. Thus, in 2010 (calculated from balances in Nov. 2008) we will be forced to reduce the amounts of the Kirk Bryan Award (from \$5000 to \$3000) and the Gladys W. Cole Award (from \$9900 to \$7500), unless we receive direct pass-through donations to supplement these amounts. We do not intend to reduce the student awards (Howard, Mackin, and the new Morisawa), and will supplement them as necessary from Division funds. You can help alleviate the impact of future reductions by donating to these award funds, particularly the three student awards, the Kirk Bryan, and the Cole: go to <http://www.geosociety.org/>, click on “Foundation”, then “Donate”, and finally the fund of your choice. And please stay tuned for more information on pass-through donations and financial updates.

Your QG&G Management Board

2008 AWARDEES

The following awards were given by the QG&G Division at our annual awards ceremony on Tuesday, October 7, George R. Brown Convention Center - Houston, Tx

— Kirk Bryan Award —

The Kirk Bryan Award for Research Excellence was established in 1951. The award is given for a publication of distinction (within the past 5 years) advancing the science of geomorphology or Quaternary geology, or a related field. The 2008 award was presented to **Jon J. Major**, U.S. Geological Survey, for his 2004 paper, 'Posteruption suspended sediment transport at Mount St. Helens: Decadal-scale relationships with landscape adjustments and river discharges': *Journal of Geophysical Research*, v. 109, F0102, doi:10.1029/2002JF000010.

Citation by Barry Voight

It is my very great pleasure today to introduce Jon Major as the recipient of the 2008 Kirk Bryan Award for Research Excellence. The award recognizes his contribution to geomorphology through the publication of the paper, “*Posteruption suspended sediment transport at Mount St Helens: decadal scale relationships with landscape adjustments and river discharges*”, which appeared in 2004 in the *Journal of Geophysical Research*.

Jon’s paper addressed the widespread landscape disturbance by the great 1980 eruption at Mount St. Helens, which damaged or destroyed many tens of thousands of hectares of vegetation, displaced or altered several river corridors, and deposited large volumes of easily erodible sediment on hillslopes and in channels of several watersheds surrounding the volcano. Jon recognized the exceptional opportunity to examine the responses of sediment yields and peak flows to the abrupt and devastating disturbances. He was well aware of the value of a great and sustained compilation of 15 years of unique hydrologic data, then mainly collecting dust in USGS archives. Assuming leadership of the geomorphology project, he chose to combine thorough statistical evaluation of these rich and unique data with his own field observations and insights on processes. The result is a wonderfully well-documented study of landscape disturbance, one that in my experience is unmatched.

Jon distinguished between the impacts on

hydrologic responses of 1) a debris avalanche that buried 60 sq km of valley, 2) a lateral volcanic blast that destroyed 550 sq km of forested terrain and deposited (mainly) a sandy tephra with a silt cap, 3) debris flows that reamed channels and deposited decimeters to meters of gravelly sand, and 4) pumice fallout forming decimeter thick gravelly/sand deposits proximal to the volcano. The spatially complex disturbances produced a variety of compensating effects that influenced hydrologic responses. The disturbances abruptly increased basin sediment supplies and transiently decreased infiltration, increased surface runoff, and reduced channel roughness. As a result, Jon could demonstrate that the sediment yields from disturbed watersheds increased initially as much as several hundredfold. He showed that sediment transport has been greater and more persistent from basins having severely disturbed channels, than from basins having mainly disturbed hillslopes. The temporal patterns of posteruption sediment transport mainly reflect depletion and isolation of the primary sources of sediment, but also reflect the variations of water discharge. Jon showed that the persistent extraordinary sediment yields from much-disturbed channels indicate that the supplies of sediment remain accessible, and will not be exhausted for many more years and perhaps decades. This result led Kevin Scott to conclude that, *“Jon’s expert and devoted analyses are not only a model of scientific endeavor—his body of work on this subject will save lives and public expenditures in the future...”*

I’ll add here just a few other quotations from exceptional scientists to illuminate the quality of Jon’s research. From John Costa, National Flood Science Coordinator: *“Jon’s 2004 publication...is a wonderful example of rigorous interpretation of the changes, response, and recovery of a catastrophically disturbed landscape... I cannot think of another example of documentation of extensive disruption and careful documentation of processes that follow the landscape response that is as carefully documented and presented as this one.”*

Jim O’Connor, a former recipient of the Kirk Bryan Award (1995), says this: *“This paper is a major contribution to the field of geomorphology and Quaternary geology. It addresses the fundamental question of the magnitude and frequency of geomorphic processes and does so with leading-edge quantitative analysis of one of the most complete sets of data ever collected for documenting the effects of major landscape disturbance on water and sediment transport.” Jon’s research provides “one of the most comprehensive and data-rich analyses of major landscape disturbance ever attempted...”*

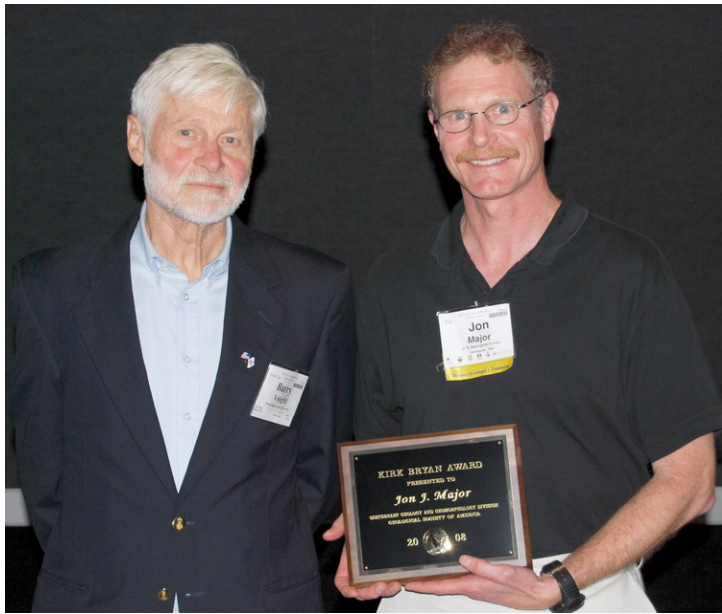
Jon Major has enjoyed a distinguished career with

the USGS, in geomorphology research, and in the mitigation of volcanic flowage hazards. He has published numerous high-impact journal articles and important USGS publications, and has participated in many responses to volcanic crises. I am proud of what he has accomplished in science and public service. I am equally proud of his strength of character. At the risk of embarrassing him, I want to mention one instance to illustrate the point. In the early 1980s, the debris-avalanche deposit at Mount St. Helens was being studied in unprecedented detail by Harry Glicken, under the direction of the late Dick Fisher of UCSB, and myself. At the same time, Jon was also engaged in thesis research, involving lahars on another part of the volcano. Many of you know that Harry had narrowly missed death in the 1980 Mount St. Helens blast, but later lost his life along with volcanologists Maurice and Katia Krafft and forty Japanese, from a pyroclastic density current at Mount Unzen in Kyushu on June 3, 1991.

Glicken’s 300 page revolutionary thesis on the debris avalanche remained unpublished. Jon then sought to remedy this, and on his own time, and borrowing time from his own research, he revised Harry’s thesis, had all the illustrations and plates redrafted, and prepared for its publication as a USGS Professional Paper. When the USGS, because of a budget crunch, had to relinquish plans for publication as a Professional Paper, Jon persevered and finally saw to it that Harry’s thesis was published in hardcopy by the Geological Society of Japan. For this achievement, which did much to stimulate debris avalanche research worldwide, Jon received no personal credit, and yet he had sacrificed about a year of his personal and intellectual pursuits.

I mention this saga in the citation in the hope it might inspire others to serve science in a similar fashion, should occasion arise, and also because it is a measure of the character of our Awardee. On the other hand, when it came time for Jon to measure the hydrologic response of the gigantic debris-avalanche deposit at Mount St. Helens, it might also be said that Jon was thoroughly prepared.

Jon’s research on landscape disturbance at Mount St. Helens has produced a monumental work that advances the science of geomorphology, and is eminently worthy of the Kirk Bryan Award. I am sincerely proud of Jon, in many ways, and I congratulate him on this well-deserved recognition of his groundbreaking achievement.



2008 Kirk Bryan Award winner **Jon Major** (right) with Citationist **Barry Voight**.

Response by Jon Major

Thank you, Barry, for nominating the paper, for your generous citation, and for your mentorship. I also wish to express my sincerest gratitude to Richard Iverson, Kevin Scott, John Costa, Jim O'Connor, and Tom Dunne for their fervent support of the nomination, and to the Quaternary Geology and Geomorphology (QG&G) Division panel members for selecting this paper to receive the Kirk Bryan award.

As the QG&G Division secretary, I was in the odd position of not only knowing that this paper had been nominated, but also of serving as the conduit through which all the other nominations flowed. You will be pleased, but not surprised, to know that we have very talented members in our discipline, as several worthy papers were nominated for this award. I was thus extremely surprised, but most delighted, to learn that my paper had been selected for the award. I am honored, but very humbled, to join those who have previously received this award. I am also acutely aware that this is the 2nd consecutive Kirk Bryan award given to a member of the current QG&G management board. I can assure you that this is merely a happy coincidence—board members receive no advantage in the evaluation process, and awardees certainly need not be board members.

Receiving this award is particularly gratifying for several reasons. This is the 50th time the award has been given. By my count, 18 of those awards have gone to USGS scientists, in whole or in part. But most noteworthy is the fact that this is the 4th time in a generation that the award has gone to someone at the

USGS Cascades Volcano Observatory (CVO)—where awardees Richard Iverson, Kevin Scott, and Richard Waitt reside—or perhaps the 5th time if, by extension, I include Jim O'Connor of the USGS Oregon Water Science Center, who received the award for a paper he completed during his tenure as a postdoc at CVO. It is an honor to work at this institution, and a pleasure to work with these and other colleagues of such high caliber. I thank the late Dick Janda and John Costa for providing my career an unconventional trajectory by taking a chance and hiring me with only a MS degree, and then supporting my pursuit of the PhD afterwards. And I appreciate Barry Voight, Richard Iverson, and Tom Dunne taking me under their wings as a student and providing the occasional kick in the pants.

This award is also gratifying because to me it represents a triumph of what I will call “small” science within the field of geomorphology—the kind of science that flourished in Kirk Bryan’s day. This is not to say that collecting and processing sediment data over decadal time scales is easy or inexpensive—indeed it requires significant financial and physical resources, and is the type of work the USGS is uniquely suited to conduct. What I mean is that this was a simple, unglamorous, low-profile, small scale project that relied on a foundation of unparalleled data that was freely available in the public domain, rather than the fruit of a multidisciplinary, multi-institutional “big” science project that is commonly sought and aggressively funded these days. I am grateful to the managers of the USGS Volcano Hazards Program for their appreciation of the significance of long-term sediment data collection and to my past and present supervisors for letting me pursue my curiosity unabated. This award also shows that volcanology is truly interdisciplinary—and not simply the bastion of petrologists, seismologists, and geophysicists—and highlights the theme that posteruption geomorphological processes can have more direct societal impact than an eruption itself, something that is sometimes overshadowed within the volcanological community. It also speaks to the need to maintain long-term gauging stations throughout the nation, and the need to figure out how to establish viable, long-term sediment measuring programs—a need that may increase in importance as, for example, more and more moderate to large dams impounding large amounts of sediment are removed across the nation.

Although mine is the only name on the paper, this award in spirit recognizes the supreme efforts of many others who collected, and in some instances initially analyzed, the high-quality data upon which the paper is based—Kurt Spicer, Tom Hale, Dennis Saunders, Randall Dinehart, Dallas Childers, Rick Kittleson, Karl

Lee, Mark Uhrich, Dave Meyer, and Holly Martinson to name a few. It is said that ideas come and go, but good data are immortal. To those hardworking colleagues, I offer my sincerest gratitude for creating immortality. I especially recognize the initial data analyses by Randall Dinehart, which served as a launching point for my own analysis.

Regarding Barry's comment about my involvement seeing Harry Glicken's study of the Mount St. Helens debris avalanche come to fruition, I'll say that it was simply a way for me to honor the memory of a friend. I regret that I failed to fulfill Harry's dream of getting it published as a USGS Professional Paper, but I take delight knowing that what was published has had such international impact on the fields of volcanology and mass movements. Under different circumstances perhaps Harry might have received the Kirk Bryan award for that work.

To my wife, Michelle, I offer my deepest appreciation for letting me pursue an unconventional lifestyle while she leads the charge handling our spirited twins.

In closing, I want to thank Pete Antilla, now retired from the USGS, for asking me a simple question: after noting that suspended sediment flux is a double mass problem he wanted to know whether sediment concentration or water discharge was the major control on long term trends in sediment flux at Mount St. Helens. Such a simple question launched the analysis that culminated in the paper that is honored today. I also thank John Pitlick, Peter Wilcock, and Rob Ferguson for helping shape the final form of the paper. Finally, to the anonymous reviewer who wrote a particularly scathing review of the original manuscript, I hope you found something positive to take away from the published paper. Thank you, GSA and QG&G for this wonderful honor.

— Distinguished Career Award —

The Distinguished Career Award, established in 1985, is presented to Quaternary geologists and geomorphologists who have demonstrated excellence in their contributions to science. For 2008, we present the award to **Rich Madole**, U.S. Geological Survey (ret.), Denver, Colorado.

Citation by Janet Slate (given by Marith Reheis)

On behalf of Janet Slate and the nine other people (including myself) who wrote letters in support of Dr.

Richard F. Madole's nomination for QG&G's Distinguished Career Award, I have the honor of presenting this award to Rich.

Those of us who have been long-standing members of QG&G know that Rich's service to the Division is without parallel: serving as Secretary for three two-year terms (1981-82 to 1987-88), moving to 2nd Vice-Chair in 1988 and on up through the ranks to serve as Chair (1990-91), then coming back in the newly created, appointed position of Historian in 1999-2000, and finally retiring from the Board in March of 2006. In fact, Rich has served QG&G longer than anyone else!

Rich hails from the Buckeye State (Ohio) and earned his degrees there, his B.S. at Case Western Reserve and his M.S. and Ph.D. at Ohio State University. Just last week, he was inducted into his high school's Hall of Fame for his achievements. Tonight we salute Rich's achievements in Quaternary geology and geomorphology.

Rich's research in Quaternary geology and geomorphology is wide-ranging. From windblown materials to rock glaciers, from water to landslides and faulting, from climate change studies to surficial geologic mapping, we all wish we had the breadth of knowledge that Rich has amassed. An articulate representative for our science, Rich has donated many hours to outreach and served as an expert witness in a three-year-long, landmark water-rights trial.

Although officially "retired," as an emeritus scientist with USGS, Rich continues to pursue research. One of his latest endeavors, *Origin and age of a complex array of surficial deposits — reconstructing the recent prehistory of the San Luis Valley National Park*, won him USGS Bradley Scholar funds. Selections for the competitive program were based on scientific merit, relevance, and technical expertise.

In addition to numerous other awards, Rich has been the deserving recipient of distinguished USGS awards for Superior Service (1995) and Meritorious Service (2004). Tonight we honor Rich with this Distinguished Career Award from his peers of the QG&G Division.

I'd like to share just a handful of quotes from the many letters that supported Rich's nomination for this award ...

From Dan Muhs (USGS)... As a grad student who worked for him part-time at the USGS, I learned a lot from him, and he was a supportive and encouraging mentor to a young, naïve geoscientist!... Rich has done some magnificent work over the years. He has done the most careful and detailed mapping of Front Range glacial deposits here in Colorado. ... He recently published a beautiful (yes, *beautiful*) map of eolian

deposits in eastern Colorado that will stand as the definitive work for many years to come.

From Larry Benson (USGS)... Rich has provided the field expertise in a project involving cosmogenic surface-exposure dating of moraines in the Rockies. ... I frankly could not have accomplished this work without Rich's insights as to what was there to date. Rich has certainly established himself as *Mr. Surficial Geology of Colorado*.

From Dave Dethier (Williams College)... I got to know him well 9 years ago when I started working on some research in the Front Range. Rich was generous with his time and knowledge, providing me with maps, unpublished research and sage advice from the moment I walked, unannounced, into his office! He is a first-rate scientist and field geologist with an encyclopedic knowledge of Quaternary processes and stratigraphy in Colorado and adjacent states.

From Peter Birkeland (CU retired, 2000 recipient of DCA)... He also is great in leading field trips, as he remembers all the facts and details and discusses them in a very organized fashion.

From Marith Reheis (USGS)... He was the first to recognize and prove that dunes and eolian sand sheets on the western Great Plains were important archives of Quaternary climate-change history and that they have been repeatedly active during the Holocene. ... He has done important research on several of the largest and most active landslides in the western U.S., as well as on the paleoseismic history of the Meers fault in Oklahoma, a major intracontinental fault with Holocene activity. He mapped the surficial geology of a large portion of northwestern Colorado, resulting in new interpretations of glacial and fluvial deposits in this region, and is a recognized authority on the glacial history of the Front Range and especially of Rocky Mountain National Park.

From Alan Nelson (USGS)... Richard F. Madole is the type of scientist many members had in mind when they voted to create the Distinguished Career Award in 1985. That is, a respected Quaternary geologist or geomorphologist with decades of solid research contributions behind [him] who [deserves to be] recognized for [his] contributions to Quaternary science.

With these accolades, let me close by saying Dr. Richard F. Madole is deserving of the Distinguished

Career Award of the Quaternary Geology and Geomorphology Division of the Geological Society of America, because of his contributions in our field throughout his more than 40 years of scholarship. With more than 100 publications, maps, and abstracts to his name, numerous years of service to professional societies and work on behalf of the public, Rich truly exemplifies one who deserves the honor of the QG&G's Distinguished Career Award. Please join me in congratulating Rich for this award.



DCA awardee **Rich Madole** with citationist & QG&G Chair **Marith Reheis**.

Response by Rich Madole

Thank you Janet, Marith, and other colleagues who supported my nomination, and to the Division officers and panel members who decided the award. Words cannot adequately express how grateful and honored I am to receive the Distinguished Career Award. I have been involved with this award in various capacities over the years, but never anticipated that I would one day be a recipient of the Distinguished Career Award. I was the Division Secretary when the award was created, and was present in 1986 when Dick Goldthwait, a mentor for whom I was a teaching assistant, was its first recipient. Also, I had the privilege of presenting the award to Luna Leopold during my tenure as Division Chair, and a few years later supported the nomination of Stan Schumm. As a graduate student, I was an avid fan of both men. Years later, in a landmark water rights trial, *USA v. Colorado* (1989-1991), I had the good fortune to work with Luna on team USA, while Stan was Luna's counterpart for Colorado. Both men truly personified the expression 'gentlemen and scholars'.

For obvious reasons, most responses by recipients of the Distinguished Career Award tend to be autobiographical; this one is no different. I first became aware of the QG&G Division when it was known as the Geomorphology Division (the name change occurred in 1970) because my advisor, Sid White, was Division Secretary when I was a graduate student. Sid expended considerable energy on behalf of the Division, only teaching, his primary passion, consumed more of his time. I cannot let this opportunity pass without thanking him for all that he did for me. He was a great advisor, as might be expected given his devotion to teaching. Together, we created numerous courses in geomorphology through a vehicle called 'special studies'. Thus, during one quarter I would have a one-on-one class with Sid on mass wasting and slope stability, in another quarter it was arid land processes, then fluvial geomorphology, and so on. At the time, glacial geology was the only course devoted solely to a single aspect of geomorphology. In fact, at the time, many universities did not even offer a course in geomorphology.

Ruth Wallace, an outstanding science teacher at Mayfield Junior High School, who included earth science in her classes nearly 20 years ahead of the national curve, introduced me to geology. Her class projects gave purpose to what I had been doing with most of my free time since age five, which was exploring the creeks, forested woodlands, and deep ravines carved into the edge of the western Allegheny Plateau by streams graded to nearby Lake Erie. Glacial erratics and landforms on the uplands caught my attention early on, as did Devonian brachiopods and the occasional trilobite in rocks exposed in the sides and floors of deep ravines. Her projects kept me interested in school at a time when my tendency for truancy was on the upswing because of a strong desire to be literally 'in the field' rather than a classroom. Years later, while a graduate student, puzzled aunts and uncles would comment: "first you wouldn't stay in school, and now you won't leave." Actually, the truancy stopped once I was old enough to participate in interscholastic athletics. They gave me a reason to still be at school when classes ended, which was good because athletic and academic scholarships provided me with a quality undergraduate education at virtually no cost.

I entered Western Reserve University (now called Case Western Reserve) in 1954 as a zoology major with aspirations of being a wildlife biologist, assuming that it would lead to a career that would keep me outdoors. At the same time, I elected to take physical geology mostly because of Ms. Wallace's influence. A few weeks into the semester, I switched majors from

biology to geology and never looked back, except briefly in graduate school when I was offered a fellowship in the Agronomy Department that paid twice as much as my teaching assistantship in geology. I was interested in soil genesis, but not crop science or other aspects of agronomy.

Initially, at the urging of Professor John Hall, an Ohio State alumnus, I went to Ohio State to work under Dick Goldthwait. However, when I arrived in Columbus, he was totally immersed in processing data collected in Antarctica as part of IGY (International Geophysical Year) and in developing a new organization, which became known as the Institute of Polar Studies. Eventually, I was the recipient of the Institute's first fellowship, and was allowed to use it to work in an alpine area, even though the Institute's charter covered only polar areas. Obviously, polar and alpine regions have much in common, which is why and how I met John Marr, founder of the Institute of Arctic and Alpine Research (INSTAAR), when he visited the Institute of Polar Studies. I chose to do my thesis and dissertation in the Front Range and adjoining Colorado Piedmont near Boulder and in so doing, the Institute of Arctic and Alpine Research became my institutional home away from home. While doing fieldwork for my dissertation, the cabin where I was staying caught fire sometime after midnight. My wife and I escaped literally with some clothing, shoes, and the few possessions we could scoop up before the ceiling collapsed. Everything else (maps, books, field notes, air photos) was destroyed in the fire. I will never forget the kindness of Bill Bradley and Bill Braddock, University of Colorado, who not only supplied equipment to resume fieldwork, but also provided something even more important, encouragement to continue.

During the late 1950s and early 1960s employment opportunities in geology were dismal. So, I was happy when Standard Oil of Texas (Chevron) offered me a job in Dallas in June 1963. However, two years indoors on the 14th floor of a building in downtown Dallas was enough, so when Texas Instruments purchased Geophoto Services, Inc., I was delighted to move to Denver to become part of a small group working on structural geomorphology (later called tectonic geomorphology). The projects were innovative and exciting, but they did not include fieldwork or permit research beyond limits set forth in contracts; also, publication of results was not allowed. Hence, when a former classmate, Larry Taylor, then Department Chair at Albion College, informed me that nearby Adrian College was planning to hire a geologist to develop a Department of Earth Science, I applied for the job.

During the time at Adrian College (1967-1972),

summers were spent at INSTAAR's Mountain Research Station. My first summer there coincided with the arrival in Boulder of a talented group of scientists who were to become the nucleus of the INSTAAR organization for several years to come, chief among them were John Andrews and Nel Caine. Following close behind them was a steady influx of outstanding graduate students and numerous visiting scientists from the U.S. and abroad. Summers at the MRS (Mountain Research Station) were indeed exciting; the camaraderie and intellectual interactions were exceptional. One young man, a recent high-school graduate, was assigned to be my field assistant in 1967. He was so outstanding that I eventually stopped utilizing field assistants because none could live up to his standards. Little wonder then that within a few years after receiving his Ph.D. from the University of Colorado that young man, Jim Clark, was the senior author of the paper that received the Kirk Bryan Award in 1980.

A letter from Jim Benedict prompted me to apply for financial aid that provided support for the first two summers at the Mountain Research Station. Jim and I met in August 1962 when Sid White took us to look at a deposit that Kirk Bryan named the Prairie Divide Till. At the time, Jim was working on his Ph.D. at the University of Wisconsin under Bob Black, but his field area was near the University of Colorado, where, as an undergraduate, he had been introduced to geomorphology by one of the finest teachers ever, Bill Bradley. Bill received the Distinguished Career Award in 1994. In 1975, Jim received the Kirk Bryan Award for his work on 'Downslope soil movement in a Colorado alpine region: rates, processes, and climatic significance'.

I returned to INSTAAR in 1972 supported by an NSF postdoctoral fellowship. Near the end of my tenure at INSTAAR, I received a call from Ken Pierce who described a program in the making that, if funded, would dramatically increase U.S.G.S. capabilities in Quaternary geology and geomorphology. Thus, in 1974, I was one of more than a dozen 'new hires' that quintupled the number of Quaternary geologists in the Geologic Division in Denver. Most of us were assigned initially to projects involving surficial geology and the environmental impacts of coal strip-mining in the western U.S. Two years later, the Branch Chief (Central Environmental Geology) asked Ken Pierce, Dave Fullerton, and I to organize a meeting to develop the agency's first program for climate-change research. The program struggled at first, but under the guidance of Dick Poore and Tom Ager, it eventually became a major component of U.S.G.S. research. For most of my 23 years with the U.S.G.S., not counting

ongoing service as Scientist Emeritus, I worked mostly on projects concerned with either or both geologic hazards and climate-change history.

Several years ago, one of my USGS colleagues remarked in his retirement speech that in us (the audience) he saw his career. Eventually, I came to fully appreciate that remark. Thus, while I am immensely grateful for the Distinguished Career Award, I realize that I cannot take full credit for it inasmuch as my career is the product of literally hundreds of people. Countless interactions and influences led me here. I have been incredibly fortunate that my career allowed associations with so many people of remarkable character and integrity. My colleagues, especially at the U.S.G.S. and within the QG&G Division, have enriched my life, and for that I am very appreciative. The old refrain 'thanks for the memories' expresses how I feel. Thank you all.

Donald J. Easterbrook -- Distinguished Scientist Award --

The Easterbrook Distinguished Scientist Award, established in 1999, is presented to an individual who has shown unusual excellence in published research, as demonstrated by a single paper of exceptional merit or a series of papers that have substantially increased knowledge in Quaternary geology or geomorphology. The 2008 Award was presented to **Alan Gillespie**, University of Washington.

Citation by Jack Shroder

Dr. Alan Gillespie needs little introduction to most of the community of scholars of Quaternary Geology and Geomorphology, inasmuch as he is well known in our field and served as our Division Chair several years ago. I first talked to Alan by phone about 15 years ago when he called me to talk about some dates of glaciation in the Himalaya that I had produced. He and Peter Molnar were working on a paper on asynchronicity of glacier advances that was later published as: Gillespie, A. R., and Molnar, P., 1995, Asynchronism of maximum advances of mountain and continental glaciations. *Reviews of Geophysics* 33, 311-364. When I tried to pooh-pooh my thermoluminescence dates as too tentative, he noted that they actually fit the scheme that they were working on, at which point I realized he knew a great deal about some small points. Later I met him in person in Wyoming at the Galena Creek rock glacier conference

and we climbed a small peak together.

Alan has been a highly productive geoscientist for more than a quarter century, as well as Professor and Director of the Keck Remote Sensing Lab at the University of Washington for the past two decades. After Steve Porter retired, Alan took over the Editorship of the important journal **Quaternary Research** until a few years ago. I have also known of Alan's work in connection with his helping convene the Galena Creek Rock Glacier conference in the Absaroka Range of Wyoming in 1997, as well as his being on NASA's ASTER science team, which is a fairly exclusive group dedicated to working with the ASTER satellite imagery associated with the Global Land Ice Measurements from Space (GLIMS) group that I work with. Alan's editorial review work with *Geophysical Research Letters*, *Journal of Geophysical Research* and, *Geosphere* has earned him commendations, as well as Editorial Board memberships on *Quaternary Science Reviews* and *Geology*. His overall service has been exemplary, as the small selection (of a much larger whole) in his vitae shows.

Alan Gillespie's research has also been first rate, as the 3 books and 185 articles (59 as first author), many in leading journals, clearly show. A number of these papers were important new contributions in newly growing subdisciplines of Quaternary chronology, and were published with well-known researchers in the field. This has also included a number of publications in *Geology*, the *GSA Bulletin*, and *GSA Today*, so he has clearly supported the publications of our society in a useful fashion.

A look at the list of 45 graduate students that Alan has advised as a Chair, Co-chair, or Committee Member turns up a number of names of now well-known productive faculty members at other institutions and with whom Alan has published on a number of occasions. One of them, Paul Bierman, is slated to become Chair of QG&G in a few years, so he is following his mentor, Dr. Gillespie's lead, in a good fashion. Alan's former students, Doug Clark and Paul Bierman, have told me that they want to do a tag-team slide show as co-citationists should these recommendations for the Easterbrook Award bear fruit for Dr. Gillespie, especially because they have many humorous slides of Dr. Gillespie at work.

In sum, Alan Gillespie's vitae speaks for itself as he is clearly worthy of recognition as a fine scholar worthy of the Easterbrook Distinguished Scholar Award, and I wholeheartedly endorse him for it.



Easterbrook awardee **Alan Gillespie** with citationists **Paul Bierman** & **Doug Clark**.

Response by Alan Gillespie

It is a great honor to receive the Easterbrook Award for 2008, and I thank Jack Shroder for nominating me, and Les McFadden, Yehouda Enzel, Paul Bierman and Doug Clark for their letters of support. And, of course, Don Easterbrook for his generous establishment of this award.

The way this works is the award winner writes a proposal to the Division to study a specific topic. It is very general and flexible.

It strikes me that the Easterbrook Award is a good example of what's right with our Division. Most of us are in Earth sciences because of our love of research and Earth itself. We are less in love with proposals and accounting and paperwork. It is a great boost to have an award that makes it possible to do a significant piece of research with a straightforward proposal and none of the bureaucratic overhead that attends most of the supplications to granting agencies. This boost is equally the case whether the Easterbrook research is to be a stand-alone work, or a preliminary study to facilitate a future proposal.

We have used this same model in the Quaternary Research Center at the University of Washington, but on a smaller scale. All of us there have seen what encouragement such infusions of support can be, to students and faculty alike. In hard economic times, this kind of support can be even more important.

So what do I plan to propose for the Easterbrook Award? In 2007, J. Batbaatar ("Bataa"), now a PhD student at UW, and I demonstrated that mountains within the Gobi Desert, in the hyperarid core of Asia, were glaciated multiple times during the late Quaternary. This was the topic of my Easterbrook presentation at GSA this year. Others (notably Frank Lehmkuhl) had suggested this as a reasonable possibility; therefore, when Bataa and I found ourselves

in the Gobi on another project we made a little time to drive and hike to the top of the massifs of the Gobi-Altai to see for ourselves. So we were unfunded when we discovered moraines of various ages, and sampled them for Be-10 cosmic ray exposure dating. The main reason the glaciations of the Gobi-Altai matter is that they fill in a big hole in the paleo ELA surfaces for Asia, and therefore dated ELA levels will improve our knowledge of Pleistocene climate there. The Easterbrook Award is just about the right size to date the samples we collected “on spec,” and we think this project will fit nicely into Bataa’s thesis work.

Of course, when we stood on the moraines and summit plateaus we had no idea how we would be able to get the dating done. Jack Shroder and Don Easterbrook came along at a perfect time for us! So, thanks again, to all of you who made this possible and to the Division.

Farouk El-Baz — Award For Desert Research —

The Farouk El-Baz Research Award, established in 1999, is given annually for outstanding work in the field of warm desert research. The award is intended to encourage and reward arid-land studies. The 2008 award was presented to **Martin Williams**, University of Adelaide.

Citation by Don Johnson & Stanley Ambrose

On behalf of Ashok K. Singhvi of India, who nominated Professor Martin Williams, and many others, who wrote in support of Martin's nomination, we are honored to acknowledge Professor Williams as recipient of the Farouk El-Baz for Desert Research Award. Martin is unquestionably deserving of the award in light of his extensive, long sustained, and high quality desert work executed in multiple continents. In this regard, his résumé speaks for itself. He is author of over 200 scientific papers, 12 of those in *Nature*, plus various reports and book chapters. In addition he is author or co-editor of 11 books, all of which contain desert themes. These include *Landform Evolution in Australasia*, *The Sahara and the Nile*, *A Land Between Two Niles*, *Quaternary Geology and Biology of the Central Sudan*, *Monsoonal Australia*, *The Cainozoic in Australia*, *Interactions of Desertification and Climate*, and *Quaternary Environments*. Reviews of these books have been generally strong to very strong, several being exceptionally laudatory.

Martin’s research interests are indeed wide ranging,

from early human origins, soils, and landforms to the reconstruction of prehistoric environments and Quaternary climatic changes in Africa, Australia and Asia, with a focus on deserts. Beginning in the SE Libyan Desert in 1962, he pursued research on landscape evolution of the drier parts of North Africa, Australia, India and China. He has investigated the response of rivers that flow through dry regions, such as the Nile, the Murray-Darling and the Son and Belan in north-central India. He has also studied Quaternary climatic fluctuations linked to El Niño Southern Oscillation events. He has researched the causes and consequences of desertification processes in China, Africa, Central Asia and Australia. Like a long distance runner, his creative productivity has been steady, consistent, and ongoing.

We both additionally know Martin personally, from his visits and involvements at the University of Illinois, and from our respective, though very different, overseas collaborations with him.

One of us (Johnson) collaborated with Martin on follow-up soil-geomorphological work in the late 1980s at Brock’s Creek, his dissertation area, in a remote part of Northern Territory, Australia. The experience was transformative, for it was at Brock’s Creek that the interpretive and factual utility of the biomantle concept, formulated earlier (1986) in eastern and southern Australia, was fully confirmed. Indeed, the soil mixing, biosorting and biotransferring activities of soil animals, especially termites, ants, and other invertebrates in forming biomantles were everywhere palpable in the vast savanna landscapes of Northern Territory, and of Australia and other continents, including deserts, generally.

The other of us (Stan Ambrose) has been most fortunate to have spent several field seasons with Martin on three different continents during the 21st century. He has amply demonstrated that he is an inexhaustible ditch digger, and a prodigious teller of tales of adventure and mis-adventure on every soil-bearing continent.

We thus both have witnessed Martin's exacting field *modus operandi* first hand, though in rather different dry regions of the world. We have likewise followed and monitored his career and much of his extensive written contributions on desert matters and other knowledge. Additionally, we both consider Martin a close colleague and friend.

We believe Professor Williams' many exemplary contributions embody the full spirit of the Farouk El-Baz Desert Research Award. So, on behalf of the Quaternary Geology and Geomorphology Division of the GSA, and those of us who wrote on his behalf, and

on behalf of all who have benefited from his work, we congratulate him!



El-Baz awardee **Martin Williams** (right)
with citationist **Don Johnson**

Response by Martin Williams

I owe a particular debt to Dr Ashok Singhvi for nominating me for this award, and to Don Johnson and Stan Ambrose for their very kind words on my behalf this evening. I am also deeply indebted to my friends and colleagues Bob Balling, Jim Bowler, Patrick De Deckker, Françoise Gasse, Don Johnson, Peter Kershaw, Pete Lamb, Nick Lancaster, Grant McTainsh, Virendra Misra, Gerald Nanson, Alayne Street-Perrott, Mike Talbot, Osman El-Tom, Aaron Yair and Yang Xiaoping for writing in support of this application. Between them they represent nine countries spread across five continents. I am humbled by their confidence in me.

My appetite for desert research was aroused after reading an article by the French Saharan explorer, E.F. Gautier, about the now dry river systems of the Sahara. I was a small boy living in France at the time, and his account kindled my young imagination. I remember thinking: 'One day I will go there and see for myself!'

My initiation into desert research was in the Libyan Desert in the northern summer of 1962. Captain (later Lieutenant-Colonel) David Hall, Royal Engineers, organised a small expedition to Jebel Arkenu, a ring-complex with Neolithic rock art, located near the border between Sudan, Egypt and Libya. I joined him for a second expedition to SE Libya in 1963, while on leave from mapping soils along the Blue and White Nile, and a further expedition in 1970 to Adrar Bous, a ring-complex in the Ténéré Desert of Niger. Adrar Bous is located near the geographical heart of the Sahara. If

you draw a circle of radius 1500 km you would barely touch the coast. I worked there with the late, great archaeologist Professor Desmond Clark for three months, establishing a detailed record of Quaternary depositional environments associated with prehistoric artefact assemblages extending from the Early Stone Age to Neolithic and younger. It was here, under Desmond's eagle eye, that I excavated the oldest complete domesticated Neolithic cow so far recovered from the Sahara. While on a camel trip together we planned future joint geological and archaeological fieldwork in the Sudan and Ethiopia.

My mapping of soils in the Blue and White Nile valleys, with the USDA Soil Survey Manual as my constant field guide, convinced me that in order to make sense of the inherited physical and chemical properties of these soils, I needed to understand the depositional history of both these mighty rivers, which took me into the Ethiopian and Ugandan headwaters and later into most parts of the Nile basin. This work continues. The late Don Adamson was a sterling companion on many of these fieldtrips, and proved himself as tireless as he was observant. We later worked together with Desmond in the Ethiopian uplands and in the Ethiopian and Afar Rifts.

My interest in deserts has taken me to many spectacularly beautiful parts of the world, including the Rajasthan Desert of NW India, the Alashan region of Inner Mongolia, the Flinders Ranges of South Australia, the Afar desert of Ethiopia, the west Kenya rift, as well as to the Near East, the American SW and, only last week, the Kalahari.

I am honoured and privileged to receive the GSA Farouk El-Baz award for desert research. I owe an enormous debt of gratitude to my desert travelling companions in four continents: they shared the simple joys and the occasional dangers and hardships with dignity and stoicism. One is the better for having known them.

- Gladys W. Cole Memorial Award -

The Gladys W. Cole Memorial Research Award is restricted to investigation of the geomorphology of semiarid and arid terrains in the United States and Mexico. It is given each year to a GSA Member or Fellow between 30 and 65 years of age who has published one or more significant papers in geomorphology. The Fund was established in 1980 by Dr. W. Storrs Cole in memory of his wife. The first award was presented in 1982. The 2008 award was given to **Benjamin J.C. Laabs** (SUNY-Geneseo), for

"Chronology and Climate of the Angel Lake glaciation, northern Great Basin."



Cole awardee **Benjamin Laabs**

"Reconciling Holocene alluvial records on the Colorado Plateau."

Honorable mention: Summer Brown (Virginia Technological University), *"Integrating apatite (U/Th)/He and fission-track dating to redefine the temporal and spatial history of the Teton Range, WY."*



Howard Research Award winner **Jonathan Harvey**.

— Student Research Awards —

Our Division offers two student awards: The **J. Hoover Mackin Research Award** was created in 1974 to support graduate student research in Quaternary geology or geomorphology. The **Arthur D. Howard Research Award** was established in 1992 to support graduate student research in Quaternary geography or geomorphology.

— J. Hoover Mackin Award —

The 2008 Mackin Award for Ph.D. research was given to **Rebecca Franklin** (University of Arizona), *"Herbology of the alpine eastern Sierra Nevada."*
Honorable Mention: Keith Laskowski (Yale University), *"N-Alkane record of alpine glaciation."*

— Arthur D. Howard Research Award —

The 2008 Howard Award for M.S. research was given to **Jonathan Harvey** (Utah State University),

- Robert K. Fahnestock Memorial Award

Suzanne Walther (University of Oregon),
"Differences in bed sedimentation downstream of a dam and a diversion canal on the McKenzie River, Oregon."

- John Montagne Fund Award

Jason Gulley (University of Florida)

UPCOMING MEETINGS

FRIENDS OF THE PLEISTOCENE

Cordilleran Cell Initial Announcement

Title: Earthquake Geology and Alluvial Fan Stratigraphy along US Highway 50, Great Basin, NV: A Late Pleistocene Regional Extension Rate

Date: Although a firm date has not been set, a late September early October time frame is anticipated.

Further details will be disseminated through the FOP email list as they develop and eventually posted on a web site that is expected to be up and running later this spring. Please direct questions to Rich Koehler at: Koehler@seismo.unr.edu.

Northeastern Cell Deglaciation of the Champlain Sea Basin, Eastern Ontario

June 6-7, 2009

Ottawa, Ontario

The Champlain Sea was an inland arm of the Atlantic Ocean that invaded the St. Lawrence Lowland following retreat of the Laurentide Ice Sheet. The sea lasted for about two thousand years (12,000-9,500 ¹⁴Cyr BP), its level falling continuously as the crust rebounded isostatically. Although both glacier and sea are now gone, the sediment they left behind preserves a detailed record of the deglacial event history, and remains integral to life in the Lowland. It is farmed extensively, mined for aggregate, and used as a substrate for waste disposal. Buried eskers host abundant supplies of potable groundwater and Champlain Sea mud is prone to slope failure.

The Geological Survey of Canada has worked in the Champlain Sea basin for over 100 years, accumulating an extensive body of outcrop, core, and seismic data in the process. Field-trip stops will draw from this collective experience, and will touch upon key controversies surrounding the deglacial event history of

the basin. Fundamental hypotheses on the origin of sculpted-bedrock forms, eskers, and mud-rich glaciated basin fills will be discussed. Classic field stops will be visited, including the world-class Cantley sculpted-bedrock site, the Kemptville esker where Brian Rust coined the term "subaqueous outwash", and a stop that exposes a succession of Champlain Sea mud very similar to the classic succession described by Antevs.

STOP LEADERS

(1 - Geological Survey of Canada, Ottawa, Ontario; 2 - Organizers)

Jan Aylsworth-1, Paleolandslides (geotechnical)

Greg Brooks-1, Seismic microzonation mapping (geotechnical)

Don Cummings-1,2, Esker aquifers (sedimentology, dcumming@nrcan.gc.ca)

Marc Hinton-1, Esker aquifers (hydrogeology)

André Pugin-1, Subglacial meltwater erosion (geophysics)

Susan Pullan-1, Esker aquifers (geophysics)

Hazen Russell-1,2, Subaqueous outwash fan (sedimentology, hrussell@nrcan.gc.ca)

David Sharpe-1, Subglacial meltwater erosion (glacial geology)

For additional details, contact:

Hazen Russell, Geological Survey of Canada
Natural Resources Canada

391-601 Booth St.

Ottawa, Ontario K1A 0E8

ph: 613-992-4374

fax: 613-992-0190

e-mail: hrussell@nrcan.gc.ca hrussell@nrcan.gc.ca

For information on fieldtrip and registration details visit the Northeastern Friends of the Pleistocene website:

<http://www.climatechange.umaine.edu/friends/>
<<http://www.climatechange.umaine.edu/friends/>>

Rocky Mountain Cell Northeastern Arizona

The Rocky Mountain Friends of the Pleistocene (FOP) trip for Fall 2009 will descend upon the canyon country at and around Lees Ferry in northernmost Arizona. Along the Colorado River at the end of Glen Canyon and the start of Grand Canyon, this spectacular region hosts a ton of recent and ongoing research, including fluvial geomorphology of all flavors and scales, tectonic geomorphology, and geoarchaeology. The trip will be

lead by Joel Pederson, Utah State University, and it is tentatively penciled in for earliest October. Contact Joel to get on the email list for notices at:

joel.pederson@usu.edu.

Southeastern Cell Late Pleistocene Rivers & Dunes

December 5, 2009

Southeastern Georgia

David Leigh will lead a trip along river valleys of southeastern Georgia (near Savannah), including the Altamaha and Ogeechee River valleys, to examine morphology and stratigraphy of late Pleistocene river channels and associated eolian dunes. Details of the trip will be announced in future messages. Contact: David Leigh, University of Georgia, 204 Geography-Geology Bldg, Athens, GA 30602, dleigh@uga.edu.

7th International Conference on Geomorphology (ANZIAG)

July 6 – 11, 2009

The International Association of Geomorphologists and the Australian - New Zealand Geomorphology Group invite all geomorphologists and others interested in geomorphology to participate in the 7th International Conference on Geomorphology. The Conference will provide an opportunity to discuss the latest research across all branches of geomorphology and to experience some of our fascinating antipodean landscapes.

PROGRAM

The 7th International Conference on Geomorphology (ANZIAG) will be held in Melbourne in July 2009 with the theme 'Ancient Landscapes - Modern Perspectives.' For the first time in history, this Conference will be held in the Southern Hemisphere, on an ancient piece of Gondwanaland. The conference provides a venue for geomorphologists working in all branches of discipline to present their work, to hear the work of others and to interact with colleagues from around the globe. For more information on the exciting and dynamic program, please visit the program website <http://www.geomorphology2009.com/>.

ABSTRACT SUBMISSIONS

Authors are invited to submit abstracts for oral and poster session on original work for the 7th International

Conference on Geomorphology. Please visit the Abstract Submission page on the Conference website and follow the detailed instructions.

SPONSORSHIP & EXHIBITION

There are a variety of Sponsorship opportunities available for companies and organizations to align their activities with the 7th International Conference on Geomorphology (ANZIAG). We look forward to seeing you in Melbourne!

ADDRESS FOR COMMUNICATIONS

Geomorphology 2009 Conference Managers
GPO Box 128, Sydney NSW 2001
Australia

Tel: + 61 2 9265 0700

Fax: + 61 2 9267 5443

E-mail: geomorphology2009@tourhosts.com.au

Conference website:

<http://www.geomorphology2009.com/>

CANQUA-CGRC Biennial Meeting

The 2009 CANQUA-CGRC Biennial Meeting will be hosted by Simon Fraser University.

We cordially invite you to participate in the meeting, which will be held at the Burnaby campus of SFU from May 3 to 8, 2009.

Multi-day field trips will be run immediately before and after the meeting, and you can choose from several one-day field trips that will be run on May 6, during the meeting.

For information on the technical program, field trips, a TCN short course, accommodations, transportation, abstract submission and registration, please visit our website:

<http://www.sfu.ca/earth-sciences/CANQUA/>

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MISCELLANEA

Theme Session: May 7-9, GSA Cordilleran Section Meeting: "Rivers, Humans, and Fish: River Morphology and Ecohydraulics."

Location: UBC Okanagan campus in Kelowna, British Columbia.

This will be an interdisciplinary session on the themes of river morphology, fish habitat and human disturbance. We expect the session will provide an opportunity for experts in different fields who manage, study, and engineer our rivers and fish habitat to discuss common problems.

There will also be a field trip on the Effects of Channelization on Rivers, lead by Leif Burge, Norman Corbett, Okanagan College.

For more information see:

<http://www.geosociety.org/sectdiv/cord/09mtg/techprog.htm>

Dr. Leif Burge

Chair, Earth and Env Science & Geography
Okanagan College
1000 K.L.O. Road, Kelowna, B.C., V1Y 4X8

Environmental & Engineering Geoscience seeks contributed papers

(EEG) is co-published by GSA and the Association of Environmental & Engineering Geologists. The journal accepts peer reviewed manuscripts that address issues relating to the interaction of people with hydrologic and geologic systems. Geomorphology studies are most welcome. Theoretical and applied contributions are appropriate, and the primary criteria for acceptance are scientific and technical merit. Beginning in 2009, color figures which are needed to convey scientific content are printed at no charge to authors. Electronic submission and review are conducted at <http://eeq.allentrack.net>.

Contact co-editor Ira Sasowsky ids@uakron.edu for questions. We look forward to your contribution.

MRI DATABASE

For those interested in integrated global change research, we would like to draw your attention to the database being built by the Mountain Research Initiative (MRI) in Bern, Switzerland.

The database is MRI's central networking tool to connect people from research, government, NGOs and the private sector involved in the issue of global change in mountain regions in one way or another. It includes both contact information and details on the participants' areas of expertise. To date, the database already comprises close to 3000 entries. Make (or revise) your entry now at: <http://mri.scnatweb.ch/content/view/40/44/>.

MRI's goals are to advance the understanding of how global change, especially climate change, will impact mountain environments, peoples and economies throughout the world, and to promote the use of that understanding in the pursuit of sustainable management of mountainous regions. MRI is endorsed by IGBP, IHDP, GTOS and the MAB Program. Find out more at our new website: <http://mri.scnatweb.ch>.

SWGEONET Online

Georectified Aster satellite imagery data as geotiff for the Southwestern US and northern Mexico. We have more than 2300 images (>350Gb) available and more on the way. They have been acquired from 2000 to 2004. Image selection is done through our main swgeonet map server:

<http://aspen.asu.edu/website/Geoinformatics/viewer.htm>.

Just make one or more of the Aster layers visible, make the one you are interested in active, and click on a footprint of interest with the inquire (i) tool and then click through the various options.

Here is a tutorial that might help to get you going: http://www.geoinformaticsnetwork.org/swgeonet/Data/Tutorials/Tutorial-ASTER_data.htm.

And a paper & talk from the ESRI user's conference: <http://activetectonics.la.asu.edu/GEONatASU/Data/ESRI2004GEONArrowsmith.ppt>; <http://activetectonics.la.asu.edu/GEONatASU/Data/1915.pdf>; SWGEONET home page: <http://www.geoinformaticsnetwork.org/swgeonet/>.

Please use this and let us know how useful it is. Please be sure to acknowledge the source.

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DENDROCHRONOLOGY DATABASE

The Bibliography of Dendrochronology is an archive of printed documents relevant to tree-ring research worldwide, that you can search for free. It was compiled and is constantly updated by Henri D. Grissino-Mayer. It currently contains over 8200 references dating back to 1737.

<http://www01.wsl.ch/dendrobiblio>

You are welcome to contribute by sending reprints of relevant publications to:

Dr. Henri D. Grissino-Mayer
Department of Geography
University of Tennessee
Knoxville, TN 37996
865.974.6029
<http://web.utk.edu/~grissino>

Database of species used in dendrochronology:

<http://www01.wsl.ch/species>

ELSEVIER JOURNALS

Femke Wallien, the Earth and Environmental Sciences publisher at Elsevier announces that the titles, authors and abstracts of articles published in the following journals are available online at no cost:

Geomorphology:

<http://www.elsevier.com/locate/geomorph>

Quaternary International:

<http://www.elsevier.com/locate/quaint>

Quaternary Research:

<http://www.elsevier.com/locate/ygres>

Quaternary Science Reviews:

<http://www.elsevier.com/locate/quascirev>

Quaternary Geochronology:

Elsevier has recently started this new journal. Editor in Chief is Rainer Grün from the Australian National University in Canberra. The journal publishes highest-quality, peer-reviewed articles on all aspects of dating methods applicable to the Quaternary Period. A Guide for Authors, free sample copy and instructions for submission of articles can be found at:

<http://www.elsevier.com/quageo>

Also, you can receive Tables of Contents via email as each new issue publishes. Register your email address with ContentsDirect, Elsevier's free email alerting service, at cdsub@elsevier.co.uk or online at <http://contentsdirect.elsevier.com/>.

IAG NEWSLETTER

IAG Newsletters are available on the IAG Website:

<http://www.geomorph.org>

GEOMORPHORUM

The newsletter of the Association of American Geographers (AAG) Geomorphology Specialty Group can be accessed at:

<http://www.cas.sc.edu/geog/gsgdocs/geomorphorum.html>

Send comments and suggestions to:

Greg Pope, Chair, AAG-Geomorphology
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PAGES - (PAst Global changES)

The core mission of PAGES is to *facilitate international collaborations and interdisciplinary science*, especially between individuals involved in national programs with overlapping interests. The PAGES scope of interest includes the physical climate system, biogeochemical cycles, ecosystem processes, biodiversity, and human dimensions. The emphasis is on high-resolution studies of global change – such as those stored in ice cores, tree rings, speleothems, corals, lakes, marine records, etc. – and the use of these data for making sound estimates of future global change.

What is PAGES and how can a GSA/Quaternary Member get involved? <http://www.pages.unibe.ch>.

PAGES even played a key role with NOAA in establishing the WDC-A for Paleoclimatology as the central depository for global paleoclimate data.

WDC-A stands for World Data Center for Paleoclimatology, which is a part of the NOAA National Climate Data Center (NCDC).

<http://www.ngdc.noaa.gov/paleo/paleo.html>

— Julie Brigham-Grette

CGRG BIBLIOGRAPHY OF CANADIAN GEOMORPHOLOGY

<http://cgrg.geog.uvic.ca/cgi-bin/search.cgi>

1. The Bibliography of Canadian Geomorphology is a searchable database dedicated to identifying publications and presentations describing the practice and application of geomorphology in Canada. Included are over 18,000 records related to the fields of aeolian, applied, coastal, fluvial, glacial, hillslope, karst, periglacial, permafrost and offshore geomorphology. The database also includes records describing Canadian Quaternary/ Holocene environments and a substantial body of records related to Canadian hydrology.

2. Recent Publications in Canadian Geomorphology:
<http://cgrg.geog.uvic.ca/list.htm>.

Quaternary Geology and Geomorphology Division Management Board Meeting

(Annual Division Report to GSA Council)

Sunday, October 5, 2008

7:00 PM-10:00 PM, Hilton Americas Hotel, Houston.

Attending:

OFFICERS:

Lisa Ely, Chair

Marith Reheis, 1st Vice-Chair

Paul Bierman, 2nd Vice-Chair

Kyle House*, 2nd Vice Chair-Elect

Jon Major, Secretary

Scott Burns, Treasurer

Dennis Dahms, Newsletter Editor; Webmaster

Thom Davis, Historian

Jack Shroder, Past Chair

PANEL:

Steve Forman*, **Scott Lundstrom***, **Ken Adams**

2006-2008 Panel (outgoing)

Christine May*, **Frank Pazzaglia**, **Joel Pederson**

2007-2009 Panel

Jennifer Pierce, **Faith Fitzpatrick***, **Tom Pierson***

2008-2010 Panel (incoming)

Other invitees:

Diane Lorenz*, GSA

Monica Gowan, GSA Council liaison

Barb EchoHawk, GSA Division liaison

* Sent regrets for not attending

Meeting called to order at 7:15pm

GSA Council Liaison report: Monica Gowan (GSA Council liaison) gave a summary of recent discussions within GSA council regarding GSA's desire for stronger linkages between GSA Divisions and section meetings. GSA has a desire to strengthen the different national sections and would like to see greater division presence at sectional meetings. GSA formed an *ad hoc* committee to determine how best to enhance division presence at sectional meetings, and wants to formalize division-section relations. GSA would like each division to appoint a liaison to work with various sections. Much of the board meeting discussion revolved around whether or not we should be present at each sectional meeting. The consensus was that we would participate in sectional meetings we thought were of strong mutual benefit, but that we may not make a big push to formally participate in all sectional meetings. GSA also would like to see sectional meetings beef up and become more significant meetings. There was discussion among board meeting members about trends in attendance at sectional meetings, the pros and cons of attending sectional meetings, and how we felt those meetings fit into the bigger picture of scientific conferences. The board gave Monica Gowan several suggestions to take back to council. Board also felt that people who were affiliated with a particular section might take the lead in contacting section representatives with regard to upcoming meetings. The QG&G Division chair will serve the role of being the liaison with council regarding section issues. The board agreed that an agenda item at each annual meeting will be to identify people to contact section representatives to discuss potential QG&G involvement at upcoming section meetings. For the 2010 Section meetings, Faith Fitzpatrick (via email) agreed to take on the role of serving as the overall board liaison with sectional representatives. Lisa Ely (Chair) will contact Faith and ask her to contact the North-Central Section representative. Joel Pederson will contact the Rocky Mountain Section representative. Marith Reheis (1st Vice-Chair) will contact the Cordilleran Section representative. Frank Pazzaglia (Panel) will contact the Northeastern Section representative.

Treasurer's report (Scott Burns): Scott reported (see attached) that in fiscal year 2007-2008, QG&G had a total income of \$13,684.54, and total expenditures of \$14,090.69 for a net deficit of \$406.15. For fiscal year 2008-09, the projected income is \$14,500 and projected expenses are \$13,365. The Division has total assets of \$12,013.41. Scott's assessment is that despite the minor amount of deficit spending QG&G is financially healthy and he recommends that we not raise dues for 2009. The motion passed.

Thom Davis (Historian) reported that he has scanned all Division newsletters (dating back to 1957) that are not available as pdf documents on the QG&G website. The scanned newsletters (as pdf documents) have been burned

to a CD. While all scans are readable, there was some “bleed through” on several scans. Thom asked the board and panel members to take a look at the documents, especially those from 1986 and 1987 that he scanned with an enhanced technology. If the comments suggest that the bleed through is too distracting, Thom can arrange to hire a student for about \$200 to rescan the documents that bled through. Thom also noted that there were a number of other documents that he felt were not candidates for scanning, and wondered what to do with them. **Lisa Ely** (Chair) will contact GSA to see if they can store a few boxes of paper documents that several of the board members felt were not worth scanning (such as past evaluations of award nominees, etc.—documents considered to be “confidential” and not to be made generally available to division members). There was some discussion of simply shredding those papers, but **Jack Shroder** (past chair) raised the point that sometime down the line, some historian may find some value in them once the writer has passed.

Marie Morisawa Fund and Award: The purpose of the fund is to provide awards to female graduate students pursuing a career in geomorphology. At the end of fiscal year 2007, the Marie Morisawa fund had a balance of \$5,635, which was not enough to offer an award in 2009, as GSA does not allow disbursements from funds having net assets less than \$20,000. Net assets at the end of FY08 were \$20,807, which is enough to allow a disbursement of \$1000 in FY10. **Scott Burns** (Treasurer), however, located a donor willing to contribute an additional \$1000 toward an award for each of the next 3 years (2009, 2010, 2011). As a result, the Division can give out an award in 2009 for \$1000, an award in 2010 for \$2000, and a minimum award of \$1000 in 2011. Discussion at the meeting revolved on the mechanics of how to give the award. Two options were proposed—a separate application for the award, or an “automatic” application by students who apply for GSA student research grants similar to the mechanism used for the Howard and Mackin awards. The board voted to use the application process used for the other student awards. Thus, female graduate students will be automatically considered for the award if they check the Quaternary Geology and Geomorphology Division affiliation when submitting an application for a student research grant. If they have not previously received a GSA student research grant for a given degree, their research grant application will automatically be forwarded to the Division for consideration for the Morisawa, Mackin, and/or Howard award. If a student has already received a GSA student research grant for a given degree, they can apply for any of the student research awards by filling out a research grant application and sending it to the Division secretary. The panel that evaluates the applicants for the student research awards will first select the Howard and Mackin awardees. Once those two awardees are chosen, they will be removed from candidate pool. The Howard and Mackin evaluation committees will then rank the top three female applicants from the remaining students in their respective pools, and then the two committees will select the Morisawa awardee from that pool

of six students. Once the Morisawa awardee is chosen, that student will be removed from the pool of student applicants, and then the Howard and Mackin committees will select their respective honorable mention awardees for the Howard and Mackin awards. This somewhat convoluted process was adopted to prevent the Morisawa awardee from also being selected as the honorable mention for the Howard or Mackin awards (which might cause the Morisawa award to be viewed as a “second rank” award). The board will post up the application information for the Morisawa award on the Division website and also have a blast email sent out to the membership to advertise that we will give the award in 2009. **Jon Major** (Secretary) will update the Division policy document to include a section on the Morisawa award.

Donna Russell (GSA Foundation) reported the base funds for the following awards (as of June 30, 2008):

- Kirk Bryan award: \$87,757
- Donald J. Easterbrook Distinguished Scientist award: \$64,505, but Don Easterbrook passes through the difference to fund \$25,000 each year for the award.
- Farouk El-Baz award: \$228,952
- Arthur D. Howard (MS) student award: \$48,328
- J. Hoover Mackin (PhD) student award: \$69,841
- Gladys W. Cole Memorial research grant: \$183,335
- Marie Morisawa fund: \$20,808

GSA allows divisions to use up to 5% of the base funds to support awards. Base funds for all but the Easterbrook and Morisawa awards are down from fiscal year 2007. As a result, some of the award funds do not fully cover their respective awards. In fiscal year 2010, we may have dip into division funds to cover some awards.

Membership report: The membership now totals 1506, of which 360 are student members. QG&G is now the third largest division in GSA.

Election: The election for 2008-09 QG&G officers closed July 31, 2008. In that election, 12.1% of QG&G members voted (165 out of 1360 eligible). 160 votes were cast online; 5 paper ballots were received.

Awards: The annual awards ceremony was held Tuesday, October 7, 7-11 PM at the George C. Brown Convention Center, Houston.

Kirk Bryan Award

Jon J. Major, for Major, J.J., 2004, *Posteruption suspended-sediment transport at Mount St. Helens--Decadal-scale relationships with landscape adjustments and river discharges*: Journal of Geophysical Research, v. 109, F01002, doi:10.1029/2002JF000010, 22 p. (\$5000, plaque)
Barry Voight, Citationist

Thanks to the following panel members for evaluation:
Steve Forman, Scott Lundstrom, Ken Adams, Frank Pazzaglia, Joel Pederson, and Christine May

Distinguished Career Award

Rich Madole, U.S. Geological Survey (\$1000, plaque)
Marith Reheis (for Janet Slate), Citationist

Donald J. Easterbrook

Distinguished Scientist Award

Alan Gillespie, University of Washington (\$25,000, plaque)
Doug Clark, Paul Bierman, Citationists

Farouk El-Baz Award

Martin Williams, Adelaide University (\$10,000, plaque)
Donald Johnson, Citationist

Gladys W. Cole Memorial Research Grant from GSA

Benjamin J.C. Laabs, SUNY-Geneseo, for his research proposal entitled *Chronology and climate of the Angel Lake Glaciation, Northern Great Basin* (\$9250, plaqued certificate)

J. Hoover Mackin (PhD) Award

Rebecca Franklin, University of Arizona, *Herbchronology of the alpine eastern Sierra Nevada* (\$2500, plaqued certificate)
Honorable mention: Keith Laskowski, Yale University, *N-alkane record of alpine glaciation* (plaqued certificate)

Thanks to the student awards panel: **Paul Bierman** (QG&G 2nd Vice-Chair), Arjun Heimsath, Cam Wobus, Dave Franzi, and Missy Eppes.

Arthur D. Howard (MS) Award

Jonathan Harvey, Utah State University, *Reconciling Holocene alluvial records on the Colorado Plateau* (\$2500, plaqued certificate)

Honorable mention: Summer Brown, Virginia Technological University, *Integrating apatite (U-Th)/He and fission-track dating to redefine the temporal and spatial history of the Teton Range, WY* (plaqued certificate)

Thanks to the student awards panel: **Paul Bierman** (QG&G 2nd Vice-Chair), Sara Mitchell, Sara Rathburn, Stephen Wright, Josh Galster.

Robert K. Fahnestock Memorial Award from GSA

Suzanne Walther, University of Oregon, *Differences in bed sedimentation downstream of a dam and a diversion canal on the McKenzie River, Oregon* (plaqued certificate)

John Montagne Fund from GSA

Jason Gulley, University of Florida (plaqued certificate).

Proposed change for Distinguished Career Award nomination requirements: Scott Lundstrom (Panel) –

Proposed (via email) that the Distinguished Career Award nomination package include a CV of the applicant. Some nomination letters state things such as "... XXX published 120 papers...". The current nomination package procedure does not require a CV be submitted, and the publications list must be culled to what are considered the most significant 20 papers. Scott suggested that it might be nice to see a complete CV as well. **Thom Davis** (Historian) raised the point that often the nomination is done without the knowledge of the nominee, and that getting a CV could be difficult. The board adopted a motion to suggest the "most recent" CV be included with the nomination package, with an understanding that the most recent CV may be years out of date. This new requirement will be updated on the website to read as "*The nominator should assemble the following for the candidate: (1) a brief biographical sketch, which may be photocopied from American Men and Women of Science; (2) a statement of no more than 200 words describing the candidate's scientific contributions to Quaternary geology and geomorphology; (3) a copy of the nominee's most recent CV or a selected bibliography of no more than 20 titles; and (4) at least four letters from colleagues supporting the nomination.*"

Don J. Easterbrook Distinguished Scientist Award: A

recent email from Don Easterbrook indicated that he would like to see the summary reports that the awardees are supposed to submit within three years of obtaining the Easterbrook award funds. This requirement had apparently fallen through the cracks as no summary reports were ever submitted. **Jon Major** (Secretary) contacted the 2000-2005 awardees asking them to submit either a pdf of a paper supported by the award, or a 1-page summary of the results of the research supported by the award. One of the Easterbrook awardees suggested that those summaries be made available to the membership at large. The board voted to post the summaries on the QG&G website. If only a pdf was submitted, only the bibliographic citation (not a link to the publication) will be posted.

Feedback on awards deliberations: Diane Lorenz (GSA)

sent an email indicating that an unsuccessful applicant for the Cole Memorial Research Award asked for feedback on why his/her application was not selected for the award. Diane asked if the Division would supply some summary feedback for each applicant for that award. The board discussed the nature of the request, and determined that it is very difficult to say exactly why one applicant is chosen over another. The applicants for the award span a broad spectrum of disciplines within the field of geomorphology, and the expertise of the board that evaluates the applicants also spans a wide spectrum of disciplines. As a result, it should not be a surprise that the rankings of proposals

submitted for the award can be all over the board. The selection of the winner is a democratic process that relies on “points” being assigned to rankings provided by each evaluator, and the applicant with the greatest number of points is selected as the awardee. While some evaluators provide brief written summaries of why they ranked the applicants as they did, not all do so. Even if they did, it would be difficult to say exactly why one applicant was rated higher than another given the diversity of the final rankings. As a result, the board voted not to require providing any specific written feedback to any given applicant for the Cole award. The Cole Memorial Research Award is an award (not a generalized research grant) and as such the board did not feel that it necessarily merits that kind of feedback to applicants. The Secretary will ask, but not require, board members to supply written feedback regarding their rankings.

Strategies for boosting numbers of award nominations:

There is concern among the management board about the numbers of nominations for a few of the Division awards. There are mechanisms in place for generating nominations for the various professional awards given in addition to nominations received from the membership at large. Outgoing panel members are asked to submit nomination packages for the Kirk Bryan award, sitting panels are used to help generate nominations for the Distinguished Career and Easterbrook Distinguished Scientist awards (as detailed in the Division policy document). Only the Farouk El-Baz award for desert research depends solely on nominations from the membership. In the past few years, a reasonable number of nominations have been submitted for the Kirk Bryan and Distinguished Career awards, and the minimum number of nominations (3) has been evaluated for the Easterbrook Distinguished Scientist award. However, nominations for the Farouk El-Baz award have been lagging. The board had no new suggestions this year for boosting numbers of nominations, particularly for the El-Baz award.

Portland meeting 2009: Planning for the Kirk Bryan field trip at the Portland meeting is well in hand. Jim O'Connor and Scott Burns will lead a trip up the Columbia River Gorge. The program committee for the Portland meeting has a selection of QG&G related field trips, technical sessions, and short courses tentatively lined up. The board will have **Barb Echohawk** (GSA Division Liaison) send a blast email to the membership soliciting proposals for technical sessions, field trips, and short courses. The 2009 JTPC representatives will be **Marith Reheis** and **Paul Bierman**.

OTHER BUSINESS

International Association of Geomorphologists (IAG) 2009 meeting: QG&G and the Geomorphology Specialty Group of the American Association of Geographers share dues for the U.S. membership in IAG. We jointly choose one

person to officially represent our two groups as a voting representative at the IAG meeting every 4 years. The AAG proposed Anne Chinn as a representative at the 2009 IAG meeting in Melbourne, Australia, and her name was submitted to IAG last spring as a place-holder, since there was no nominee from QG&G. Alan James has volunteered to be the nominee from QG&G. The 2009 QG&G Division Chair should interact with AAG Geomorphology Group to choose final representative before the meeting takes place in July, 2009. Alan James is trying to find someone to volunteer to organize and host the 2013 IAG meeting in the U.S. He and **Lisa Ely** (Chair) have contacted Jerry Davis and Leonard Sklar at San Francisco State University to ask them if they would be interested in hosting. GSA has indicated that they would consider helping with logistical organization.

Division Chair's meeting will be held in Boulder, CO, March 7-8, 2009. The board voted last year to send two representatives to the meeting (Chair and 1st Vice-Chair). GSA will contribute \$700 toward the costs of Division attendees to this meeting. **Marith Reheis** (incoming Chair) will attend the meeting, and **Paul Bierman** (incoming 1st Vice-Chair) will attend if he is available. If he is not, Marith will contact **Kyle House** (incoming 2nd Vice-Chair) to see if he is able to attend.

GSA 2010 Annual Meeting, Denver, CO and beyond. The board wishes to try to line up potential Kirk Bryan field trips a couple of years in advance. **Thom Davis** (Historian) will contact someone about possibly leading a trip in 2010 up Boulder Canyon. For 2011, it was suggested that a visit to the University of Minnesota St. Anthony Falls Laboratory might be interesting. **Jon Major** (Secretary) will contact folks at SAFL to gauge their interest.

Environmental and Engineering Geoscience: The editors of Environmental and Engineering Geoscience contacted **Lisa Ely** (Chair) soliciting advice on how to attract more geomorphology related papers to the journal. The board had no particular suggestions for how this journal might attract more geomorphology related submissions. It was suggested that the editors or a representative of the journal be invited to attend the QG&G awards ceremony and make an announcement to the members attending. **Jon Major** (Secretary) will contact the editors and have them write up a brief announcement and then arrange for **Barb Echohawk** to send an email to the membership.

Photographs: At last year's board meeting, it was suggested that photos of past awardees be obtained and posted on the Division website. In particular, **Thom Davis** (Historian) would like to obtain photos of awardees prior to 2001 (photos of later awardees are available in the Division newsletters online). **Jon Major** (Secretary) will arrange for **Barb Echohawk** (GSA Division liaison) to send a blast email to the membership soliciting photos.

***The following of our colleagues
passed on in 2007-08:***

Sankar P. Das Gupta, Kolkata, India; *notified* Nov 2, 2007

Ludwig J. Frank, II Auburn, WA; *notified* April 8, 2008

Joseph H. Hartshorn, Sarasota, FL; May 5, 2008

Richard L. Hay, Tucson, AZ; February 10, 2006

J. Laurence Kulp, Puyallup, WA; June 29, 2006

Alvin R. Leonard, Portland, OR; February 7, 2007

Harold E. Malde, Boulder, CO; November 4, 2007

Charles E. Mear, Austin, TX; September 18, 2007

Shea Penland, New Orleans, LA; March 25, 2008

John S. Shelton, La Jolla, CA; July 24, 2008

James Edward Slosson, Simi Valley, CA; April 29, 2007

Geology & Society

Dick Berg berg@illinois.edu

Geophysics

Dennis Harry dharry@cnr.colostate.edu

Geoscience Education

Mark Hafen mhafen@cas.usf.edu

History of Geology

Jane Davidson jdhexen@unr.edu

Hydrogeology

Carl Mendoza Carl.Mendoza@ualberta.edu

International

Contact: Chair, Paul Robinson p.robinson@ns.sympatico.ca

Limnogeology

Peter Drzewiecki drzewiecki@easternct.edu

Planetary Geology

Robert C. Anderson robert.c.anderson@jpl.nasa.gov

QG&G

Dennis Dahms dennis.dahms@uni.edu

Sedimentary Geology

Contact: Chair, Dan Larsen dlarsen@memphis.edu

Structural Geology & Tectonics

Barbara M. Sheffels barbsheffels@comcast.net

Meeting adjourned at 10:10 pm.

2009 Division Newsletter Editors

Many Divisions “publish” their newsletters mainly by posting them on their Division websites. All Division websites can be accessed from:

<http://www.geosociety.org/sectdiv/divisions.htm>.

Archaeological Geology

Jennifer Smith jensmith@levee.wustl.edu

Coal Geology

Anupma Prakash prakash@gi.alaska.edu

Engineering Geology

Jerry DeGraff 45nyutca@sbcglobal.net

Geobiology & Geomicrobiology

Christopher Rowan, c.j.rowan@gmail.com

Geoinformatics

Contact: Chair, Linda Gundersen lgundersen@usgs.gov

Geology & Health

Kevin Nick knick@llu.edu

Biographies of Candidates for 2009-2010 Offices of the QG&G Division

Candidate for QG&G Chair:

Paul Bierman. Education: BA, Williams College; PhD, University of Washington. Experience: University of Vermont, Geology & Natural Resources, Professor; Director, UVM Cosmogenic Nuclide Extraction Lab; manager of the Landscape Change Program, an NSF-supported digital archive of historic Vermont landscape images used for teaching and research. Professional Affiliations: GSA Fellow. GSA Service: QGG 2nd vice-chair 07-08, 1st vice-chair 08-09; Bulletin associate editor 97-00; Geology editorial board 00. GSA Award: Donath Medal outstanding young scientist of the year 96; NSF CAREER award for integrating scientific education & research; 2005 NSF Distinguished Teaching Scholar. Research Interests: Rates of bedrock weathering, central Australia and the Canadian arctic.

Candidate for QG&G 1st Vice-Chair:

P. Kyle House. Education: BA, BS, Western Washington University; MS, PhD, University of Arizona. Experience: Nevada Bureau of Mines and Geology, University of Nevada, Reno, Research Geologist. Professional Affiliations: GSA, AGU, AAAS. Awards: Outstanding Graduating Senior in Geology, Western Washington University 89; American Water Resources Association Boggess Award 06. Research Interests: Late Cenozoic evolution of fluvial and lacustrine systems; flood geomorphology and paleoflood hydrology; geomorphology of desert fluvial systems; digital innovations in geologic mapping, basic data visualization, and collaboration.

Candidates for QG&G 2nd Vice-Chair:

Nick Lancaster. Education: BA, MA, PhD, University of Cambridge. Recent Experience: Associate Research Professor, Desert Research Institute 91-93; Research Professor Desert Research Institute 93-present; Program Coordinator, USGS Earth Surface Dynamics Program 03-05; Director DRI Center for Arid Lands Environmental Management 05-08. Professional Affiliations: GSA Fellow; AGU, AAAS, IAS. Awards: Dandini Medal of Science (93); Farouk El-Baz Award for Desert Research 02; Nevada Regents Researcher Award 07. Research Interests: Geomorphology and Quaternary geology of arid lands, especially aeolian processes; response of arid geomorphic systems to climate change; remote sensing.

Sara Rathburn. Education: BS, Colorado State University; MS, University of Arizona; PhD, Colorado State University. Experience: Colorado State University, Associate Professor 07-present; Assistant Professor 01-07. Professional Affiliations: GSA, AGU, NAGT, AAUW. GSA Service: GSA QGG Panelist 05-07; Co-editor GSA SPE451 09; Student abstracts review 08; Session co-chair 06, 07. Awards: Warner Distinguished Teacher/Advisor Award 08; CSU Excellence in Education 05. Research Interests: Fluvial response to sediment influx; channel restoration of mountain streams; environmental flows; geosciences education.

Candidate for QG&G Treasurer:

Scott Burns. Education: BS, MS, Stanford University; PhD, University of Colorado. Experience: Professor & Chair, Dept. of Geology, Portland State University; previous institutions: Louisiana Tech University, University of Colorado, Western Washington University, Lincoln College New Zealand, American College of Switzerland. Professional Affiliations: GSA Fellow, AGU, NAGT, AEG (Past President), AIPG. GSA Service: Treasurer, QGG, Chair of EGD, Chair Cordilleran Section. Awards: GSA EGD Meritorius Service Award, Louisiana Tech Faculty Senate Chair Award, Portland State University Hoffman Award, Portland State University Alumni Association Outstanding Faculty Award. Research interests: landslides, slope stability, Missoula Floods, terroir, radon, soil development, glacial geology, heavy metals and trace elements in soils.

Candidate for QG&G Newsletter Editor-Webmaster:

Dennis Dahms. Education: BJ, MA, University of Missouri; MA, University of Colorado-Denver; PhD, University of Kansas. Recent experience: Professor, University of Northern Iowa, 05; Associate Professor, 96-05; Assistant Professor, 91-96; Visiting Professor (96-present) University of Missouri, Department of Geology, Camp E.B. Branson, Lander, WY. Professional Affiliations: GSA, AAG, AGU, AMQUA, INQUA, Executive Board - Center for Global and Regional Research (University of Iowa). GSA Service: QGG Newsletter editor/webmaster (03-present). Research Interests: Quaternary stratigraphy and climate change, glacial history, soil geomorphology, paleoenvironments, Rocky Mountains, Greater Yellowstone geoecosystem.

Candidates for QG&G Panel (2009-2011)

Michael Bishop. Education: BS, Western Michigan University; MA, Indiana State University; PhD, Indiana State University. Professional Affiliations: AAG, GSA, AGU, AAAS, ASPRS. Editorial boards: Geomorphology, Annals of the Association of American Geographers, Praxis-Springer science publishing, AAG creative achievement award for book entitled GIScience and Mountain Geomorphology. Research interests: Remote sensing, GIScience, mountain geomorphology, geomorphometry, surface process numerical modeling.

Yehouda Enzel. Education: BSc & MSc, Hebrew University of Jerusalem; PhD, University of New Mexico. Experience: Hebrew University, Inst. of Earth Sciences, Lecturer to full Professor and head of environmental studies; visiting professor in Australia (Macquarie, Wollongong), University of Washington, Desert Research Institute, Reno, and a research faculty associate, University of Arizona. Affiliations: Isr. rep. to INQUA, GSA (QG&G, Limnogeology, and International divisions), Israel Geol. Soc., Israel Water Res. Assoc., AGU, EGS, Int. Assoc. Hydrol. Sci.; GSA-QG&G, Farouk El-Baz Desert Research Award. Editor: Isr. J Earth Sci.; Editorial Board and AE: GSAB, Geology, Quat. Res. Main research interests: Paleohydrology of streams and lakes, geomorphology and Quaternary geology of hyperarid areas, soils, loess and dust.

Tim Fisher. Education: B.Sc. (hons), University of Alberta; M.Sc., Queen's University; PhD, University of Calgary. Experience: Indiana University Northwest, Assistant and Associate Professor 94–03, Department Chair 01–03; University of Toledo 03–present, Associate and Full Professor, Associate Chair 2008–present. Professional Affiliations: GSA, AGU, Sigma XI, AAAS, CANQUA, INQUA Sub-commission of Glaciation secretary 1999–2003, president 2003–2007; Associate Editor, Canadian Journal of Earth Sciences, Journal of Maps; Editorial Advisory Board, Quaternary Science Reviews; AAAS electorate nominating committee (Geography & Geology) 2009–2012. Research interests: Glacial Lake Agassiz paleogeography and role in abrupt climate change, deglaciation history of the Great Lakes region, glacial sedimentology and geomorphology, Great Lakes coastal dunes, and Holocene lake level change in the Great Lakes.

Yvonne Martin. Education: BA, University of Western Ontario; MSc, PhD, University of British Columbia. Position: Associate Professor, Department of Geography, University of Calgary; Institute Fellow, Biogeosciences Institute of the Canadian Rockies and Foothills, University of Calgary. Professional Affiliations: American Geophysical Union; Geological Society of America; Canadian Geophysical Union. Research Interests: Drainage basin evolution; ecology/geomorphology interactions; biogeosciences; wildfire geomorphology; fluvial sediment transport; mass wasting.

Jaakko Putkonen. Education: BA, MS, University of Helsinki; PhD, University of Washington. Experience: Assistant Professor, University of North Dakota, 08–present; Research Assoc. Professor, University of Washington, 07–09; Research Assistant Professor, University of Washington, 01–07; Geological Survey of Finland, Geologist, 90–91. Professional Affiliations: GSA, AGU, Washington State Licensed Geologist. Research Interests: Geomorphology and Quaternary climate change; analysis of Quaternary landscape evolution through computer modeling and cosmogenic isotope analysis of field samples; periglacial processes and the effects of climate change on Arctic and Antarctic environment.

Dave Wilkins. Education: BS, MS, Texas A&M University; PhD, University of Utah. Experience: Texas A&M University-Corpus Christi, Environmental Science, Visiting Assistant Professor 98–00; Boise State University, Assistant/Associate Professor, Dept. of Geosciences, 00–present. Professional Affiliations: GSA, AGU, AAG, ESA, NAGT. IAG Service: Geomorphlist moderator, 2004–present. Awards: GSA Gladys W. Cole Memorial Research Award. Research Interests: dendrogeomorphology, wildfire-climate relationships and landscape evolution, arid lands geomorphology, palaeolakes.

TO ALL VOTING MEMBERS OF GSA'S QG&G DIVISION:

This is the ballot for 2009-2010 officers for the Quaternary Geology & Geomorphology Division. Please vote by marking your ballot, completing the section at the bottom of this page, and returning it to GSA postmarked no later than **July 31, 2009**. Biographical data for this year's candidates are on the pages immediately preceding this ballot.

You may vote online if you wish by July 31 at <https://rock.geosociety.org/ballot/vote.asp?Name=ggg>. At this site, access the online ballot using your GSA member number (or your e-mail address if it is in your GSA records). For assistance, please contact GSA at gsaservice@geosociety.org or (303) 357-1000, option 3, or call toll-free in the U.S. at (888) 443-4472. You may submit your completed ballot by fax instead by July 31, 2009, at (303) 357-1074.

Chair (one-year term; vote for one candidate):

() Paul Bierman () Write-in _____

1st Vice-Chair (one-year term; vote for one candidate):

() P. Kyle House () Write-in _____

2nd Vice-Chair (one-year term; vote for one candidate):

() Nick Lancaster
() Sara Rathburn () Write-in _____

Treasurer (two-year term; vote for one candidate):

() Scott Burns () Write-in _____

Newsletter Editor-Webmaster (two-year term; vote for one candidate):

() Dennis Dahms () Write-in _____

Members of the Panel (term is 2009-2011; vote for **three** candidates):

() Michael Bishop () Yehouda Enzel () Tim Fisher
() Yvonne Martin () Jaakko Putkonen () Dave Wilkins
() Write-in _____

Complete the following section to validate your ballot. Your ballot must be received by July 31, 2009.
Mail to:

Quaternary Geology & Geomorphology Division, Geological Society of America
PO Box 9140, Boulder, CO 80301-9140

Your Name (printed) _____

Your Signature (required) _____

Your GSA Member Number* (required) _____

* This is at the top right of your mailing label. If you need assistance, GSA contact information is printed near the top of this ballot.

GSA Quaternary Geology and Geomorphology Division Newsletter

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