Mount Hood beyond the Portland, Oregon, skyline. The 2009 GSA Annual Meeting will convene at the Oregon Convention Center on October 18th. Photo courtesy of the U.S. Geological Survey, Cascades Volcano Observatory, Vancouver, WA. 1990’s photo by David Wieprecht.
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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**Panel Members**  
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Christine May, maycl@jmu.edu

2008-2010 Panel  
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Jennifer Pierce, jenpierce@boisestate.edu  
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University of Vermont  
Burlington, VT  05405

**GSA Councilor/QG&G Division Liaison:**  
(Mounted by the GSA President)

Monica Gowan
Message from the QG&G Chair:

Quaternary Geologists and Geomorphologists,

The 2009 Portland annual meeting promises to be an extremely successful meeting; certainly a record number of abstracts have been submitted. The QG&G Division is sponsoring more than 35 oral and poster sessions and 10 field trips (OK, so several of them are terroir tours!), running the gamut of geomorphic process and Quaternary history. It has been a great deal of work to organize the sessions in this meeting and to shoehorn them into limited space and time. I thank the topical session organizers, who were flexible and responsive, and especially to the QG&G First Vice Chair, Paul Bierman, who helped tremendously in organizing the technical program long-distance from Australia via high-speed internet.

The Annual Business Meeting and Awards Reception will be held on Tuesday evening, October 20, following the one-day Kirk Bryan intra-meeting field trip to the Columbia Gorge. We hope to see you all there to honor the award recipients and to mingle and network with old and new friends. We are excited to be awarding the first Marie Morisawa student award this year, due to the generosity of an anonymous donor. Unless you have been keeping your hard-earned dollars under your mattress, you are fully aware of the impact of the economic crisis on investment portfolios. The GSA and, consequently, QG&G award funds have undergone the same shrinkage, so please consider donating to one or more of these student or professional award funds when you renew your GSA membership, or at any time during the year.

The 2010 Annual Meeting will return to Denver, Colorado. Hard as it is to think about gearing up for next year, now is the time to start thinking about proposing topical sessions, field trips and short courses for this meeting. The new approach by GSA will be to conduct planning from one meeting to the next, instead of from December to December, to allow more direct feedback and discussion of weaknesses in the meeting program. Pardee sessions are becoming more flexible, with variable lengths and incorporating panel discussions rather than all talks. Consider proposing sessions and field trips that are co-sponsored by more than one division, which broadens their base; you can find the contact information for the current officers of the Divisions on the GSA website, or contact your QG&G chairs (who are the representatives to the Joint Technical Program Committee) for help. During the proposal period, we are constantly checking the proposed sessions and contacting the conveners if it appears the session would be appropriate for our sponsorship, but it would certainly help us if you would initiate such contacts in your planning process! If you have thoughts about potential sessions or field trips, please e-mail mreheis@usgs.gov me so that I can pass them on to next year’s annual program committee.

Kyle House and I attended GSA’s "Leadership Weekend" in Boulder, which included representatives from the GSA Council, Division Chairs, Section Chairs, and the Associated Societies. The best part, for me, was the opportunity to interact with the other Division chairs and to share ideas, policies, and best practices. We had continuing discussions and presentations on how to enhance Section meetings with the support of the Divisions and the Associated Societies, as well as on the new Strategic Plan (http://www.geosociety.org/aboutus/stratplan.htm), including proposed major revision of the GSA structure.

I look forward to seeing many of you at the GSA Annual Meeting in Portland!

Marith Reheis
2009 Quaternary Geology and Geomorphology Division Chair

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ELECTION RESULTS

Chair: Paul Bierman
University of Vermont

First Vice-Chair: P. Kyle House
University of Nevada-Reno

Second Vice-Chair: Sara Rathburn
Colorado St. University

Treasurer: Scott Burns
Portland State University

Newsletter Editor/Webmaster:
Dennis Dahms, University of Northern Iowa

Panel Members for 2009-2011:
Yvonne Martin, University of Calgary
Dave Wilkins, Boise State University
Yehouda Enzel, Hebrew University
GSA ANNUAL MEETING
October 18-21, 2009
Oregon Convention Center
Portland, Oregon

QG&G Management Board Meeting
Sunday, October 18, 7-9 PM, Portland Hilton, Council Suite

Technical Sessions Sponsored by or of Special Interest to QG&G Members

QG&G Sessions:
Sunday
#5. Quaternary Geology: Glaciation, Paleoclimate, and Landscape History (AM)
#8, T9. Climate Signals in Rivers and Streams
#38, T13. Hydrogeomorphic and Ecohydrologic Consequences of Extraordinary Sediment Loading (posters—all day)
#39, T14. Sequential and Repeat Photography as a Tool for Earth and Environmental Science Research and Education (posters—all day)
#55, T4. Colossal Floods (PM)
#56, T7. Paleoseismology, Arid-Region Soils, and Quaternary Geology: A Tribute to Michael Machette’s 35 Years of Quaternary Research (PM)
#62, T53. Steady and Unsteady Deformation of Folds, Faults, and Orogens: Dynamics, Kinematics, and Insights to Coupled Processes (PM)

Monday
#81, T60. Alluvial Records: Numerical Dating and Archives of Climatic, Environmental, and Neotectonic Change (AM)
#102, T9. Climate Signals in Rivers and Streams (Posters—all day)
#107, T53. Steady and Unsteady Deformation of Folds, Faults, and Orogens: Dynamics, Kinematics, and Insights to Coupled Processes (Posters—all day)
#125, T10. Geoheritages, Geoantiquities, and Geomorphosites (PM)
#129, T39. Methods of Reconstructing Quaternary Sea Levels (PM)
#143, T156. New Advances in the Theory and Application of Luminescence and ESR Dating: Flood and Fluvial Overbank Deposits, Paleosols, Dunes, Geoarchaeological and Quaternary Paleoenvironmental Analysis (PM)

Wednesday
#225, T13. Hydrogeomorphic and Ecohydrologic Consequences of Extraordinary Sediment Loading (AM)
#229, T38. Improving Coastal Hazards Mitigation through Advances in Coastal Geomorphology (PM)
#243, Geomorphology (Posters—all day)
#247, Quaternary Geology (Posters—all day)
#249, T12. Alluvial Records: Numerical Dating and Archives of Climatic, Environmental, and Neotectonic Change (Posters—all day)
#270, T8. Terroir—The Relationship of Geology, Soils, Hydrology, and Climate to Wine: A Special Tribute to George Moore (PM)

QG&G Co-Sponsored Sessions:
Sunday
#14, T59. 50th Anniversary of the 1959 Hebgen Lake, Montana, Earthquake: Lessons Learned in Extensional Tectonic Regimes (AM)
#20, T93. Glacial Mars (AM)
#71, T153. Geoarchaeology and Late Quaternary Landscapes of North American River Valleys (PM)

Monday
# 74, P7. Hazards and Health: Preventing Disaster and Building Resilience on the Ring of Fire (AM)
#75, T3. Buried Valley Aquifers: From Bedrock to Sediment Hosted Tunnel Valleys (AM)
#82, T64. Physics of Volcanic Eruptions: Implications for Hazards (AM)
#91, T112. The Nature of Geoscience Expertise (AM)
#94, T154. Geoarchaeology, Reconstructions of Paleoenvironments and Past Human-Environment Interactions (AM)
#108, T70. Interaction of Tectonics, Climate Change, and Eustasy in the Development of the North American Cordillera (Posters—all day)
#113, T100. Field Geology Education—Historical Perspectives and Modern Approaches (Posters—all day)
#118, T135. Geology in the National Forests and Grasslands—Stewardship, Education, and Research (Posters—all day)
#137, T120. Darwin, Geology and Evolution: Impact of Darwinian Views on Scientific Theory-Making (PM)
#140, T134. Risks and Realities: Current Advances in Understanding Societal Risk and Resilience to Natural Hazards I (PM)
#142, T144. Landslides in the Pacific Northwest: Advances in Research and Practice (PM)

Tuesday
#164, T134. Risks and Realities: Current Advances in Understanding Societal Risk and Resilience to Natural Hazards II (AM)
 Improving Coastal Hazards Mitigation through Advances in Coastal Geomorphology (Posters—all day)

Risks and Realities: Current Advances in Understanding Societal Risk and Resilience to Natural Hazards (Posters—all day)

Debris Flows (Posters—all day)

Landslides in the Pacific Northwest: Advances in Research and Practice (Posters—all day)

Cenozoic Lakes (Posters—all day)

Reducing Risk from Geologic Hazards in the Dynamic Landscape of Oregon and Washington (PM)

Field Geology Education—Historical Perspectives and Modern Approaches I (PM)

Geology in the National Forests and Grasslands—Stewardship, Education, and Research (PM)

Obsidian from Magma to Artifact: Geological and Archaeological Perspectives (PM)

Streambanks in Theory and Practice (AM)

Field Geology Education—Historical Perspectives and Modern Approaches II (AM)

Debris Flows I (AM)

Cenozoic Lakes (Posters—all day)

Physics of Volcanic Eruptions: Implications for Hazards (Posters—all day)

Undergraduate Investigations of Geologic Hazards on Dynamic Landscapes (Posters—all day)

Obsidian from Magma to Artifact: Geological and Archaeological Perspectives (Posters—all day)

Crisis In The Cryosphere: Impacts of Planetary Meltdown (PM)

Field Geology Education—Historical Perspectives and Modern Approaches III (PM)

Debris Flows II (PM)

QG&G-Sponsored Fieldtrips:

402. The Great Missoula Floods and the Channeled Scabland (Mon.–Sat., Oct.12–17)

416. Terroir Tour of the Northern Willamette Valley I (Fri., Oct. 16)

420. From Disaster to Recovery: The Hydrogeomorphic, Ecological, and Biological Responses to the 1980 Eruption of Mount St. Helens (Sat., Oct.17)

424. Terroir Tour of the Northern Willamette Valley II (Sat., Oct.17)

427. Kirk Bryan Field Trip: Quaternary Geology and Geomorphology of the Columbia River Gorge (Tues., Oct. 20)

431. Terroir Tour of the Columbia Gorge (Thurs., Oct. 22)

433. Fluvial Response to Removal of Marmot Dam, Sandy River, Oregon (Thurs., Oct. 22)


QG&G Awards Ceremony & Reception

Tuesday, October 20, 7-11 PM, Oregon Convention Center, Portland Ballroom Room 252

All members of the QG&G Division, students, and those interested in finding out more about our division are welcome to attend. Scott Burns has arranged to have premium Oregon microbrews, water, and lots of food.

— Kirk Bryan Award —


— Distinguished Career Award —


Don J. Easterbrook

— Distinguished Scientist Award —

Douglas Burbank, University of California-Santa Barbara.

Farouk El-Baz Award

— for Desert Research —

Rivka Amit, Geological Survey of Israel.

Gladys W. Cole Research Award

— for Research in Geomorphology —

Mark Sweeney, University of South Dakota, for “Late Holocene geomorphic response to Kelso Wash, eastern Mojave Desert: climatic versus base level control of desert dust source.”
Student Research Awards

— Arthur D. Howard Research Award —

Scott Reynhout, University of Cincinnati, for “Measuring bedrock weathering and basin erosion in the Lakakh Himalaya: Towards a comprehensive understanding of landscape evolution.”

Honorary mention:
Benjamin Ferreira, Western Washington University, for “A detailed kinematic study of the Swift Creek landslide.”

— J. Hoover Mackin Award —

Isaac Larsen, University of Washington, for “Quantifying spatial patterns in landslide frequency to assess coupling among erosion, tectonics, and climate.”

Honorary mention:
Esteban Sagredo, University of Cincinnati, for “The Little Ice Age in the Andes: Temperature versus precipitation.”

— Robert K. Fahnestock Award —

The Robert K. Fahnestock Award honors the memory of Fahnestock, a former member of the Research Grants Committee, who died indirectly as a result of service on the committee. The grant is awarded for the best proposal in sediment transport or related aspects of fluvial geomorphology. The 2009 recipient is Adam Lee, Texas A&M University, for “Characterization of Channel Stability and Evaluation of Restoration Efforts on the Uncompahgre River between Ouray and Ridgeway, Colorado.”

— John Montagne Fund —

This fund was established in 2000 to support one student research in Quaternary/Geomorphology. The recipient of the 2009 award is Isaac Larsen, University of Washington, for “Quantifying spatial patterns in landslide frequency to assess coupling among erosion, tectonics, and climate.”

— Marie Morisawa Award —

Jill Onken, University of Arizona, for “Late Holocene alluvial cycles, landscape change, and climatic controls in the Carrizo Wash watershed of west-central New Mexico.”

Honorary mention:
Britta Jensen, University of Alberta, for “Geochronology and paleoenvironments of Middle Pleistocene interglacials in eastern Beringia.”

Obituary

Dwight "Rocky" Crandell
Edited for the QG&G Newsletter from the Seattle Times, April 10, 2009 (online edition, Sandi Doughton, reporter).

When newly minted geologist Dwight "Rocky" Crandell was assigned to map the Puget Sound lowlands southeast of Seattle in the early 1950s, conventional wisdom held that the landscape was shaped mainly by glaciers. But Rocky began filling his notebooks with observations of what appeared to be deep layers of mud underlying towns from Enumclaw to Auburn. Over several years, he tracked the mud to its unexpected source: the flanks of Mount Rainier.

The evidence Crandell and his partner, Don Mullineaux, pieced together proved the volcano's summit had collapsed 5,600 years ago, unleashing a landslide so massive it flowed all the way to Puget Sound and filled nearby valleys with debris up to 400 feet deep. The realization that such an event could happen again, with hundreds of thousands of people now populating Rainier's fringes, shaped much of Rocky's subsequent career.

Crandell and Mullineaux pioneered the approach used today to evaluate the hazards posed by volcanoes. Two years before Mount St. Helens' 1980 blast, they warned that the restless volcano was primed to erupt. … and worked around the clock in shifts to brief public officials, from then-governor Dixy Lee Ray to President Carter.

Crandell died April 6, 2009 of a heart attack at a hospice in Wheat Ridge, Colo. He was 86. His work with Mullineaux on Rainier & St. Helens institutionalized … the field now called volcanic
hazard analysis. "That was really Rocky's idea," Mullineaux said. "It's now used around the world, but when we were making the first map, nothing else like it existed." As a result of volcano-hazard mapping, several valleys downstream of Mount Rainier are now equipped with mudflow-warning systems.

Crandell retired a few years after the St. Helens eruption, partly to make way for young scientists. But he continued to do unpaid field work for another decade.

After his wife, Marion, suffered a brain injury in an automobile accident, Rocky devoted much of his time to her. Two years ago, he visited Mount Rainier with his daughters to scatter her ashes. During a stop at Mount St Helens' visitor center, rangers and staff came from across the park to meet the man whose work remains the bedrock of volcanology in the Northwest.

Rocky is survived by two daughters and their husbands, three grandchildren and one great-grandchild. His son, Tom, died in 1965 in a river-rafting accident. A service was held April 18 at Jefferson Unitarian Church in Golden, Colo.