

Quaternary Geologist & Geomorphologist

Newsletter of the Quaternary Geology and Geomorphology Division
<http://rock.geosociety.org/qgg>

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QG&G'ers enjoying the sights seen and ideas discussed on the 2nd Annual Kirk Bryan Fieldtrip held during the 2007 Denver GSA Annual Meeting. Allan James and his colleagues (upper left) apparently concern themselves with the size of trout in Colorado, while Jon Major (lower left), our 2008 Kirk Bryan Awardee, ponders deeper matters. Don't forget the KB fieldtrip (Coastal Geomorphology) during this year's Annual Meeting in Houston.

Quaternary Geology & Geomorphology Division Officers and Panel Members -- 2008

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.

CHAIR:

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1st VICE-CHAIR:

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Historian: (*Appointed by the Chair in consultation with the Management Board*)

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Panel Members

2007-2009 Panel

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Christine May, maycl@jmu.edu

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GSA Councilor/QG&G Division Liaison:

(Appointed by the GSA President)

Monica Gowan

Message from the QG&G Chair:

Quaternary Geologists and Geomorphologists,

The Division is looking forward to an exciting suite of sessions and activities at the 2008 GSA Annual Meeting in Houston. The QGG Division is a sponsor of over 33 technical sessions and 5 field trips, including topical sessions on tectonic geomorphology, fluvial systems, eolian processes, coastal processes, soils, lakes, landslides and more. My thanks go to the QGG First Vice Chair, Marith Reheis, who helped tremendously in organizing the large and complex technical program. This joint meeting with the Soil Science Society of America and other organizations will particularly augment the program offerings of interest to Quaternarists, so take a broad sweep through the technical program on the GSA website.

Now is the time to start thinking about proposing topical sessions, field trips and short courses for the 2009 Annual Meeting in Portland, Oregon. The local program organizers are already hard at work on what should be another great meeting for a wide variety of QGG topics. If you have thoughts about potential sessions or field trips, please e-mail me so that I can pass them on to next year's program committee.

The QGG Division received a generous donation this year to supplement student registration for the annual Kirk Bryan field trip during the Houston meeting, which we hope to establish as a longstanding tradition. We are also working toward building up the capital in the Division's newest award, the Marie Morisawa Scholarship, for women who plan to pursue a career in geomorphology. We have a solid base of initial contributions to this fund, and with your help we could begin distributing the award next year. When you renew your GSA membership, please consider making a donation to one of the QGG student or professional award funds.

In May, GSA convened the first "GSA Leadership Weekend" in Boulder, which consisted of representatives from the GSA Council, Division Chairs, Section Chairs, and the Associated Societies. The objective was to revise the strategic plan for GSA, which was actually more interesting than it sounds. A lot of ideas bounced around about how GSA should approach issues of interest and importance to geoscientists and the public in the modern world, and what our niche should be. There was considerable momentum behind the idea of developing overarching themes from which one or two issues would be chosen for emphasis at each Annual Meeting, such as

"Health/Environment", "Earth Resources", "Information/Technology", and "Innovation in Time and Earth System Changes". We'll see how this plays out in upcoming years.

I'll look forward to seeing many of you at the Tuesday evening QGG Awards Ceremony at the GSA Annual Meeting in Houston.

Lisa Ely
2008 Quaternary Geology and Geomorphology
Division Chair

ELECTION RESULTS

Chair: Marith Reheis
First Vice-Chair: Paul Bierman
Second Vice-Chair: P. Kyle House
Secretary: Jon Major
Panel Members for 2008-2010:
Jen Pierce, Boise St.
Faith Fitzpatrick, USGS
Tom Pierson, USGS

- Friends of the Pleistocene - Upcoming Meetings

2008 Pacific Cell

November 14-16, 2008

Organizers and Leaders: Tom Rockwell, Mike Oskin, Kim Le, Lewis Owen, Warren Sharp, Kate Fletcher, Susanne Janecke, Becky Dorsey, Caitlin Lippincott, Eldon Gath and George Jefferson

Focus: Cross-correlation of Quaternary dating techniques, slip rates, and tectonic models in the western Salton Trough, including stops on:

- Deciphering the neotectonics of the southern San Jacinto and Elsinore fault zones, including slip per event and slip rate variations through time, their lifetime slip-rates versus their latest Quaternary slip rates. Have slip rates varied due to changing fault structure? Examining

evidence for the Early Quaternary age of the San Jacinto fault zone.

- Discussions on derivation of slip rates based on various dating techniques, including cosmogenic ^{10}Be , U-series, OSL, soils. Dating soils via U-series on pedogenic carbonate. Dating Lake Cahuilla shoreline deposits with Optically-stimulated luminescence - how good is OSL in a nearly ideal environment? The implications of clast provenance and fan morphology combined with various dating techniques in estimating slip rates.
- Implications of fault arrays in mud-rich basins for paleoseismic studies. Crossing active faults-what is the evidence and how do they do this? Implications of ramps and flats on strike-slip faults. Fault youth and fault maturity: is this a useful model?

This trip is limited to 3000 top-rate Quaternary types! No exceptions!

Accommodations will be based on long-standing FOP standards – i.e., we will camp.

Contact: <trockwell@geology.sdsu.edu>

2008 Southeastern Cell

October 25th & 26th

Leader: Ray Torres, University of South Carolina torres@geol.sc.edu. Please address all correspondence to Ray.

Focus: An overview of floodplain processes and coastal processes in the lowcountry of South Carolina. We will meet Friday night (not sure where yet), spend the first day on the Congaree River floodplain (maybe a pig roast at the end of the day at a place to be determined), second day on the coast (not sure where because not sure if I have boats yet). End the Sunday meeting at about 2PM.

Ray will provide more details early in the Fall regarding lodging, registration, etc to the entire SEFOP list & various listserves. So for now, just save the date.

Looking forward to a great trip.

Dr. Martha Cary (Missy) Eppes
Department of Geography and Earth Sciences
UNC Charlotte
www.uncc.edu/meppes <meppes@uncc.edu>

2008 Rocky Mountain Cell

Sept. 6-8, 2008

Quaternary Happenings in the Overthrust Belt, Western Wyoming

Leaders:

Jim McCalpin, GEO-HAZ Consulting, Crestone, CO. <www.geohaz.com>
Greg Warren, CH2M Hill, Boise, ID
Al Jones, cons. geologist, Smiley Creek, ID
John B. Rice, Jr, Rocky Mountain Environmental Associates, Idaho Fall, ID

WHEN: Sept. 6-8, 2008 (Sat. 8am to Mon., noonish)

WHERE: Star Valley/ Salt River Range, WY;
Greys River Valley/ Wyoming Range, WY

WHERE TO MEET: the trip officially begins at 8 am Saturday morning, Sept. 6, at the Allred Flat Campground (USFS, Bridger-Teton National Forest). The campground is about 20 miles south of Afton, WY on US Highway 89. You may find it convenient to arrive at the Campground on Friday night and camp there (McCalpin's website above has the map).

THE OVERALL ROUTE: the trip is a ca. 150-mile loop, starting on Saturday morning (Sept. 6) just south of Star Valley, WY, going north to Alpine WY through Star Valley, and then at Alpine turning east then south, and driving up the Greys River Valley (Sept. 7), eventually returning (Sept. 8) very near to the starting point.

Because of this layout, it will be possible for attendees to carpool on the trip if they don't want to drive alone. That is, you can leave your car near the start of the trip and hop in with someone else, and be returned to your car at the end of the trip. Carpooling is appealing for 2 big reasons: (1) it would reduce the total number of cars in the caravan, and space is tight at many of our stops, and (2) you could spare the old family minivan from being subjected to the bone-jarring, tire-eating Greys River Road ...

Suggestions: You don't need 4WD for the trip, but you do need good tires for the Greys River Road. Don't forget your spare (filled with air), jack, jack handle, and lug wrench. Speaking from experience, this is not a place to learn the difference between a passenger tire and a light truck tire.

Accommodations: tent camping all 3 nights at USFS campgrounds. All have water (dunno if I'd drink it, though) and pit toilets. No electricity.

Friday night: (before start of Trip); Allred Flats CG, WY, Bridger-Teton NF (20 mi S of Afton on US 89). There are also several motels in Afton, for those that might want to get a good night's sleep. If you stay in Afton Friday night, then drive down to Allred CG for the start of the trip at 8 am Saturday morning.

Saturday night: Alpine North CG, ID, Caribou NF (2 mi NW on Alpine, WY on US 26). There are several motels in Alpine and Alpine Junction. The Nordic Inn (\$\$\$) has Internet.

<<http://www.brenthoven.com/nordicinn.html>>
The Three Rivers Motel (\$) does not.

<<http://www.3riversmotel.com/>>

Sunday night: Forest Park CG, WY (mile 32, Greys River Road). Uhhhh, sorry. No motels in the Greys River Valley.

Communications: Cell Phones; should work most of Day 1 (Sat.), since we will be in Star Valley. No cell reception in the Greys River Valley (Days 2 and 3).

Internet: None at Allred Flat (Friday night) or at Forest Park (Sunday night). On Saturday night we'll be staying only 2 miles NW of Alpine, WY, and you might be able to cruise "downtown" Alpine and pick up a stray WiFi signal. We had luck parking in front of the Nordic Inn (0.5 mi E of Alpine Junction on US 89, N side of road).

COST: Bring some cash or your checkbook, to pay for camping and if you want a hard copy of the Guidebook. I've already paid for the Group Campsite on Saturday night, but you need to pay for your own campsites on Friday night (if you stay at Allred Flats CG) and on Sunday night (Forest Park CG). USFS charges \$10/campsite, but they don't really say how many tents can cram onto a site, so I'll leave that up to you guys.

GUIDEBOOK: To help keep costs down, I will be posting the ca. 50-page-long Guidebook as a PDF file on the GEO-HAZ website. I suggest that you download it and print it at your institution, before coming on the Trip. That way, (1) you have some reading material on the drive to Star valley, and (2) I don't have to guess how many hard-copy (\$\$\$) Guidebooks to print. The Guidebook is full of color Google Earth graphics and would cost a fortune to print, so I will be only bringing a limited number of hard copies with me. PLEASE LET MCCALPIN KNOW IF YOU CANNOT PRINT YOUR OWN COPY, AND YOU WANT HIM TO PRINT YOU ONE.

QG&G DIVISION AWARDS – 2008

The following awards will be given by the QG&G Division at the Annual Awards Ceremony & Reception on Tuesday, October 7, 7-11 PM, George Brown Convention Center, General Assembly Theater A

— Kirk Bryan Award —

Jon J. Major, U.S. Geological Survey, Vancouver, Washington, for Major, Jon 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.
Special Award Lecture: Topical Session T13, Session # 123, Sunday AM.

— Distinguished Career Award —

Rich Madole, U.S. Geological Survey (Ret), Denver, Colorado.
Special Award lecture: Geomorphology General Session # 178, Monday AM.

— Donald J. Easterbrook Distinguished Scientist Award —

Alan Gillespie, University of Washington.
Special Award Lecture: Geomorphology Division Session #178, Monday AM.

Farouk El-Baz Award

— for Desert Research —

Prof. Martin Williams, University of Adelaide.
Special Award Lecture: Quaternary Geology
General Session #278, Wednesday AM.

Gladys W. Cole Research Award

— for Research in Geomorphology —

Benjamin J.C. Laabs, SUNY-Geneseo, for
“*Chronology and Climate of the Angel Lake
glaciation, Northern Great Basin.*”

Student Research Awards

— Arthur D. Howard Research Award —

Jonathan Harvey, Utah State University, for
“Reconciling Holocene alluvial records on the
Colorado Plateau.”

Honorary mention:

Summer Brown, Virginia Tech, for “Integrating
apatite (U-Th)/He and fission-track dating to
redefine the temporal and spatial history of the
Teton Range, WY.”

J. Hoover Mackin Award

Rebecca Franklin, University of Arizona, for
“Herbology of the alpine eastern Sierra Nevada.”

Honorary mention:

Keith Laskowski, Yale University, for “N-alkane
record of alpine glaciation.”

— 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 2008 recipient is **Suzanne
Walther**, University of Oregon.

--- John Montagne Fund ---

This fund was established in 2000 to support one
student research in Quaternary/Geomorphology.
The 2008 recipient is **Jason Gully**, University of
Florida.

GSA

JOINT ANNUAL MEETING

**Geological Society of America
Soil Science Society of America
American Society of Agronomy
Crop Science Society of America**

October 5-9, 2008

**George R. Brown Convention Center
Houston, TX**

Awards Ceremony & Reception

Tuesday, October 7, 7-11 PM, George Brown
Convention Center, General Assembly Theater A

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 beer,
water, sauteed potstickers, vegetable empañadas,
Vietnamese spring rolls, pecan dusted chicken
tenders, guacamole, salsa, chili con queso, tortilla
chips, popcorn, pretzels, potato chips, and more.

Management Board Meeting

Sunday, October 5, 7-9 PM, Hilton Hotel
Room 346 AB

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

QG&G-sponsored Joint Sessions:

Sunday

J9. Gains and Losses: Soil Nutrients and Moisture in
Aridic Soils Under Changing Climates (8am-noon).

Monday

J4. Characterization and Interpretation of Soils and
Geologic Formations with Carbonates, Gypsum, and
Other Soluble Salts (8am-noon).

J5. Desert Pavements and Vesicular A Horizons (Posters, 8am-6pm).

J13. Land Use and Short-Term Erosion Processes (1:30-5:30pm).

J20. Soils through Time: Critical Zone Studies of Processes and Their Effects (8am-noon).

Wednesday

J6. Developments in Aeolian Research: Bridging the Interface between Soil, Sediment, and Atmosphere (I, 8am-noon).

J6. Developments in Aeolian Research: Bridging the Interface between Soil, Sediment, and Atmosphere (II, 1:30-5:30pm).

J20. Soils through Time: Critical Zone Studies of Processes and Their Effects (Posters, 8am-6pm).

QG&G Sessions:

Sunday

Quaternary Geology (Posters, 8am-4:45pm).

T2. Coastal and Aeolian Geomorphology Processes and Landforms (8am-noon).

T2. Coastal and Aeolian Geomorphology Processes and Landforms (Posters, 8am-4:45pm).

T5. Coastal Tectonics of the Pacific Rim: Geomorphology, Structure, and Hazards

T13. Sediment in Fluvial Systems: Production, Transport, and Storage at the Watershed Scale I (8am-noon).

T13. Sediment in Fluvial Systems: Production, Transport, and Storage at the Watershed Scale II (1:30-4:45pm).

T18. Soil Geomorphology and Chronosequences (Posters, 8am-4:45pm).

T20. Assessment of Speleothem Paleoenvironment Proxies Using Studies in Modern Karst Systems (1:30-4:45pm).

Monday

T8. Late Quaternary of the Northern Gulf of Mexico Margin: Climate Change, Sea-Level Change, and the Depositional Record (1:30-5:30PM).

Geomorphology (8am-noon).

Tuesday

T146. Hypogenic Karst: Shedding Light on Once Poorly Understood Hydrologic and Morphologic Features (8am-noon).

Wednesday

Quaternary Geology (8am-noon).

Geomorphology (Posters, 8am-6pm).

T12. Channel Networks as a Template for Earth and Environmental Processes: Toward an Integrative Process Model for Landscape Evolution (8am-noon).

T15. Trends in Geomorphology: Advances and Innovations in Measurement and Analysis (1:30-5:30pm).

Thursday

T17. Integration of Soils and Geomorphology in Deserts: A Tribute to the 50 Years of Soil Research of Dan Yaalon (8am-noon).

T19. Loess and Loess Soils (8am-noon).

QG&G Co-Sponsored Sessions:

Sunday

T143. The Origin of Mima Mounds and Similar Micro-Relief Features: Multidisciplinary Perspectives (1:30-4:45pm).

Monday

T21. Lakes, Playas, and Soils (1:30-5:30pm)

T25. Terrestrial Response to Climate Variability during the Medieval Warm Period: Lakes, Tree-Rings, and Human Adaptation (8am-noon).

T86. Reconciling Geologic and Geodetic Rates of Deformation (1:30-5:30pm).

T142. Soils as Components of Archaeological Landscapes (1:30-5:30pm).

T145. From Quaternary Geology and Physical Volcanology to Geoarch and Paleoanthropology: A Memorial to Harold E. Malde (8am-noon).

Tuesday

T30. River-Dominated Continental Margin Processes: Modern and Ancient (8am-noon).

T79. The Himalayan Orogen and Rise of the Tibetan Plateau: An Earth Systems Approach to the Tectonic and Landscape Evolution of Asia (8am-noon).

QG&G-Sponsored Fieldtrips:

404. Fluvial Systems of East-Central Texas: Responses to Climate and Sea-Level Change over the Past Two Glacial-Interglacial Cycles (Thurs-Sat, Oct 2-4).

411. Geomorphic and Hydrochemical History of the Edwards Aquifer at Inner Space Cavern (Sat., Oct 4).

415. The Origin of the Sandy Mantle and Mima Mounds of the East Texas Gulf Coastal Plain: Geomorphological, Pedological, and Geoarchaeological Perspectives (Sat., Oct 4).

420. Kirk Bryan Trip--Coastal Geomorphology and Change along the Upper Texas Coast (Tues., Oct 7).

Special Note to Students: The QG&G Division offers a \$60 reduction in registration cost for up to 15 students for the **Kirk Bryan Fieldtrip**. Interested students must complete the PDF registration form for the GSA Annual Meeting and FAX it directly to: Eric Nocerino, GSA Fieldtrip Coordinator, at 303-357-1072. Open to student GSA members only; preference to student members of the QG&G Division.

429. Soils and Geomorphology of the Texas Gulf Coastal Plain and Texas Shoreline with Special Emphasis on Hydrology, and Coastal Erosion (Thurs – Sat., Oct 9-11).

GSA Quaternary Geology and Geomorphology Division Newsletter

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