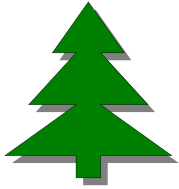




AGS NEWSLETTER

ARIZONA GEOLOGICAL SOCIETY, INC., TUCSON, ARIZONA

December 2008



DECEMBER 2, 2008 DINNER MEETING

Global climate change and why it matters in the Southwest

Jonathan T. Overpeck, University of Arizona

ABSTRACT—none this month.

Looking for a Special Christmas Gift?

Consider a copy of *A Natural History of the Sonoran Desert*, edited by Steven J. Phillips and Patricia Wentworth Comus, Arizona-Sonora Desert Museum.

Published in January 2000, the book has 650 pages, 32 full-color plates, 450 pen-and-ink illustrations, and more than 20 chapters that cover everything from geology to grasses, and storms to flora and fauna. The book retails for \$24.95 and can be purchased at local bookstores and on the ASDM web site: www.asdm.org.



AGS Fall Field Trip Report

Thanks go to Gordon Haxel for leading the 2-day Fall Field Trip on November 15-16 to see evidence of the Jurassic magmatic arc in the Baboquivari and Las Guijas mountains in south-central Arizona. We had 31 participants, superb weather, and excellent, thought-provoking discussions.

On Saturday, we examined well-exposed outcrops of 165-MA porphyritic Kitt Peak Granodiorite and the Pavo Kug Granite along the road to the Kitt Peak National Observatory. These plutonic rocks intruded the hypabyssal, volcanic, and sedimentary rocks of the Middle Jurassic (170 MA) Topawa Group.

On Sunday, we assembled in Arivaca to regroup into high-clearance vehicles to look at Middle Jurassic igneous and sedimentary rocks in the Las Guijas Mountains. We got a look at the Durazno Granite (coarse-grained syenogranite that represents a separate magmatic pulse from the Kitt Peak Plutonic Suite), the Las Guijas Porphyry, and the Pajarito Tuff (crystal-rich ignimbrite) with interlayered eolian sandstone. The field trip ended late in the day, with some last stops to look at the historic tungsten mines and prospect pits along the northeast side of the mountain range.

Field trip group with the Baboquivari Mountains in the distance

The AGS December dinner meeting is our annual Christmas celebration. Please invite your family and friends to join us to share our featured holiday dinner of ROASTED PRIME RIB OF BEEF and a very interesting presentation.

Dinner Meeting Information — InnSuites, 475 North Granada Avenue, Tucson

To reserve your place for dinner, call 520-663-5295 before 5 pm, Friday, November 28, 2008.

Cost: Members \$24, Guests \$27, Students \$10 (+\$3 for late registration)

Cash Bar @ 6 pm

Dinner @ 7 pm

Talk @ 8 pm

For dinner selection, indicate if a low-salt or vegetarian meal is required. Please cancel if you are unable to attend.

AGS CAN NO LONGER GUARANTEE DINNER SEATING FOR THOSE WHO SHOW UP WITHOUT A RESERVATION.

A NOTE ABOUT THE COST OF AGS DINNER MEETINGS

The Executive Committee appreciates that our monthly dinner costs are high and is always looking for ways to hold them down. Periodically we review other venues for our meetings, but none meets our requirements as well as the InnSuites. A little-known bonus is that we have a gentlemen's agreement with the InnSuites that they will increase dinner prices only bi-annually, rather than annually. The last increase was March 2008 so there should be no change for 2009 (cross your fingers; we have yet to negotiate menus and prices for next year).

As we approach the new year, we would like to take this opportunity to explain the charges that are included in the cost of each dinner.

\$17.75 for each plated dinner
\$50 set-up charge for the meeting room,
\$75 set-up charge for the bar,
20% gratuity (on all above charges), and
8.1% tax (on all above charges).

For a typical meeting with 30 dinners served, the cost of dinners totals \$532.50. Add to that \$125 set up for room and bar, \$131.50 gratuity, and \$63.91 tax. The total cost for 30 dinners then is \$852.91. Divided among 30 attendees, a single dinner actually costs \$28.43.

Each month, as a member benefit, AGS subsidizes the difference between dinner revenue and the InnSuites' invoice. If you have questions, please feel free to contact a member of the AGS Executive Committee.

A NOTE ABOUT AGS DINNER MENUS

The 2008 dinner menu is shown below. If you have preferences or suggestions for 2009, please contact Claudia Stone, AGS Secretary, cstone@srk.com, before mid-December when the 2009 menu will be selected.

| | |
|-----------|--|
| January | Chicken Marsala |
| February | Grilled Chicken Breast (Sheraton Four Pts) |
| March | Breast of Chicken Florentine |
| April | Stuffed Manicotti |
| May | Roasted Prime Rib of Beet |
| June | Chicken Cordon Bleu |
| July | Pasta Primavera |
| August | Braised Beef tips w/Peppers & Onions |
| September | Chicken Teriyaki |
| October | London Broil |
| November | Oven Roasted Turkey |
| December | Roasted Prime Rib of Beef |

A NNOUNCEMENTS

The Arizona Department of Mines and Mineral Resources is Seeking Applicants for the Position of MUSEUM EDUCATION CURATOR

The job notice on the state website states:

"The Education Curator for the Department of Mines and Mineral Resources will be responsible for exposing students throughout Arizona to the mineral wealth and geology of the state. The curator will visit schools and colleges promoting this education and prepare materials for the teachers of these students. They will conduct adult classes and seminars as well as tours for students and the public. Travel of 30 to 60 percent will be required."

The position is in Phoenix. Salary grade is 18. Salary range is \$31,110 to \$51,107.

The application deadline is November 23, although the position will remain open until filled. Apply on line at the Arizona state job web site: <https://secure.azstatejobs.gov/>. Search on "curator."

GLOBAL URANIUM SYMPOSIUM

May 9-3, 2009
Keystone, Colorado
www.U2009.org

GSN Symposium

May 14-22, 2010, Sparks, NV
Great Basin Evolution and Metallogeny
Co-sponsored by AGS

Please make your dinner-meeting reservation BEFORE Friday, November 28, 2008. Call 520-663-5295 today!

PDAC 2009

Prospectors & Developers Association of Canada
March 1-4, 2009
Toronto, Canada
Metro Toronto Convention Centre,
South Building
www.pdac.ca

The President's Column

BY LEE ALLISON, PRESIDENT

lee.allison@azgs.az.gov

What a difference a month makes. All summer and early fall, we saw optimistic financial forecasts for copper and other minerals. Mining and energy companies were raking in profits; the economic slowdown would be minor and short-lived. Everyone marveled at how resilient the economy was, given the severity of the housing collapse.

Today, the price of copper is at a three-year low, moly plummeted from \$30 to \$12 in seemingly no time, and oil prices seem to be in free-fall. The full impact of the mineral prices is yet to be seen in Arizona and elsewhere, but Freeport McMoRan's delaying of major projects and suggestions they may cut production at Arizona mines is unsettling at best.

The debate over uranium mining in northern Arizona has taken a new turn with the U.S. Dept. of Interior proposing to scrap the rule that allowed a Congressional committee to declare an emergency and shut leasing and exploration on federal lands.

While the commodities cycle moves through another phase and the political arena churns, creating great uncertainties in the mineral industries, Arizona is taking a bold step.

The University of Arizona's Institute of Mineral Resources is about to make a major announcement as this newsletter is going to press. Science Foundation Arizona and a number of mining companies are making a multi-million dollar investment into the IMR to position it as a global leader in mining and mineral topics. In the last 20-25 years, there have been huge reductions in the number of mining engineering (~75%) and economic geology (~40%) programs nationwide.

Arizona programs are among the best in the nation already but this new initiative will look at mining and mineral resources in a systematic approach, incorporating not only scientific and technical areas but legal, environmental, social, and training aspects. Mineral resources are too critical to the nation's economic and national security and the issues about them too complex, to leave them to chance.

For the number one mining state in the nation, and a state with a growing reputation for innovation, the IMR is the right idea, at the right time.

Courtright Scholarship Awards Announced

The Arizona Geological Society and the Courtright Scholarship Committee are pleased to announce that the J. Harold Courtright Scholarship has been awarded this year to two applicants:

Rachelle Wagner

M.S., Northern Arizona University

Proposed study: Miocene Fault and Basin Analysis along the Boulevard and Dry Wash Faults, Northern Frenchman Mountain, Lake Mead Domain, Nevada

Jesse Einhorn

M.S., University of Arizona

Proposed study: Detrital Zircon Geochronology in Sediments of the Salta Rift, Northwestern Argentina

The \$2,000 award will be split evenly between the students.

Harold Courtright had a life-long interest and career in mining and geology. He honed his field mapping skills and porphyry copper exploration techniques in the northern and southern Cordillera and is credited with discovering some of the better known porphyry copper deposits in Arizona and Peru. The scholarship fund, set up after his death in 1986, was designed to promote graduate research in all fields, with special emphasis on field geology, economic geology, and the study of ore deposits.

The winners have been invited to attend the December membership meeting as AGS's guest, where they will receive their prizes.

*Happy Holidays to All AGS Members
From the AGS Executive Committee*



2009 CALENDAR OF EVENTS

- | | |
|---------|---|
| 01/6/09 | Richard Reynolds , USGS: <i>Dust in western North America</i> |
| 02/3/09 | Vince Matthews : <i>China and India's Ravenous Appetite for Natural Resources</i> |
| 03/3/09 | Mike Clarke , Augusta Resource Corp.: <i>Geology of the Rosemont Cu-Mo-Ag deposit</i> |
| 04/7/09 | Bill Chavez , New Mexico Tech: <i>Geochemical controls on the intensity and maturity of development of supergene enrichment profiles</i> |



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FOR INFORMATION
ABOUT THE
ARIZONA GEOLOGICAL SOCIETY
AND UPCOMING EVENTS
VISIT OUR WEBSITE
www.arizonageologicalsoc.org

AGS books and maps are sold at the monthly dinner meeting and by the Arizona Geological Survey. Visit the AZGS website www.azgs.state.az.us and click on Non-AZGS Publications



As always, please keep us up to date as you move, change jobs, or change your e-mail address.

2009 AGS MEMBERSHIP APPLICATION OR RENEWAL FORM

Please mail check with membership form to: Arizona Geological Society, P.O. Box 40952, Tucson, AZ 85717. Dues (circle one): 1 year: \$20; 2 years: \$35; 3 years: \$50. (Full-time students receive free membership. The newsletter is by e-mail only, and a membership application form must be returned to AGS annually to remain on the membership list.)

Name: _____

Position: _____

Company: _____

Mailing Address: _____

Street City State Zip Code

Work Phone: _____ Home Phone: _____

Fax Number: _____ Cellular Phone: _____

E-Mail (business) _____ E-Mail (home) _____

Please send the newsletter by e-mail only by regular mail only by e-mail AND regular mail

If registered geologist or engineer, indicate registration number and state: _____

If American Institute of Professional Geologists member, indicate registration number: _____

Enclosed is a _____ tax-deductible contribution to the J. Harold Courtright Scholarship Fund.