April 2012 News Notes

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Saltzman conducts field work in Ordovician of Nevada

Prof. Matt Saltzman with graduate student Cole Edwards and undergraduates Charlie Diamond and Cody Trigg conducted field work in the Ordovician of west-central Nevada over Spring Break, March 19-24. The NSF-sponsored research addresses the roles of organic carbon burial and silicate weathering in reducing global temperatures to bring about the transition from an ice-free to a glaciated Ordovician world. Sections studied in Nevada, including Meiklejohn Peak, provide a record of nearly continuous deposition during the North American Whiterockian stage and can thus be compared with potentially time-equivalent strata being studied in the central Appalachians in collaboration with Dr. Steve Leslie at James Madison University.



Section at Meiklejohn Peak showing light colored, irregularly shaped mud-mound (300 meters across and 60 meters high) in the Antelope Valley Limestone sitting above the orange-weathering Ninemile Shale. The uppermost exposed strata include the Eureka Quartzite and overlying Ely Springs Dolomite.



SES undergraduate Charlie Diamond sampling top beds of skeletal limestone facies in uppermost Antelope Valley Limestone just below the rust-weathering Eureka Quartzite.

Sigma Gamma Epsilon news

On Friday, March 2, the Sigma Chapter of Sigma Gamma Epsilon (SGE), the Earth Sciences National Honorary Society, initiated nine new members into Ohio State's chapter. SGE members must have an overall GPA of 2.67 and a GPA of 3.0 in the major and have completed at least three courses in Earth Sciences. Students must demonstrate interest in the Earth sciences by participation in School activities. New initiates are undergraduate Geological Science majors Jacqueline Mills, Zachary Cotter, Brad Hull, Christina Zerda, Loren Rosenbeck, Wayne Malangone, Edwin Buchwalter, Cara Nadler, and Will Blocher. Jeffrey Thompson, chapter president, says that the chapter expects to welcome another group of initiates in Spring Quarter. The SGE chapter participated in Winter Quarter Buckeyethon and raised about \$500 for children's cancer research at Nationwide Children's Hospital. The chapter is also doing outreach to middle school students by tutoring a group of students who plan to take part in the rocks and minerals competition of the Ohio Science Olympiad on April 28, 2012. The Science Olympiad is North America's most prestigious team science and technology competition.



Front row, L to R: Kelsey Bisson, Matthew Hawrylak, Kelsey Dailey, Jeffrey Thompson, Jeremy Myers, Alex Rytel Back row, L to R: Jameson Scott, Cara Nadler (fifth from left), Christina Zerda (sixth from left), Edwin Buchwalter (third from right), Brad Hull (second from right), Nicholas Leeper (far right)

Upcoming AAPG meeting: Long Beach, CA

Please join us for the upcoming AAPG Meeting in Long Beach, CA (April 22-25). This meeting always provides an excellent opportunity for us to get together and for you to learn about new developments in the SES. It also provides an opportunity for us to continue updating our efforts in developing an emphasis towards petroleum geology and affords the School the opportunity to hear from you.

This year we will be holding our traditional alumni breakfast. We also are included in the All Alumni Party. David Cole will be in attendance and host the breakfast. The SES Alunni Breakfast will be held at the Renaissance Hotel (Corsican Room), Tuesday morning (April 24) from 7:30–9:00 am. The All-Alumni Party will be held at the Hyatt Regency hotel, Monday evening (April 23) from 5:30–7:30 pm. If you plan to attend the Alumni Breakfast, please RSVP to Betty Heath (heath.18@osu.edu) ASAP.

Thanks to a generous gift from Jory Pacht and contributions from Peter March, Dean of the Natural and Mathematical Sciences division of the College and SES, eight students, including three undergrads, will be attending the AAPG meeting.

Thanks to all who donated to the Orton Museum!

Last month, we drew attention to the fact that Orton Museum was broken into and vandalized on the night of January 8th by an inebriated undergraduate student. A number of valuable museum pieces were damaged; you can read details of the vandalism in the Lantern (link).

This month, we would like to thank the alumni and a number of institutions who donated to the Orton Museum for the purpose of defraying vandalism restoration expenses:

David Cimprich, BA 1987; Peter Enderlin, MS 2010; Trey Fortner, MS 2003; Ralph Haefner, Ph.D. 1998; Katie Johnson, Ph.D. 2008; Robert O'Brien, BA 1959;



Pete Mackenzie, BS 1994; Roy McCammon, BA 1959; Robert Williams, MS 1968. Friends of Indianola Informal School (Columbus, Ohio); Hilliard Crossing Elementary School PTO (Hilliard, Ohio); Hoffman Trails Elementary School (Hilliard, Ohio); St. Paul School (Westerville, Ohio); Columbus Rock & Mineral Society (Columbus, Ohio); RETTEW Associates (http://www.rettew.com).

For any wishing to make a donation to support the Museum, you may do so online by giving to the Orton Museum fund online (link), with OSU fund number 308759. You may also mail donations to School of Earth Sciences, 275 Mendenhall Laboratory, 125 South Oval Mall, Columbus, Ohio 43210; please make checks out to Ohio State University, and include OSU fund number 308759 in the memo.

In Brevia

Prof. David Cole was invited by the Carnegie Institution of Washington to present an overview of science team results from our Sloan Foundation funded Deep Carbon Observatory - Deep Energy Directorate project. Results were presented from nine institutions on the topic - Reduced Carbon in Earth's Crust and Mantle I: Abiogenic versus Biogenic Origins.

Prof. David Cole spent eight days at Los Alamos at the Lujan Neutron Scattering Center conducting small angle neutron scattering experiments on caprock and tight gas shales to better quantify submicron pore features in these rocks.

PhD student Tingting Liu (adviser: David Cole) has been working in Prof. David Tomasko's lab (in Chem. Eng) measuring the adsorption of CO2 and light hydrocarbons on various mineral and rock substrates with application to fluid behavior in tight formations at subsurface conditions of elevated temperature and pressure.

PhD student Ellyn Enderlin (adviser: Ian Howat) attended a 5-day workshop in Copenhagen, Denmark, on ice-penetrating radar methods sponsored by the Center for Remote Sensing of Ice Sheets.

Profs. Doug Alsdorf and Michael Durand attended the American Geophysical Union Chapman Conference on Remote Sensing of the Terrestrial Water Cycle, held in Waikoloa Beach, near Kona, Hawaii, from 19-22 February. Approximately 250 scientists participated. Conference attendees heard from Dr. Michael Freilich (director of NASA Earth Sciences), Andy Revkin (science editor for the New York Times), as well as a number of prominent researchers in the field.

Previous issues of the Alumni News Notes (beginning Autumn 2011) have been archived at: http://www.earth-sciences.osu.edu/alumni.php