

## November 2013 News Notes

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### Alumni change lives

*Zachariah Cowan received support from the William J. Buschman scholarship fund. Photo: Zechariah at Field Camp.*

Ohio State's Field Camp in Ephraim, Utah was an irreplaceable experience that took my classroom understanding to a level that I know is necessary for the real world. Being lucky enough to receive a William J. Buschman scholarship from the fund established by an estate gift, I never had to worry about anything besides geology. When I am trying to figure out how to come up with money to pay for lunch, it's hard to stay focused on learning. The scholarship gave me the opportunity to get all the gear I needed for field camp and show up prepared to excel. As the school year progresses, help from the scholarship will also give me the opportunity to cut back a few of my hours at work to spend more time on research and gaining experiencing in the lab. Ohio State's School of Earth provides an incredible amount of resource, and having a little help gives me the opportunity to take advantage of that.



### Twenty-one years and counting

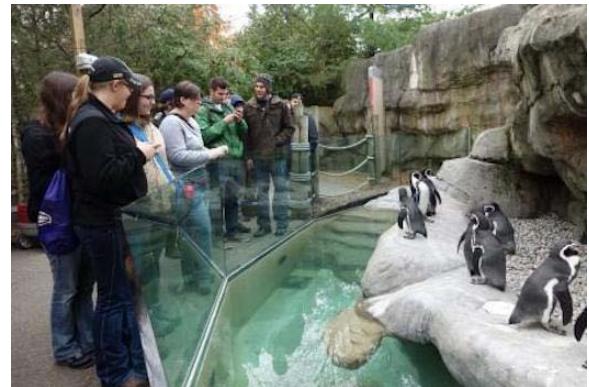
Kathy Welch, a research scientist from Ohio State, left Columbus Monday, 28 October for New Zealand on her way to McMurdo Station, Antarctica. This is the 21st year in a row that she has done this trek at this time of the year. Kathy works with Dr Berry Lyons, Professor and currently Director of SES. Berry's group at Ohio State is part of a multi-institutional, multidisciplinary program looking at ecosystem changes brought about through changes in hydrological processes in the McMurdo Dry Valleys in Antarctica. The MCM Dry Valleys are the largest ice-free region on the continent. Although this polar desert landscape has a mean annual temperature of minus 19° C and precipitation of only ~3 cm/yr, it contains soils and ephemeral streams that flow



from glacier melt from 4-12 weeks a year, and perennially ice-covered lakes that contain organisms-invertebrates, bacteria, algae, mosses, etc. This program, The McMurdo Dry Valleys Long-Term Ecological Research (MCM-LTER) site, is part of a larger network of LTER sites that are supported through the National Science Foundation. Lyons, Welch and a large number of SES students, both graduate and undergraduate, have traveled South over the past 13 years to investigate the geochemical and biogeochemical variations in the aquatic systems of the Valleys. In collaboration with the work of colleagues at University of Colorado, Colorado State University, Virginia Tech, University of Illinois, Chicago, University of New Mexico, Portland State, Dartmouth and Brigham Young University their collective work has demonstrated the sensitivity of this ecosystem to settle changes in the amount of liquid water generated from glacier melt.

## Advanced Oceanography fieldtrip

On Saturday 2 November, Dr. Grottoli ([www.earthsciences.osu.edu/~grottoli.1](http://www.earthsciences.osu.edu/~grottoli.1)) led her 18 Advanced Oceanography (ES5206) students on a field trip to see marine organisms at the aquarium at the Columbus Zoo and Aquarium (<http://www.colszoo.org>) and at Reef Systems Coral Farm (<http://www.reefsystems.com/>). After a behind the scenes tour of Discovery Bay Reef and the Manatee Coast exhibits at the zoo, students paid a visit to some marine birds in the penguin exhibit (top photo). At the coral farm, students had the opportunity to touch many invertebrate species (bottom photo). At both locations, students were exposed to the challenges and rewards of marine aquaculture, learned about the many different pathways to a career in animal husbandry and marine aquaculture, and gained an appreciation of the effort and scale involved in maintaining large marine facilities. Top photo: Advanced Oceanography students studying the penguins at the Columbus Zoo and Aquarium. Bottom photo: Advanced Oceanography students and Dr. Grottoli (center of image) surrounding a coral culture tank in the greenhouse of the Reef System Coral Farm.



## Panero participates in workshop

Associate Professor Wendy Panero was invited to participate in the Earth Life Sciences Institute's workshop on Transport Properties of the Earth's core, held at Lake Kawaguchi, at the base of Mt. Fuji. She presented results of experimental and theoretical work from graduate student Jeff Pigott (MS 2011) and former graduate student Daniel Reaman (PhD 2011) on the development of the Earth's inner core.



## Brevia

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Craig Grimes, B.S. 2003, recently took a position as Assistant Professor in the Department of Geology at Ohio University. Craig returned to SES on October 17 to present a seminar in the 8898 colloquium on “Tectonic-Source Signatures in Igneous Zircon Geochemistry.” Craig received his Ph.D. at the University of Wyoming and did a post-doc at the University of Wisconsin before joining the faculty at Mississippi State for several years and now returning home to Ohio.