



WHITMAN GEOLOGY

Vol. 1, 2006

Dear Geology Alumni;

Hi! I am initiating this newsletter with the hope that it will establish a stronger connection between alumni and current students. This newsletter will not only keep you in touch with the events here at Whitman, but your responses will be a valuable resource to students as they make their choices for life outside of Whitman. I'd like to encourage you to become part of Whitman's career consultant network. This is a network of alumni and parents who have agreed to make themselves available to talk to students about their careers and jobs. For more information or to sign up please visit this website:

http://www.whitman.edu/content/career_center/parents/networking-at-whitman

If you have any other words of advice for students or would like to write something to be published in a subsequent newsletter we would be happy to hear from you! This newsletter will be sent out annually in November in conjunction with Whittie News. You can email me at geotech@whitman.edu

Best Wishes, Tara Gregg '05

Where in the world is Whitman Geology?

This past summer Professor Bob Carson took a group of students to Tibet. For pictures and details on his trip visit this website: <http://people.whitman.edu/~carsonrj/trips/Tibet/Tibetrocks2005.htm>

Last fall's regional trip visited central Idaho. The trip was led by Visiting Professor Brennan Jordan. Also attending were Professor Bob Carson and 34 students. Cooper Brossy ('03) joined the trip for a few days and led the group through Craters of the Moon National Monument. Cooper, now studying at Central Washington University, wrote his senior thesis on cinder cone reconstruction in Craters of the Moon while he was at Whitman. Other highlights of the trip included volcanic features of the Snake River Plain, the Borah fault scarp, and examining moraines from the Rocky Mountain Pleistocene glaciation in the moonlight.

In April the annual spring regional trip will be visiting south-eastern Oregon's Leslie Gulch and Jordan Craters.

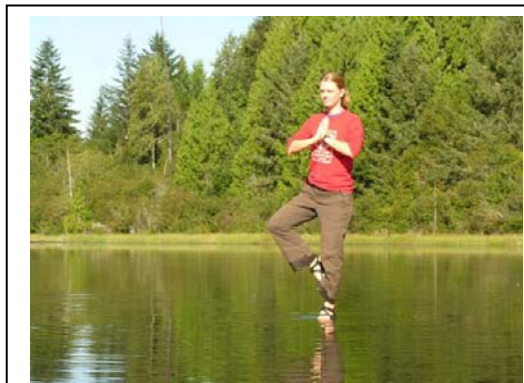
Everything including the "Big Sink": Student Research

Three of Whitman's students participated in Keck Consortium research projects last summer and have continued their work throughout this school year.

Ryan Porter ('06) and Matt Andring ('06) carried out their research in Minnesota. Ryan's work used Anisotropic Magnetic Susceptibility (AMS) to determine the magnetic signature of the North Shore Volcanic Group rhyolites. Matt studied the petrography, geochemistry and anisotropy of a system of Precambrian granophyres in the Beaver Bay Complex. His results indicate that the origin of these dikes is local. Emily Mendell ('06) spent her summer on Banks Island, Arctic Canada studying paleo-forests and the effects of



Fall 2005 Regional Trip to Craters of the Moon National Monument



Senior Morgan Zeliff researching seismic hazards, Price Lake, Olympic Peninsula, WA

modern climate change on the arctic environment. These students will be presenting their research at the Keck Research Symposium at Amherst College at the end of April.

Senior Becky Burand ('06) worked with Professor Pat Spencer to analyze a thick fine-grained stratified sediment sequence near Grand Coulee. Their results provide evidence for a large ice-dammed lake in this area during the Pleistocene. A Sally Ann Abshire Award funded her research.

Morgan Zelif ('06) and Chris Iacoboni ('06) carried out their research on Washington's Olympic Peninsula. Morgan researched the seismic hazard of the Saddle Mountain West fault; her work was funded by the USGS. Chris investigated the geomorphology associated with the Saddle Mountain East Fault; the Perry Research Fellowship from Whitman funded his work.

Jamie Hinderliter, Shannon Othus and Don Malkemus each analyzed aspects of the 'Big Sink', a geomorph feature located in the Blue Mountains, Oregon. Jamie's research was on the geomorphology of the "Big Sink". Her results indicate that the depression is a remnant of an ancient landslide. Shannon looked at the composition and stratigraphy of the interbeds in the Columbia River Basalt Group and their suspected role in initiating mass wasting in this area. Don used radiocarbon dates of buried charcoal to determine the forest fire history of the Blue Mountains.

Junior Ben Schupack ('07) presented at the annual GSA meeting in Salt Lake City. He presented on "Eruption Styles of Small Martian Shield Volcanoes on Syria Planum, From Mola, Tes, and Themis Data."

For more details on student research visit:

www.whitman.edu/geology

Updates on our Geology Extraordinaire

John Winter: I've been working on the second edition of my text, Introduction to Igneous and Metamorphic Petrology. It will come out next spring, hopefully. I also recently published an article: "The Occurrence, Vesiculation and Solidification of Dense Blue Glassy Pahoehoe," with Chris Oze ('97): *J. Journal of Volcanology*. 142, 285-301. 2005. I'm preparing to retire next Christmas!



John is ready for retirement!



Students at Rongbuk, Tibet

Pat Spencer: I have been involved in projects with students related to the Pleistocene geologic history of the eastern Washington region. Recently, a paper appeared in *Washington Geology* on the pre-late Wisconsinan catastrophic glacial outburst floods in southeastern Washington, coauthored with student Miriam Jaffee ('00). More recently, I have been involved in a project identifying the distribution and interpreting the sedimentologic history of stratified, pre-Missoula Flood age sediment in Upper Grand Coulee. Meghan Mix ('04) and Becky Burand ('06) are collaborators on that project. I recently was elected to the position of Faculty Chair, which means less teaching and many more hours of meetings for the next couple of years. In my spare time, I still

enjoy cultivating Bonsai and fly fishing. Last summer, on two consecutive days in Wyoming, on the Wiggins Fork of the Wind River, I caught an 18-inch Brown and a 19-inch Cutthroat. Last year, in March of 2005, I co-



led a trip to the Galapagos Islands and Machu Picchu in the Peruvian Andes, with a dozen students. I had the great fortune to be asked to go again this past March (2006), this time with 57 Whitman alumni, including Elizabeth Walker ('85). What a wonderful experience! Our kids are grown. For those of you who remember them, Robyn graduated from Willamette University in 2004 and has been working in San Diego; Alison graduates from the University of Montana in May, 2006; and Ben enrolled as a freshman at the University of Washington last fall. Kathy is still writing, currently finishing editorial stuff on her 13th book.

Bob Carson: The last geology newsletter went in 1989, long before I was leading Keck Geology Consortium research programs just east of Yellowstone National Park. Now those Keck programs are in Mongolia (2000 to the Darhad in the North, 2003 to the Gobi in the South, 2004 to the Altai in the West, and 2006 to the Hangay near the center), focusing on glacial geology and neotectonics. Closer to home, students are helping me revisit the active faults on the Olympic Peninsula and study the Big Sink landslide in the nearby Blue Mountains.

Regional geology, international addition, has been exciting: 1997, Dominica and Montserrat; 1999, Costa Rica; 2000 and 2002, Galapagos and Andes; 2001, Africa; 2002, Greenland and Iceland; 2005 Tibet; and 2007, Norway including Svalbard.

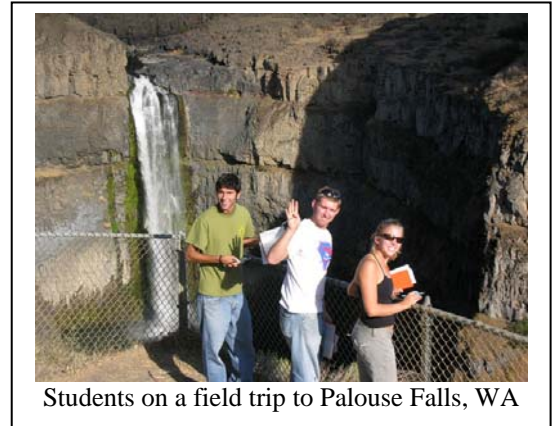
Remember those three Carson boys? Clare and I had 2 weddings and a grandchild in 2005. Ben is a music professor at UC Santa Cruz. Chris teaches high school science in Denver. Henry is working on a PhD in marine ecology at San Diego State University.

Kevin Pogue: I am in the final stages of writing a book on the geology of City of Rocks National Reserve and Castle Rocks State park that is going to be published by the Idaho Geological Survey. I've also been collaborating with geologists at the USGS, University of Illinois, and Michigan State on a new interpretation of the origin of the clastic dikes in the Touchet beds.

My latest research interests center on the relationship between geology, geography, soils, and climate and the production of premium wine grapes.

This summer, I'm conducting research on the geologic and geographic controls on temperature variations within the Walla Walla AVA (American Viticultural Area) with student Greg Dering ('07). The French word for the relationship between wine and vineyard site is "terroir" so I am becoming a "terroirist". In September, I am scheduled to lead a Whitman alumni field trip to study the various terroirs of the Rhone valley of southern France.

Brennan Jordan: After a two-year stint at The College of Wooster, I had another terrific year as a visiting assistant professor at Whitman. I had the pleasure of leading the fall regional field trip to my old stomping grounds in central Idaho, a terrific way to return to the west! Also in the fall, I was able to participate in an AGU Chapman Conference, The Great Plume Debate in Fort William, Scotland, no fisticuffs but some pretty heated discussion. I also had a paper published in the GSA Memoir: Plates, Plumes, and Paradigms. I am eagerly anticipating a new adventure this summer, co-directing, with Bob Carson, a Keck project in

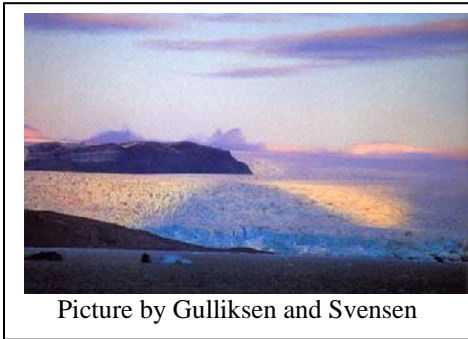


Students on a field trip to Palouse Falls, WA

Mongolia. But the most important development in my professional life this year has been securing a tenure-track position at The University of South Dakota. I am very excited to have a long-term position to build in, and look forward to digging into the geology of the Black Hills. I thank the students and faculty in the Whitman Geology Department for the two great years I have had here. It has truly been an outstanding experience, and I will leave Walla Walla with many new friendships and fond memories. I look forward to seeing my Whitman friends at national meetings and other events for years to come.

We're getting a new Professor!

In light of John's retirement Kirsten Nicholaysen has been hired as his replacement. Kirsten will begin next fall and will be teaching Mineralogy, Petrology and Volcanology.



Picture by Gulliksen and Svensen

Upcoming Trips

THE ULTIMATE ARCTIC ADVENTURE: CRUISE TO NORWAY AND SPITZBERGEN IN 2007

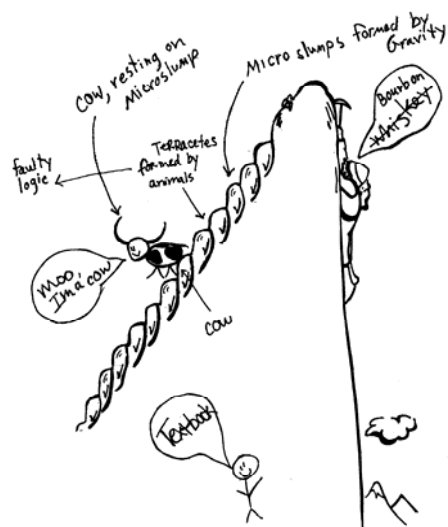
Bob Carson is working with the Alumni Office to host alumni, parents, students and friends of Whitman College on a cruise to Norway in 2007 through the North Sea, Norwegian Sea and Arctic Ocean with nine stops in the Norwegian fiords and the Svalbard archipelago. The trip will include scenery, culture, biology, and geology. We will look for glaciers, icebergs and permafrost; wildflowers; reindeer and Arctic fox; birds and more birds; walruses, whales, and more marine mammals; and hopefully,

lots of polar bears. If you are interested and would like more details, please contact Margaret Hoglund in the Alumni Office at (hoglund@whitman.edu).

WINE AND GEOLOGY IN PROVENCE September 10-18, 2006

The Côtes du Rhone – the slopes bordering the majestic Rhone river – present a spectacular diversity of terrain. This diversity is expressed as 'terroirs,' each created by a unique geology, topography and climate. Traveling with Whitman professor of geology and terroir expert Kevin Pogue, and starting from the Northern Rhone appellations, we will follow this famous river on its course southwards through Provence. Throughout the region, the mild climate and diversity of soils has, for generations, translated into world-class wines. During our 9-day trip we'll visit Provence's most renowned wineries. We'll also sample the finest food, cheeses and wines of the area, stay in elegant and charming accommodations, visit ancient towns, admire Provence's spectacular countryside, and return home with a new appreciation and understanding of French culture and landscape! For more information, contact Margaret Hoglund in the Alumni Office at hoglund@whitman.edu.

Come Visit! Geology displays greatly expanded Hall of Science!



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