

The 2012 PSU Summer Field Geology School departed from the parking lots behind Deike Building on May 26th for our annual cross-country trip across the United States—a ritual that marks the beginning of a six-week problem-based course in the Rocky Mountains and Basin and Range. This year, there were 31 student participants, including 3 students from other universities.



The group arrived at the College of Eastern Utah, and the 2012 field school began with an exercise on sequence stratigraphy led by Dr. Rudy Slingerland in the Book Cliffs. Dr. Eric Kirby followed this with a Quaternary mapping project where students reconstruct past climate change from paleoshorelines of Lake Bonneville. Then the caravan headed north to YBRA in Red Lodge, Montana where Dr. Slingerland instructed the students in a mapping exercise familiar to many alumni—the faulted strata of the Laramide anticline in Elk Basin.



At YBRA, we take advantage of the Dusenberry classroom. Nearly all the exercises are completed in an ArcGIS format, and the students carry GPS units, locator devices, and two-way radios in the field, but some things at PSU field camp do not change. Students still use aerial photos, maps, and cross sections to develop a 3-D understanding of the geometry of geological features and the variability in geologic processes, so they can communicate their findings in reports.



Dr. Slingerland passed the baton to Dr. Donald Fisher at YBRA, and the caravan crossed through Yellowstone and Grand Teton National parks en route to projects in the White Knob Mountains and Lost River Range of east-central Idaho. The students map a faulted syn-orogenic sequence of conglomerates, a mappable unconformity and post-orogenic series of volcanics, with the entire area dissected by normal faults. After stops at the Craters of the Moon National Monument and the Borah Fault Scarp, the class returns to Utah for mapping of the Alta Overthrust Belt.



The students descend from Duff's Bench during a day of introduction to the stratigraphy of the Alta area and the mapping of ramps and flats in faulted rocks of the Sevier thrust belt.



Professor Emeritus David Egler came out of retirement to introduce the Alta Stock exercise with Dr. Maureen Feineman, and another year of PSU field camp was wrapped in the cirque at the head of Little Cottonwood Canyon.



By the end of the summer field school, Dr. Slingerland had made an indelible imprint on the students' intellectual and cosmetic development.



Overall, 2012 was a wonderful year with great weather, spectacular geology, and an enthusiastic group of students.