THE GREATER YELLOWSTONE ECOSYSTEM

Zach Schierl, 2010

Twenty-one Whitties were recently lucky enough to spend ten exciting days exploring Yellowstone National Park and the surrounding area on what has become a nearly annual excursion for Professor Bob Carson. The two-credit geology/environmental studies class had been meeting weekly on Sunday evenings since the beginning of spring semester. We had spent weeks getting a primer on the geology of the region from Professor Carson while each of us individually researched and gave a presentation on topics related to the trip, ranging from bison and mountain goats, to wildfires and life in hot springs. Needless to say, when our departure date finally arrived, we were all anxious to hit the road and finish off spring semester with a bang.

Our base for most of the trip was Hunter Peak Ranch, located along Clarks Fork of the Yellowstone River about a half hour east of Yellowstone National Park. While the majority of our time was spent out in the field, no account of the trip would be complete without a mention of the wonderful hospitality provided by our hosts, the Carys. The food in particular was nothing short of spectacular making meal times a highlight of the day for our entire group.

Most of our days were spent exploring the sparsely inhabited territory surrounding the ranch in Clarks Fork Valley. Only two of our 10 days were spent fully within Yellowstone National Park, but in hindsight, I'm glad this was the case. While Yellowstone was just beginning to experience the effects of peak tourist season, in the comparatively wild and undeveloped mountains and valleys to the northeast, we seldom encountered other people.

From a geologic standpoint, northwestern Wyoming was a gold mine (pun possibly intended) of different features. The geologic story of the area is dominated by a feature known as the Heart Mountain Detachment, a 1000 mi^2 mass of rock that spontaneously slid as much as 60 miles to the east approximately 50 million years ago, making it one of the largest landslides known to geologists. In addition, we got a firsthand look at some of the oldest rocks in North America at 3.4 billion years old, scoured road cuts for fossils, saw the obligatory hot springs and geysers, as well as textbook examples of glacial troughs, moraines, and postglacial gorges. In the true spirit of geology, our souvenirs from the trip consisted not of t-shirts or gift shop trinkets but instead rocks. *Lots* of rocks. Such was our collecting zeal that, had you looked carefully, our turtle top vans were probably riding visibly lower on the way back to Walla Walla.

While geology majors comprised the majority of our group, our focus was fortunately not limited to inanimate objects. Biology majors got their fix as our drives to and from Hunter Peak Ranch would often take us through Yellowstone's famous Lamar Valley, sometimes called the "Serengeti of North America." Armed with two dozen pairs of binoculars and a telescope, by the end of the trip we had managed to spot virtually every species that makes Yellowstone paradise for wildlife enthusiasts: elk, pronghorn, innumerable bison and their adorable offspring, black bears, grizzly bears (including one that made a mad dash across the road in front of our vans), foxes, marmots, pikas, and even a distant telescopic view of a wolf.

Over the course of the trip we also spent time exploring the Montana towns of Cooke City and Red Lodge, the famed Buffalo Bill Historical Center in Cody, WY, and elevations of more than 11,000 feet where we encountered snowdrifts higher than our vans. Not to be outdone by Wyoming itself, our drives to and from Whitman were punctuated by a variety of interesting stops. We got a firsthand look at the glacial Lake Missoula sediments we geology majors hear about so frequently in class, a tour of the largest gold mine in North America in Whitehall, Montana and a descent into nearby Lewis & Clark Caverns, and an afternoon playing, jumping, and rolling in the St. Anthony sand dunes in eastern Idaho.

Throughout the trip, Professor Carson's intimate knowledge of the region added a dimension to the trip that was indispensible. The most memorable moments from the trip stemmed from visiting the "off-the-beaten trail" kind of places, the kind of places that you wouldn't find unless given several years to explore the region. Case in point: promised a surprise on the 4th afternoon of the trip, we drove to a pullout along the Beartooth Highway a few miles from the ranch and followed Bob as he took off into the woods. "Where is he taking us?" After a full day that had included summiting a 9,000-foot peak, such was the lament of many of us as twenty-one pairs of tired legs were left to wonder what was in store. After a twenty-minute walk, we emerged on to a rocky granite platform high above Clarks Fork Valley to find a perfectly arranged medicine wheel, inner arm aligned with the direction of the rising sun. Whether constructed by indigenous peoples or visitors, no one knew, yet it mattered little. We remained there, watching the sun drift toward the western horizon, more or less in silence, each in quiet reflection. It was experiences such as this, magnificently combining the visual, the scientific, and the spiritual, that made the trip the highlight of my Whitman experience…so far!