

Hello Wisconsin

by **Amalia Doebbert**

On the graduate Geoclub's 2008 annual fall outing, nineteen students (and one spouse) ventured up to the Door Peninsula guided by field trip leader Andy Leaf. As always, the goal was to introduce our new grad students to some Wisconsin geology and for everyone get to know each other along the way. Funding for the trip was generously provided by BP. In order to work around the early GSA meeting, we scheduled the trip for mid-October and lucked-out with a weekend of perfect summer-like weather and spectacular peak fall colors. Featured geology included the Niagara Escarpment, Silurian dolomite and associated karst features, the Maquoketa shale, giant stabilized sand dunes at Whitefish Dunes State Park, and the Two Creeks Buried Forest.



The grad Geoclub group in Door County: Scott Johnson, Amalia Doebbert, Evan Earnest Heckler, Jocelyn Heckler, Dave Lovelace, Alex Teel, Dave Ullman, Erin Fenlon, Lisa Colville, Phil Gopon, Kelsey Winsor, Andy Fraass, Mai Zhang, JoAnn Gage, John Hora, Libby Obbink, Joe Kington, Rachel Murphy, Summer Ohlendorf, and Andy Leaf.

Some of the geology we sought turned out to be elusive, leading to a certain amount of driving in circles and hunting through bluffside vegetation for outcrop. However, we also discovered a fantastic "new" roadcut we hadn't expected, so perhaps it all evened out in the end. Fantastic

campfire music, a midnight hike along Lake Michigan, an orchard market, Sweetie Pies pie shop, and a brief stop at a lighthouse were some of the non-geological highlights. We all had fun, which was really the point, and even learned a thing or two along the way. ●

Undergrad Geoclub heads north to Keweenaw and migrates south into Maquoketa

by **Samantha Hayes**

For the second time around, the undergraduate Geoclub traveled to the Upper Peninsula of Michigan to explore the geology of the Keweenaw region during the first weekend of October 2008. Two vans, nine people and a field guide (Bornhorst and Rose, 1994) set out toward Agate Beach, MI where we filled pockets and stocking hats with colorful agates. We also had the chance to go on an underground tour of Quincy Mine which allowed us to physically see the displacement caused by Hancock Fault. We climbed and clubbed through 1085-1060 million year old geologic units of the Jacobsville Sandstone at the Natural Wall Ravine, the Portage Lake Volcanics, where we went copper hunting at the Central Mine dump pile, and finally touched the Copper Harbor Conglomerate at Horseshoe Harbor.

On November 22-23, ten members of the undergraduate geoclub and paleo club headed south towards Dubuque in search of another geologic adventure within the mysterious dolomite caverns of Maquoketa Caves State Park. The Maquoketa cave system was (re)discovered in the 1830's and was investigated in 1980. Excavations have uncovered over 900 artifacts belonging to Late Woodland occupants between AD 300 and 1000. As we crawled in and out of each crevasse, we came across the Hopkinton Formation and the overlying Scotch Grove



On Brockway Mountain Viewpoint, UP- Michigan. Back: Danielle Jordan, Boomer Bain, Rob Matson, Jason Huberty, Alyssa Lochen, and Tony Giuffre. Front: Jason Janzen, Sam Hayes, and Reba Heiden.

Formation which were sculpted into these caves containing elaborate stalagmites and stalactites. The most memorable cave was Wye Cave, where we had to slip our way down into a sink hole surrounded by knife-like boulders. The cave opened up into a small chamber where one could stand and walk around. Next, the group needed to crawl into a smaller shin-bash-chamber that led to an eleven inch thick "squeeze" (rightfully named). Fortunately, the squeeze was less than ten feet long until the cave once again opened up into a larger room. As you can tell, our group definitely got "down and dirty" for this trip. The fossils seen were crinoid molds (sea lilies) of the phylum, echinoderm. One of our members even found a partial

body fossil of a trilobite (early Cambrian arthropods) along a roadside mining pile. We used the GSI Guidebook by Anderson (2001) along with the previous Maquoketa caving experiences of UW students, George Rothdrake and Lisa Lesar.

These trips gave our participants a better understanding about the structure, mineralogy, sedimentology, glacial geology, and even the human history of the world under our feet. I personally would like to thank UW graduate student, Jason Huberty, for being our guide during the Keweenaw trip. His knowledge of the area enhanced our educational experience of UP-Michigan.

The UW undergrad Geoclub and paleontology clubs would like to thank members and alumni of the department for their generous support of undergraduate field trips. ●



George Rothdrake, going through the "squeeze" in Wye Cave.