



# Geology Museum 2008 Annual Report

## Showcase of Mineral Diversity

Nearly two hundred mineral fans flocked to the museum in March for the unveiling of a display showcasing the *R.A. Greiner Mineral Collection*. The new exhibit features 85 stunning specimens arranged on tiers, in what is now the largest case in the museum. The display is especially popular with school children, and visitors of all ages seem compelled to declare which are their favorites. To make room for the new exhibit, museum workers had to relocate a 1,300 pound copper nugget. With the help of some tow straps, a forklift, and a bribe in the form of an apple pie, the nugget was safely moved to another spot in the mineral room. This case was constructed with financial support from the **Robert and Ramona Sneider Geology Museum Fund** and **Dr. R.A. Greiner**.



*Dr. Greiner and a friend enjoying themselves and the opening reception in March.*



*Jeopardy! Clue Crew members take a break from filming video clues at the Geology Museum.*

## Museum in Jeopardy!

In April, the *Jeopardy!* Clue Crew visited the museum and taped eleven video clues for the popular game show. An episode already has aired which included three clues about museum specimens. The featured objects were a Canyon Diablo meteorite, a piece of polished malachite, and our giant globe. The clue about malachite was even a Daily Double, a special clue where a contestant can wager as much of their money as they like. It is also worth noting that the clue involving our globe and the Mid-Atlantic Ridge ended up stumping all three players.

## Undergraduates Underground

To gain a different perspective of Wisconsin's bedrock, a group of students joined museum personnel for a field trip to a former commercial cave. Unlike a road cut or quarry, a cave enables one to be enveloped within a rock layer—in this case, the 450 million year old Galena dolomite. The lower portion of the cave is much more decorated than the upper passage. The slowly dripping soda straw stalactites were well worth the climb out.



*Autumn Wilke rappels down a steep slope to reach the lower portion of the cave.*

## Nurturing Young Minds

Have you ever touched a human brain? Taken a dog's pulse? Calculated the speed of a glacier? The girls attending the day-long "Expanding Your Horizons" conference in November enjoyed many such hands-on experiences. **Brooke Norsted** was the co-chair of this event which allowed roughly 400 middle school girls to try out careers in science, technology, engineering and mathematics. In total, there were 102 workshops and all of them were led by local women scientists. Brooke heavily recruited presenters from within the department as well as the Wisconsin Geological and Natural History Survey to ensure the earth sciences were well-represented.



*Geology grad student Lisa Colville brings relief to the geology of the upper midwest at Expanding your Horizons.*



*Elementary students get their hands dirty at the museum's science night workshop.*

## From Microbes to Mammals

A variety of other outreach events filled out the calendar in 2008. In the spring, museum personnel presented at ten elementary school science nights, where hundreds of school children and their families learned about astrobiology and the search for life beyond our planet. Participants were introduced to microbes living in bizarre places on earth and then environments on moons and other planets in the Solar System that might harbor microbial life.

The theme of our annual open house was also astrobiology. This May event featured a talk by **Jason Huberty** of the Wisconsin Astrobiology Research Consortium and special displays on microbes, banded iron formations, and Earth's oldest rocks and fossils.

After the record breaking snows melted and just before school let out, **Rich Slaughter** spoke to every fourth grader in the Middleton-Cross Plains School District as they rotated through his "Ice Age Wisconsin" station at a two-day outreach event at Pope Farm Park. He returned to the museum hoarse and with sore knees from crouching on the ground for hours on end, but he left the students with visions of giant beavers and mammoths lumbering about in their heads.

## A Reflection on Natural Selection

Museum personnel put their organizational and creative skills to work for the UW's third annual Darwin Day in February. From coordinating over 30 volunteers to constructing and installing a 80' long inflatable prehistoric whale model in the Microbial Sciences building, students and staff were kept busy with preparations. The day-long event was attended by hundreds of people and featured several provocative lectures in the morning. Neil Shubin, an evolutionary biologist from the University of Chicago, talked about his team's recent discovery of *Tiktaalik*, a 375 million-year-old fish that represents an important phase in the transition from fish to land-dwelling vertebrates. In the afternoon, thirteen interactive exploration stations were set up in and around the museum that highlighted current research on evolution by university scientists.



*This eighty-foot long inflated whale was built by volunteers and was displayed at Darwin Day. The whale was exhibited in Microbial Science and visitors could step inside the the Basilosaurus model to learn about whale evolution.*

## Donations

The museum's collections were enhanced in 2008 with specimens from **Jerry Gunderson** and the **Friends of the Geology Museum**. Jerry donated several fossils including some rare arthropods with preserved appendages from the Silurian of Iowa. The Friends presented the museum with a polished slab of tiger iron from Australia, a botryoidal fluorite from India, and a deep cranberry-colored tourmaline from the Jonas Mine of Brazil. In addition, the friends acquired three Ordovician trilobites from Russia for the museum. These exquisite trilobites are essentially complete and one specimen provides an interesting glimpse of an exoskeleton's underside. In terms of financial gifts, our greatest supporters were:

BP  
 EnCana Oil and Gas  
 Friends of the Geology Museum  
 Julie Hill  
 Tina Johnson  
 David Jones  
 Dave and Sherry Lesar  
 Jay and Silvia Nania  
 UW-Madison Natural History Museums Council



*A spiny trilobite from Russia courtesy of the Friends of the Geology Museum.*

**Thank you all for contributing to the Geology Museum!**

### Out for the Count in 2008

Number of people receiving an hour-long guided tour of the museum: **12,826**

Number of geodes cracked in two hours at the Winter Workshop: **94**

Volume of the museum's globe: **129.68 cubic feet**—which means that it could hold just over 10,000 cans worth of soda

## On the Road

In April, **Brooke Norsted** was invited to speak at the UW-Madison Founders Day alumni gathering at the Carnegie Museum of Natural History in Pittsburgh. She talked about the museum's Wyoming dinosaur expeditions and enjoyed touring the Carnegie's newly unveiled dinosaur hall.

The next month Brooke co-led a three day long NASA workshop

entitled "Astrobiology for Museum Workers" at the Adler Planetarium in Chicago. Participants came from all over the country to learn about astrobiology and techniques for conveying this content to their audiences. Brooke was responsible for presenting and leading everyone through a variety of hands-on activities that they could then use at their institutions.

## The Museum Crew

### Museum Assistants

Gabriela Farfan  
 Madee Hartjes  
 Sander Hunter  
 Caitie Johnson  
 Lisa Lesar  
 Carrie Levitt  
 George Rothdrake  
 Rob Schultz  
 Autumn Wilke

### Saturday Host

Lou Goodman

### Emeritus Director

Klaus Westphal

### Friends of the Geology Museum

Samantha Crownover – President  
 Peter Lundberg – Vice President  
 Carlos Peralta – Treasurer  
 Ray Riddle – Secretary

### Tour Guides and Volunteers

Boomer Bain	Amy Homan	Laura Mitchell
Beth Brander	Katie Horst	Alex Morrow
Joe Christman	Jason Huberty	Josh Nadke
Amalia Doebbert	Ginger Kern	Libby Reineke
Carrie Eaton	Allie Matthies	Ryan Shedivy
Danielle Gosse	Chris Miller	Buddy Tangalos

*We value the time and energy you invest in making the museum successful. Thank you!*

*Rich Slaughter, Director  
 Brooke Norsted, Assistant Director  
 Joe Skulan, Instructor and Researcher*