

Department of Geosciences



The Boulder RUNdown - AY 2007/2008

Who's Counting?

We now have 26 Geoscience majors...

**15 in Geology and
12 in Environmental Geoscience**

Congratulations!

Last Spring, Dr. Jim Mills was promoted to Professor, and this past Fall, Dr. Jeane Pope received tenure and promotion to Associate Professor. Congratulations to both!

Rocks-R-Us...

Geoscience students again have visited several field areas this year: China; Black Hills, SD, Baraboo, WI; Hawaii, St. Francois Mts., MO, and Appalachian Mts., MD-WV.

Contact Us!

Visit our website: <http://www.depauw.edu/acad/geosciences/> for a color version of the newsletter and for more departmental information.

Geoscience Majors Conduct Summer Research

Several geoscience majors were engaged in various research projects this past summer as part of internships and research positions. Several students traveled to the GSA meeting in Denver to present the results of their work.

The Department of Geosciences has a long-standing tradition of integrating teaching and research in order to better prepare our students for graduate school and/or geoscience careers. Many of our majors were busy this past summer putting this philosophy into action. At least 8 geoscience majors were involved in some form of geoscience-related activity as part of a summer internship, research position, or job.

and Ben traveled to China and mapped the stratigraphic and structural features in their study area with Dr. Cope in order to unravel the region's geologic history.

Beth Drewes '08, Nick Vetz '08, Lauren Weir '08, and Jay Wellik '10 were research interns/fellows with programs from other universities. Beth participated on a University of South Dakota (Keck Consortium) field mapping project of the Arnes central volcano in northwestern Iceland. She is continuing her work here at DePauw as an independent study project with Dr. Mills. Nick traveled to Germany to work at the Center for Marine Environmental Sciences at the University of Bremen. There he worked on a project that investigated gases in seep-associated gas hydrates and sediments of the Eastern Black Sea. Lauren worked at the University of Idaho with Dr. Mickey Gunter to investigate the health effects of volcanic dust on animals by characterizing mineral deposits in sheep organs. Jay conducted research on landform evolution in the Colorado National Monument (continued on page 3)



(l-r) Charlotte Buehler '08, Ali Barnes '09, and Ben Gibson '08 at GSA. Ali and Ben presented a poster on their China research project with Dr. Cope.

Billy Alward '08, Ali Barnes '09, and Ben Gibson '08 worked with Department faculty members this summer on two different projects. Billy worked with Dr. Wilkerson to develop a spatial and temporal GIS within Google™ Earth for the Colorado Plateau region, whereas Ali



Research poster presented at GSA by Lauren Weir '08 and her research advisor Dr. Mickey Gunter (University of Idaho).

MESSAGE FROM THE CHAIR

Greetings from Greencastle! Another year has passed and the Department has remained very active on a variety of fronts, ranging from class activities & field trips to research & publications (and everything in between!).

As noted on the front page, we have a large number of majors in the Department (with several more prospective majors likely to declare this Spring); however, we will be graduating a large (11!) senior class this May. Their departure comes with mixed feelings as they will be hard to replace both personally and physically. With the increased price of oil and the growing public awareness of environmental issues, however, they should have abundant opportunities to use and develop the skills that they've learned here at DePauw.



Scott discussing the map area in WV during the Spring 2007 Appalachian Mts field trip led by Fred & Scott.

The recently established F. Michael and Dorothy W. Wahl Endowed Fund for Geosciences Field Trips already has had a major impact on students in the Department. Last January, several Geoscience majors had their Winter Term travel costs to Hawaii significantly subsidized. This academic year has been very cost effective, allowing geoscience majors to have all of their expenses (with the exception of meals) covered on Departmental field trips. Next year promises to be an even busier travel year as there presently are plans to do a Fall Break trip back to the Black Hills, a Spring Break trip to California (Death Valley), and the possibility of a Winter Term trip in May to Utah and Arizona. The Wahl Fund, in conjunction with our Department annual travel budget, should help significantly reduce student expenses for these Departmental field trips. Thanks again for your support.

On a personal note, I spent most of the summer developing Google™ Earth geotours & an accompanying workbook for the 3rd edition of Stephen Marshak's introductory geology textbook "Earth: Portrait of a Planet". These geotours fly the reader to various locales relevant to each chapter and provide text, placemarks, and geo-referenced images to describe the geology at that location. Although just released, the geotours seem to have been fairly well received (see a Chronicle of Higher Education "The Wired Campus" article on it <http://chronicle.com/wiredcampus/article/2514/teaching-geology-google-style>). I also worked with Billy Alward '08 as he developed a neat GE project for the Colorado Plateau.

On the home front, life is delightfully busy with Zach's (10) and Ben's (6) school and sports activities. Beth continues to coordinate and develop DePauw's GIS Center, with faculty members and staff from more departments taking advantage of the GIS facilities, workshops, and technical assistance that DePauw now offers. We all are in need of a "lithic-fix"...nothing that a trip this Spring Break can't satiate.

This issue marks my last "Message from the Chair", as I will complete my second three-year term as Department Chair this coming June. Starting in July, Jim will assume the responsibilities of Department Chair...please join me in wishing him well! As always, please stop by if you're in Greencastle!
-Scott (mswilke@depauw.edu)

Department Scholarship Awards

**Ernest R. "Rock" Smith
Memorial Scholarship**

Thomas R. Alford
Allison C. Barnes
Lauren N. Schaefer

H. Richard Gault Memorial Scholarship

Daniel C. Stauffer

Charles L. Bieber Memorial Fund

William S. Alward
David P. Della Chiesa
Elizabeth K. Drewes
Benjamin A. Gibson
Nicholas Q. Vetz

**Charles M. & Frances Wylie-Condit
Science Scholarship**

Melissa D. Orr

The Smith, Gault, and Bieber funds all are scholarships. In the awards process, the Department names students to receive scholarships from these funds (and from the Wylie-Condit fund), and the University determines the award amount for each student, using that money to fund part of the recipient's financial aid package from the University.

The income from the James A. Madison Fund for Research and the F. Michael and Dorothy W. Wahl Endowed Fund for Geosciences Field Trips is used for research and field trips at the Department's discretion in consultation with the Vice President for Academic Affairs.



Glacial geomorphology field trip along the IL-IN border led by Illinois State Geological Survey geologists.

Jeane Pope

Hi All! The year was once again highlighted by more exciting travels. In January, Janet Vaglia (Biology Department) and I led a Winter Term class on the GeoBiology of the Hawaiian Islands. It was a great trip, filled with amazing hikes and fantastic geology. My personal favorite was our hike to the active lava flows on the Big Island. Pele blessed our trip by providing additional excitement – we actually survived a tsunami! Of course, it was less than a foot in height by the time it hit the Hanalei Colony, but it was a tsunami all the same. The native wildlife was also incredible. We even had a rare sighting of a superb example of the human species...I met Pierce Brosnan on the beach in Kauai. The birds, whales, and diverse plants were nice too.

I will be keeping up the travel in 2008, too. In fact, I am writing this just a few hours before leaving for a Winter Term in Service (WTIS) trip to Costa Rica. Our trip will focus on Environmental Community Service. The two projects we will be doing involve reforestation (Sarapiqui Project) and beach reclamation for sea turtle habitat (Estacion Las Tortugas). The actual work will involve clearing brush, planting trees, clearing the beach, building nesting sites, and so on. We will also probably engage in some more traditional community service work, such as painting a school and helping maintain the grounds, depending on time. The Sarapiqui Project is located in Horquetas, which is a small community of farmers located southeast of the Central Valley. We will be doing reforestation on the grounds adjacent to the community school. Of course the reforestation will benefit the environment, and it will also be a teaching opportunity for future generations of Costa Rican students. During this part of the trip, we will be staying with families that live in the community. The Turtle Station is located north of Limon along the Carribean Coast away from town. It is well equipped for visitors, with cabin-style rooms (indoor plumbing), a central eating room, and recreational and educational facilities. It is run by Stanley Rodriguez Mendez and his family, who have connections with EcoTeach, our partner organization in Costa Rica. This will be my first WTIS trip, and I am excited to be working with students to put environmental principles into action.

Perhaps my most exciting news of 2007 is that I have been granted tenure and promotion. Starting next summer I will be an Associate Professor. I appreciate the continued support of the university, and I am pleased that I will be at DePauw for the foreseeable future.

On a personal note, my husband Jason continues to be an avid cyclist and has joined a racing team. He even manages to get me to go riding with him sometimes. In fact, for better or worse, he convinced me to ride the Hilly Hundred in Bloomington this fall. Not only did I survive, I actually found the great weather and beautiful scenery to be quite enjoyable. As for the hills themselves, I have mixed feelings...I liked going down them. Pedaling up? Not so much.

As always, I've enjoyed the visits and emails from many of you. It's always fun to hear what people are doing, so keep up the communication!

Cheers, Jeane (jpope@depauw.edu)

(continued from page 1)

area as part of an NSF grant through Mesa State College. Jay presented his work at GSA as well (unfortunately, we don't have a photo).

Lastly, Charlotte Buehler '08 also had a geoscience-related position over the summer. Charlotte worked with WWC Engineering in Sheridan, WY collecting data for several local hydrogeology projects. As part of her job, Charlotte was responsible for writing the Environmental Impact Statements for the hydrogeology part for each of her project areas.

Do you know about any geoscience internship opportunities? Please let us know, and we'll pass them along to Departmental majors.

GSA Employment Service Center

Looking for qualified employees in the geosciences?

Visit our on-line database of hundreds of professionals in over 30 specialties

THE GEOLOGICAL SOCIETY OF AMERICA

Is professional modeling Jim's second job???

Jim (sitting, lower left) and fellow participants on the GSA Iceland field trip relax on some columnar basalt in this cover photo for the most recent GSA's Employment Service Center brochure.

Alumni News

Charles Bates '39 writes to let us know about "...the belated learning of the naming of Bates Island in the Antarctic Peninsula... DPU Public Affairs played a major role in that discovery!"

Neal O'Brien '59 recently retired from the geology department at SUNY-Potsdam after 43 years of service. Neal plans to continue being involved with the department there, especially with regard to using the SEM for applied research involving students.

Ken Bork '62 is a professor emeritus of geology at Denison University in Granville, OH. He kindly writes that he always enjoys receiving the newsletter.

Rich Kimmel '70 is presently a hydrologist at St. Johns River Water Mgt. District in Florida. He writes, "I was very impressed by how far the Geoscience Dept has come since "my day!!" Back when I graduated, in 1970, we had 3 Geology majors!! (that's right -- 3 -- count 'em, 3!!!!) That was back in the days of Jim Madison, Dan Sullivan, and Bob Loring (I know that dates me, doesn't it?)."

Richard Ross '72 recalls his time at DePauw, "I do know that I thoroughly enjoyed the experience at the time, with much thanks owed to Robert Loring (Geography) and both Dr. Sullivan and Dr. Madison in the Geology Department." He presently is VP & Marketing Director for Northern Sky Designs, LLC in Batavia, IL.

Tim Davis '84 presently works for Occidental Oil and Gas Corporation. He writes, "Things are very active in the industry...most companies have too many projects and too few people." This bodes well for students majoring in the geosciences!

Rosario (Vasquez) Scheerhorn '92 presently works for ConocoPhillips in Houston after receiving her MS in micropaleontology from Baylor University and her PhD in inorganic chemistry from UT-Austin.

Chris Bonniwell '94 writes that he is now living in the Greenwood, IN area and is working for the Indiana Department of Environmental Management (IDEM). He says, "The job predominantly focuses on groundwater contamination issues (source identification, monitoring, remediation, etc...)".

Rich Sucher '95 currently teaches Physical Science and coaches girls basketball at a high school in Ohio. He and his wife Sarah have two children and live in Springboro, OH.



Jim discussing an outcrop on the March 2007 petrology field trip to the St. Francois Mts., MO area.

Darci (Branch) Thomas '95 was recently promoted to senior technical manager at August Mack Environmental Inc., an Indianapolis-based environmental health and safety consulting firm. Darci also participated as a panelist for the Boswell Symposium on "Grassroots Environmental Activism" held at DePauw in Sept. 2007.



Gabbie (Giuliano) Drafall '96 promises to send some of her excellent Hoffman Estates High School (located in a suburb of Chicago) students our direction. She teaches Spanish, Earth Science, and ESL Earth Science there.



Jennifer (Steadman) Ryan '96 in Red Rock Canyon, NV.

Jennifer (Steadman) Ryan '96, her husband Steve, and son Rolan presently reside in Florida, where she is a manager for Sarasota County Natural Resources.

Chris Hunter '98 is "a project manager for a company whose primary focus is oil recycling, but I head the division which handles waste management, storm water sampling and report writing, contaminated soil work, phase I and II ESA's, and groundwater monitoring." He presently lives in the Clackamas, OR area.

Jennifer (Swartz) Schmidt '98 and her husband Jon celebrated the birth of a daughter during the summer of 2006. She is now a geologic consultant in Denver, CO.

Julie (Kasl) Wood '99 enjoys being a 9th grade earth/space science teacher in Kentucky. She has been taking classes at Eastern Kentucky University to increase her teaching credits.

Jenny (Berry) Phillippe '01 has two children (Ben and Amelia) and presently lives in Indianapolis. She works for a small consulting firm (Astbury Environmental Engineering) where she is a project geologist. She writes, "I'm mostly in the office doing reports, remediation system calculations, and other miscellaneous things. I've started managing small projects and will likely move full time to project manager (although I only work 30 hrs/week since Ben was born)."

Sean Hall '01 is presently working for EnviroSolutions Inc. He tipped us to an interesting (and humorous) link about geologists: <http://uncyclopedia.org/wiki/Geologist>

Phil Rykwald '01 is presently living in San Antonio, TX where he has worked various jobs to support his caving activities. Phil says, *"My greatest achievement has been a small nonprofit I helped start to document the caves some friends and I have found in Montana. In caving the greatest goal is to find the deepest cave around and in '06 we explored what is currently the second deepest cave in the US (and it is only 18' shallower than the deepest one!). I write up most of my finds and have published over 20 articles in the past 4 years."* Phil plans on writing more articles, making presentations on caving, and hopefully obtaining a position in karst hydrology.

Aaron Hackman '02 recently took a new position as an environmental geologist at the URS office in Overland Park, KS. Aaron and Katie also became newlyweds on Sept. 8.

Katy Adank '05 is presently attending graduate school at the University of Kentucky. Her master's project involves studying *"aqueous geochemistry and plant pathogen occurrence at a strip mine in Eastern KY"*. Katy recently became engaged to James Ward.

Keith Herrmann '05 graduated from Duke University and now resides in Arlington, VA, working as a field geologist for ENVIRON International Corporation. His job responsibilities, *"cover the gamut of Phase I to Phase IV activities (historical environmental site assessment, sampling and characterization, remediation, and monitoring)."*

Heather Byars '06 is currently working towards her masters degree at the UT-Knoxville where she is working on a structure/tectonics project under the supervision of Bob Hatcher.

Sara Smaltz '06 is presently finishing her masters degree at Colorado State University, working on a structure project in the Big Horn Basin, WY. She also had been working this past fall as an intern for Chevron,

Jim Mills

Hi all –It's truly amazing how fast a year goes by. The big news, of course, is that Jeane received tenure and promotion to Associate Professor this fall – be sure to congratulate her! I taught the usual round of Mineralogy and Petrology courses, which were lots of fun. I added a laboratory section to the Earthquakes and Volcanoes course and taught it for the second time with the lab. Student response was great, and the lab adds a nice experimental component to the lecture. There is still quite a bit of refining to do, but that's half the fun. Currently, I am on sabbatical and am working on writing a textbook for the Earthquakes and Volcanoes course. It's a big project, but I'm having a lot of fun working on it.

In the spring of last year, I took a group of majors on a field trip to the St. Francois Mountains in Missouri. We had a great time looking at the Great Unconformity, ash-flow tuffs, granites and a whole bunch more! Even though the weather forecast was for sunny days in the



Geoscience group on top of Harney Peak on the Geosciences field trip to the Black Hills, SD.

50's, it of course snowed on us! This past fall I also took sixteen students to the Black Hills of South Dakota over fall break (no snow!). We had a great time and did quite the tour of the area. We were able to visit Badlands National Park, Mt. Rushmore, the Homestake Mine in Lead, Devil's Tower, Bear Butte (a very nice laccolith) and a number of other excellent geologic localities in the Black Hills. I hope to lead another trip there this year over fall break.

This past year I have had the very good fortune to work with Vernon (Max) Brown of the University of Toledo on transferring his incredible collection of maps and specimens from the St. Francois Mountains to DePauw. Max is retiring this year and had nowhere to send his collection. What I have proposed to Max is that I take over his work and develop a GIS-based searchable website on the geology of the St. Francois Mountains and see if we can begin to get some of this material published. I have already taken on an SRF student for this coming summer and am hoping to add a geology major to the project shortly. I'm not sure where we're going to put the sixty-five boxes of samples, but we'll figure it out! The rock room continues to serve us well. In fact, we installed a new 24" slab saw last year, and it does wonders with boulders. Students are still learning how to make thin



Chris Myrvold '06 and Sara Smaltz '06 received GSA awards to support their graduate work.

and recently has accepted a position with EnCana in Denver, CO.

Sara and **Chris Myrvold** '06 both were recently recognized as 2007 GSA Research Grant Recipients in the July 2007 issue of GSA Today. Sara received a Structural Geology and Tectonics Division Student Research Grant Award for "Structural controls on detachment folds associated with foreland arches: Beaver Creek anticline, Wyoming". She was recognized at the Division's award reception at the 2007 GSA Annual Meeting in Denver. Chris is attending the University of California-Davis and received a 2007 GSA Research Grant to support his graduate work. Please join us in congratulating these outstanding achievements!

sections and the equipment is holding up well. Tim Cope and I are hoping to acquire a jaw crusher in the near future so that we can more easily prepare samples for zircon separates and geochemistry (if you have a slightly used one in your basement that you're looking to get rid of – let us know!). Lastly, its been wonderful seeing and hearing from all of you out there. Keep in touch!

-Jim (jmills@depauw.edu)

Fred Soster

Hi all, This academic year marks my twenty-fifth year of teaching at DePauw. It really is hard to believe that I've been at the university for a quarter century. I've enjoyed hearing about all of the wonderful and successful careers that our departmental graduates are engaged in; keep the stories coming. During the past year some recent and not-so-recent grads stopped by for visits: Katy Adank '07, Audrey Gelhausen '07, Jeremy Sadler '95, Darci Thomas '95, and Chris Bonniwell '94. It was good to see you folks again. I had a good year professionally. I taught Earth and the Environment and Sed & Strat last spring, and Introduction to Environmental Problems, Historical Geology, and Senior Seminar in the fall. Scott and I led a field trip over to Maryland and the Smoke Hole region during the spring semester. We actually stayed up in Petersburg this time rather than at the Thompson's Motel in Franklin. Same rocks, but much better accommodations and good food!



Fred working with students at a deformed outcrop in the Appalachian Mountains, MD.

During the past two years, I modified the senior seminar format somewhat. We now spend some time early in the semester thinking about "life after DePauw." The students prepare resumes, research & write graduate school applications, do actual job searches, and complete applications for real jobs. We also spend a significant part of the semester working with the primary literature, which we read and discuss widely based on topics and papers selected by the students. The final project is a poster session where students summarize the results of a primary literature research on the topic of their choice using a well-designed poster. The student feedback for this new format has been very positive.

On the research front, the second paper from my Yellowstone work was published this year (Soster et al., 2007,

Earth Surface Processes and Landforms v. 32, p. 2038-2051). This brings that project to its conclusion. I continue to work with several colleagues from other institutions on the Lake Erie hypoxia problem. We have determined from laboratory experiments that the mayflies are having an impact on the dissolved oxygen in the water column. We presented these results last May at the International Association for Great Lakes Research annual conference at Penn State and we are presently completing a manuscript for publication. The work will continue this summer when at least two DePauw students will work with me to corroborate our findings. We plan to simultaneously monitor water column dissolved oxygen concentrations and mayfly abundances in the western basin throughout the summer. We plan to spend a lot of time on the water sampling with a relatively small boat, so I'm already hoping for lots of calm weather. I was awarded a three-year Faculty Fellowship for this project and some of my teaching load will be reassigned to conduct this research.



Fred, Scott, and students at a fold near Franklin, WV.

At home, we continue to work and play hard. Erica turns 18 in May and will graduate from high school this year as one of three valedictorians; she has completed all of her college applications but has yet to decide where to go. And in case you are wondering, DePauw is on the list. Frederick is 12 and had another good year of soccer on the travel squad. His fascination with all things related to WW II continues. Jennifer had a hectic fall semester with building dedications, DePauw Discourse, and Old Gold, and she now turns her attention to Alumni Reunion Weekend. We spent the holidays in Hawaii with Jennifer's family and visited both the Arizona Memorial and the Battleship Missouri at Pearl Harbor (much to Frederick's delight), among lots of other activities. It was a relaxing way to bring the year to an end.

I hope you all had a happy and productive 2007 and wish you the same in 2008. Do let us know in advance if you plan to visit campus. If we ever get a critical mass for reunion weekend in June, I'd like to have a departmental reunion. Keep in touch!

-Fred (fsoster@depauw.edu)

Tim Cope

I am now in my fifth year at DePauw, and my first year as the only untenured member of the department (congrats, Jeane!). I hope that status will change next year. In the meantime I've been teaching our GIS and Earth and the Environment classes, continuing research in China, and growing deeper roots in Greencastle.

The past two semesters of teaching have gone quite well. I have been working to improve our GIS class by adding more hands-on exercises using real data. To give you an idea of the flavor of this course, one of my favorite new exercises involves mapping a tsunami wavefront from the Canary Islands to the east coast of North America. I can't take credit for the idea (it was the brainchild of a former Geosciences student by the nickname of Hootie). I have also been working to incorporate Google™ Earth into our lab and homework curriculum in Earth and the Environment. Google™ Earth is turning out to be a great way for students to visualize everything from landforms to tectonic features!

This past summer I took three DePauw students to northeastern China to extend some mapping work in the Yanshan fold-thrust belt. Every year I return to this area, there are new roads that are making increasingly more remote areas accessible. We used these roads to access some very rugged terrain near the town of Xiabanchang, northeast of Beijing, and mapped some extremely complex structure involving an overturned stack of folded and thrust Proterozoic strata several kilometers thick. My students presented the results of our work in poster form at the 2007 GSA annual meeting in Denver.

My personal life has been fantastic and eventful this past year. In August I married Kate Knaul, Director of International and Experiential Education at DePauw. My new wife and I are expecting our first child in May!

-Tim (tcopc@depauw.edu)



Small theropod tracks from China.

Please write us with information for Alumni News! Also, if you have plans to be in Greencastle, please consider giving a talk to our students.

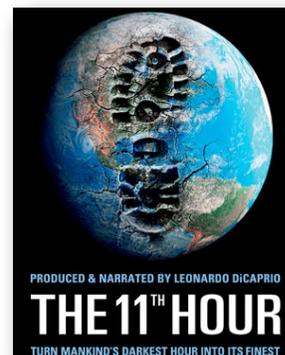
Environmental Activism @ DePauw

Boswell Symposium 2007 "Grassroots Environmental Activism"

The Boswell Symposium was the first all-campus event to highlight DePauw's year-long focus on sustainability and featured the experience of several environmental professionals, including **Darci Thomas** ('95). Darci's roll on a discussion panel was to provide insights into her work on brownfields and other projects associated with August Mack Environmental Inc. Other guests included Majora Carter of Sustainable South Bronx, who described her work on environmental justice that led to a 2005 MacArthur "genius grant," Meredith Williams from the San Francisco Estuary Institute (SFEI), who shared her perspectives as a scientist and environmental advocate, and Cheryl Johnson, Director of People for Community Recovery, who spoke about involving community members in environmental education in Chicago.

DePauw Discourse 2007 "Sustainability & Global Citizenship"

This year's DePauw Discourse continued campus discussions of sustainability by addressing such diverse topics as "Business Solutions to Global Environmental Problems" to "Climate Change and the Indigenous People of the Amazon: A Conservation Story in Photographs." Keynote speakers included Robert Kennedy and Bill McKibben. Additionally, Tim Cope moderated a session entitled "Coming Clean: The Case for Innovative and Renewable Energy," and Jeane Pope co-led an interactive workshop entitled "Exploring the Edge: Geology, Photography, and Writing Projects in the Quarry." For a full description of the event, see <http://www.depauw.edu/discourse/>



Focus the Nation 2008 "Global Warming Solutions for America"

On January 31, 2008, DePauw joined over 1800 other campuses in a nation-wide teach-in called Focus the Nation: Global Warming Solutions for America (www.focusthenation.org). This interdisciplinary event focused on what we know about climate change, why it matters, and what we need to do to reduce the potential ecological and sociological problems brought forth by anthropogenic global warming. In addition to addressing these issues in regular classes, two concurrent sessions ran throughout the day in which faculty (including Jeane Pope), administrators, students, and staff presented topics for discussion. The day ended with a community sustainability fair and a policy forum, which featured several elected Indiana politicians. For a complete schedule, see <http://www.depauw.edu/univ/sustain/ftn/>



Photo Gallery

Some additional photos from recent field trips...



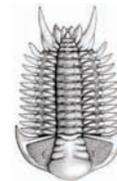
Distant view of Devil's Tower, WY during the Black Hills field trip.



The Structure & Tectonics class at Van Hise Rock on the Baraboo, WI Field Trip.

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