Compiled, written, and edited by: Patrice Reeder
Greg Wiles
Mark Wilson
Department of Geology
Scovel Hall
944 College Mall
The College of Wooster
Wooster, OH 44691-2363

Web address:  http://www.wooster.edu/Academics/Areas-of-Study/Geology.aspx
Blog address:  http://woostergeologists.scotblogs.wooster.edu/
You can also follow us on Facebook

Additional Assistance/Photography: Andrew Collins
Matt Dilyard
Shelley Judge
Meagen Pollock

On the cover:

# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Note From the Chair</td>
<td>1</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>3</td>
</tr>
<tr>
<td>The Geological Society of America</td>
<td>9</td>
</tr>
<tr>
<td>Geology Majors</td>
<td>10</td>
</tr>
<tr>
<td>Achievements of the Class of 2011</td>
<td>11</td>
</tr>
<tr>
<td>Achievements of the Current Students</td>
<td>15</td>
</tr>
<tr>
<td>Scholarships and Awards</td>
<td>19</td>
</tr>
<tr>
<td>The Geology Club</td>
<td>22</td>
</tr>
<tr>
<td>Senior Independent Study Projects</td>
<td>26</td>
</tr>
<tr>
<td>The Osgood Lecture</td>
<td>37</td>
</tr>
<tr>
<td>Alumni News</td>
<td>39</td>
</tr>
<tr>
<td>Special Thanks</td>
<td>43</td>
</tr>
<tr>
<td>Alumni Information Sheet</td>
<td>45</td>
</tr>
</tbody>
</table>
August 5, 2011

Dear Alumni and Friends,

I am pleased to write to you now in my third year as chair. 2010-11 has been a productive and exciting year for the students and faculty. We wish the Class of 2011 all the best as they pursue their various careers and interests. We are very thankful that there are so many opportunities in industry and academics for geologists over the last few years and into the foreseeable future.

We are pleased to announce that the department will be able to hire Matt Curren as a technician this coming academic year. His degree is in Geology from The Ohio State University and he has been active in support of various Antarctic programs, including ANDRILL, in which Shelley Judge has an active research program. Matt and his wife Kara Morrow, who is an assistant professor in Art History, are in their second year in Wooster. The addition of Matt will be a great help to the Department supporting our expanding lab and field activities.

Some of the department labs and classrooms are getting a facelift as we expand our analytical facilities to support the new XRD and XRF that Meagen Pollock and students have up and running. Shelley Judge taught a GIS course for the first time and will be offering it again this fall. This addition has enhanced our curriculum and student opportunities. As they begin their fourth year at the College, Shelley and Meagen continue to innovate and challenge us in teaching and research. Meagen will be on leave this fall working on her various projects in Iceland and the Appalachians.

The Wooster Geologist’s Blog has become a mainstay of recording the Department activities. Mark Wilson’s weekly updates are a great service to the geologic community and to the College - we greatly appreciate this forum and a brief glance at the blog (http://woostergeologists.scotblogs.wooster.edu/) will convince you that Geology is active and well at Wooster with student/faculty teaching and research covering Utah, Iceland, Israel, Poland, Estonia, Ohio, and Alaska just in the past year.

The College has recently increased its enrollment and Geology has stepped up and increased our 100-level course sizes. The ever-popular courses History of Life, Natural Hazards, and Oceanography are serving more students than ever and we are taking on more majors as students are exposed to these excellent courses. The syllabi and activities in the 14 courses offered by geology can be found at our new blog-like website (http://voices.wooster.edu/course-sites/).

In March the Department once again embarked on a Mojave Desert fieldtrip for Spring break. This year Patrice Reeder, our administrative coordinator, was also able to come along with the group. We are fortunate to receive generous support for student field research from the Wengerd, Totten, Danner, Ver Steeg/Moke, and Baroffio funds. These funds greatly expand the accessibility to field and lab experiences for all of our students.
Patrice Reeder continues to manage departmental events and keep up-to-date on our increasing technological needs; her contributions and skills are greatly appreciated especially with the recent additions and renovations in the classrooms and labs. Our custodians, Sherlyn Myers and Sue Decapua, are charged with maintaining our labs and classrooms. We greatly appreciate their efforts especially this year, as lab spaces were busy all summer in addition to the academic year and the grinding and sanding takes its toll on cleanliness.

Please note the Alumni Information Sheet at the back of this report. We look forward to hearing from you and value your feedback and suggestions. Best wishes for the coming year.

Sincerely,

[Signature]
Gregory C. Wiles, Chair

---

Newly remodeled XRD and XRF lab.
Shelley A. Judge
Assistant Professor of Geology

(B.S. Mount Union University, 1991; M.A.T. Kent State University, 1993; M.S. Ohio State University, 1998; Ph.D. Ohio State University, 2007; Wooster since 2008). During the Fall Semester, Shelley taught First-Year Seminar and Processes & Concepts of Geology and, during the Spring Semester, she taught Introduction to Geographic Information Systems, Structural Geology and co-taught Processes & Concepts and Desert Geology.

This past academic year, Shelley worked with two seniors, Jesse Davenport ('11) and Elizabeth Deering ('11), on their Senior Independent Study projects. Jesse participated in a project with the Keck Geology Consortium, in the Antelope Basin region of Henry’s Lake Mountains in southwestern Montana. He attempted to determine the protolith of mylonitic rocks adjacent to the Madison Mylonite Zone, and to compare his geochemical results to those published in the literature. Jesse presented his work at the annual Keck Geology Consortium Symposium. Elizabeth worked on a project in the Eocene Green River Formation of central Utah. For her study, Elizabeth concentrated on the identification, variety, abundance, and distribution of stromatolites in Lake Flagstaff, one of the large intermontane Eocene lakes, but she also noted the presence of other invertebrates and vertebrates. Elizabeth presented her work at the annual GSA meeting.

Shelley continues her work in Utah, completing the needed fieldwork on a monocline project within the Sevier fold-thrust belt. She also continued her work on mesoscopic structural features for a pre-Middle Miocene extensional event. She presented some of her Utah work at the University of Akron’s colloquium series this past year. In addition to central Utah, Shelley continued her paleoflow analysis of the ANDRILL (Antarctic Drilling Program) SMS core.

Shelley participated in many teaching-related workshops this past year. The two On the Cutting Edge Workshops for geoscience faculty were especially helpful: Using GIS and Remote Sensing to Teach Geoscience in the 21st Century and Teaching Geoscience in the Field in the 21st Century. Additional GIS workshops and courses throughout the academic year have been used already in her courses at Wooster. She co-taught a workshop, Paleontology for Science Teachers of Grades 7-12, at Eastern Illinois University with several colleagues, including Kathy Hollis ('03), now at the Smithsonian. Through the academic year, Shelley continues her outreach activities with several local schools.

During summer 2011, Shelley taught half of The Ohio State University’s field camp in central Utah, but this year it was the second half. It was, once again, a fun summer in the Sanpete Valley, full of interesting stories. Also this summer, two of her Junior I.S.
students completed fieldwork for their Senior I.S.; both participated in Keck Geology Consortium projects. **Andrew Collins (’12)** was selected for GIS research on the origins of sinuous and braided channels on Ascraeus Mons, Mars, while **Katharine Schleich (’12)** went to northwestern Iceland with Meagen Pollock, who was co-leading one of the Keck projects this past summer. Both are already on campus and working on data collecting for their Senior I.S.

**Meagen Pollock**  
Assistant Professor of Geology  

Meagen advised two Senior Independent Study students this year. In the summer of 2010, **Becky Alcorn (’11)** traveled with Meagen to Iceland, where they mapped and sampled subglacial pillow basalts exposed in quarries on the Reykjanes Peninsula. Becky’s research focused on the spatial variability in the compositions of dikes and lavas along a particularly excellent three-dimensional exposure. Becky presented her findings, with Meagen and Ben Edwards (Dickinson College) as coauthors, at both the national and joint northeast-north central meetings of the Geological Society of America (GSA).

**Samantha Spencer (’11)** worked with Meagen on the geochemistry of Jurassic diabase from southeast Pennsylvania. Before leaving for Iceland, Meagen joined LeeAnn Srogi (West Chester University of Pennsylvania) and Loretta Dickson (Loch Haven University) as co-leaders of a field trip for PA geologists to diabase quarries in the Morgantown Sheet. In her I.S., Sam analyzed and compared the geochemistry of diabase samples from these quarries and from other nearby locations. Sam visited some of her field sites in the spring, when Meagen and Shelley Judge led a joint Petrology-Structure field trip to the diabase quarries and the greater Gettysburg area.

Significant improvements were made in Meagen’s lab over the last year. **Lindsey Bowman (’12)**, Meagen’s 2011 summer research assistant, and Ron Tebbe, the science technician, played an integral role in helping Meagen install the new X-ray instruments and bring them online. She welcomes you to explore the X-ray lab by visiting its website (woosterxraylab.voices.Wooster.edu).

The X-ray instruments enticed Meagen and Brennan Jordan (University of South Dakota) to bring their Keck students to Wooster’s campus. **Katharine Schleich (’12)** is one of six students who participated in Meagen and Brennan’s 2011 Keck Geology Consortium project to Iceland’s West Fjords. Prior to the Keck project, Meagen was in Iceland conducting fieldwork with Lindsey Bowman and **Travis Louvain (’12)**. Lindsey is working on subglacial pillow basalts while Travis is studying zeolites in northern
Iceland. Since Meagen is on research leave in the fall of 2011, she plans on taking full advantage of a long field season and the new X-ray lab.

Meagen continues to serve as a Councilor for the Council on Undergraduate Research (CUR). She was a co-leader of an interactive session on current frontiers in undergraduate geoscience research, presented on best practices in international undergraduate research with Mark Wilson, and co-chaired a CUR session on faculty and student perspectives on undergraduate research at national and regional meetings.

---

Gregory C. Wiles
Geology Department Chair, Professor of Geology, and Ross K. Shoolroy Chair of Natural Resources

(B.A. Beloit, 1984; M.S. SUNY Binghamton, 1987; Ph.D. University at Buffalo, 1992; Wooster since 1998). Greg taught Climate Change and Environmental Geology in the Fall. In the Spring he taught Geomorphology and Hydrogeology, co-taught the new environmental program core course Environmental Analysis and Action, and participated in the staff-taught Desert Geology and Processes & Concepts courses.

Greg advised two senior I.S. students, Stephanie Jarvis ('11) and La Shawna Weeks ('11). Both worked on the NSF-funded project in Glacier Bay, Alaska, on aspects of climate change, glacial geology and forest health. Steph, who was a Geology/Biology double major, traveled to Alaska where together with Deb Prinkey ('01), our collaborators from CRREL (Cold Regions Research Environmental Lab), and LDEO (Lamont Doherty Earth Observatory), she sampled several transects focusing on the ongoing adjustment of mountain hemlock to warming. She found that at high elevation sites trees are releasing and increasing growth rates as these areas become more amenable to growth. At low elevations there are indications that trees are suffering, likely because of earlier loss of snow cover with trees becoming more susceptible to frost damage. The big question is if the tree species will be able to keep up with the warming or will it outpace the hemlock’s ability to migrate. La Shawna focused on recording past ice volume changes from a range of glaciers – tidewater, land-terminating, and lake terminating. This work was done on a set of glaciers from the Kenai Fjords National Park. Using GIS and remote sensing spanning the last 30 years, coupled with longer records of glacier change from the geologic record, she was able to document the similarities and differences in the three types of glaciers and put the last few decades of change into a longer-term context. Both Steph and La Shawna presented their results at GSA, in Denver and Pittsburgh respectively.

Sarah Appleton ('12) continues to work in the Wooster Tree Ring Lab. She presented the results of her junior-year project at the GSA Conference in Denver, Colorado, on ice advance in Glacier Bay and migration of Tlingit populations. Sarah traveled to Alaska in the summer of 2011 with sophomore Joe Wilch ('13) where she is investigating the
glacial history of Wachusett Inlet in Glacier Bay. Joe is working on a site from Casement Glacier in Glacier Bay mapping and investigating the glacial history. Jon Theisen (’11) (archaeology/geology) is working on his I.S. investigating the post-settlement (last 200 years) sedimentation into small lake basins south of Wooster in Holmes and Ashland Counties. This work is in collaboration with Tom Lowell (University of Cincinnati) and Kristina Brady (’05) currently at the University of Minnesota. Jon and Anna Mudd (’13) worked with Greg tree-ring dating historical structures in Columbus and Somerset, Ohio. This was funded by The College of Wooster Center for Entrepreneurship. Tree ring field and lab work in Ohio and Glacier Bay is done in collaboration with Nick Wiesenberg, who works as our part-time lab technician in the Tree Ring Lab.

Greg published two papers on aspects of glacier work in Alaska. One with Canadian colleagues appeared in The Holocene and the other with coauthors Eva Lyon (’07) and colleagues from CRREL and LDEO which appeared in Quaternary Research. Also appearing in Quaternary Research is a paper describing the style and timing of deglaciation across the Midwest. This is based on the over 100 lakes cored by workers from the Universities of Cincinnati, Dayton, and The College of Wooster.

Greg is in his third year as chair of the Geology Department and serves on the Educational Policy Committee. He continues to work as associate editor of Tree Ring Research and as a member of the U.S. National Committee of the International Quaternary Society.

Mark A. Wilson
Professor of Geology and Lewis M. and Marian Senter Nixon Professor of Natural Sciences

(B.A. Wooster, 1978; Ph.D. Berkeley, 1982; Wooster since 1981). Mark taught his typical schedule of History of Life and Invertebrate Paleontology in the Fall. In the Spring he taught History of Life and Sedimentology & Stratigraphy, and he participated in the staff-taught Desert Geology and Processes & Concepts courses.

Mark had four Senior Independent Study students this year: Megan Innis (’11) traveled with Mark to Alabama and Mississippi in the summer where they met Paul Taylor (Natural History Museum, London) and Caroline Sogot (Cambridge University) for fieldwork at the Cretaceous-Paleogene boundary. They were most interested in sclerobionts (hard substrate-dwelling animals) preserved on shell surfaces before and after the mass extinction. They found excellent material which became the basis for Megan’s I.S. thesis and a Geological Society of America presentation this October. Andrew Retzler (’11) and Micah Risacher (’11) went with Mark to Israel in the summer to study Upper Cretaceous fossils and rocks in the Negev Highlands. Andrew concentrated on shark teeth in the Menuha Formation, and Micah worked on the invertebrate fossils in the Zihor Formation. Their
work has also resulted in GSA presentations. **Michael Snader (’11)** worked on a new core drilled through the Black Hand Sandstone in northeastern Ohio to sort out depositional facies and history. A complete core like this is rare for this interval, so his work has considerable significance.

Mark had eight papers and ten abstracts published this year on geological and paleontological research in Israel, Egypt, Poland, Estonia, and the United States. The papers include new interpretations of lophophorate evolution, descriptions of new fossil species, and palaeoecological analyses of hard substrate communities. He also contributed photographs to a new textbook on palaeontology. His online “living syllabus” system is described in *Teaching at Its Best: A Research-Based Resource for College Instructors* by Linda B. Nilson. Mark’s essay on “Embracing Wikipedia” has been reprinted in *The Writer’s Purposes* by Stephen Reid.

During the year Mark gave several public presentations to various groups. His favorites were a podcast interview about Charles Darwin (scheduled for his birthday) and a talk to the Geology and Philosophy departments about the history of teaching evolution at Wooster. He also gave an invited lecture to the Academy of Religion in Wooster titled “Evolution’s Challenge”.

This summer Mark was in Israel scouting out new Independent Study projects in the Jurassic and Cretaceous of the Negev. (He was accompanied by **Will Cary (’13)** as a sophomore research assistant.) He also did fieldwork in Poland with his friend Michal Zaton (University of Silesia) on his way to Estonia for fieldwork in the Silurian with Senior I.S. students **Rachel Matt (’12)** and **Nick Fedorchuk (’12)**. They looked at Silurian rocks and fossils with our friend Olev Vinn (University of Tartu) as part of their thesis projects. At the end of that trip they went to Stockholm, Sweden, to look at museum collections of Baltic Silurian fossils.

Mark and his colleague Bill Ausich (The Ohio State University) received a National Geographic Society Research Grant for continued work on Silurian crinoids in Estonia and Sweden.

Mark is still an Overseas Representative for the Palaeontological Association, and a member of the review boards for *Choice* and *American Reference Books Annual*. This summer he became the Secretary of the Paleontological Society, taking over the duties from **Lisa Park (’88)**. In the spring he was the external reviewer of the University of Cincinnati’s undergraduate geology program.

During this coming year Mark will teach his usual courses. He continues on the Conference with Trustees Committee. ✤
Patrice Reeder
Administrative Coordinator for the Departments of Geology, Philosophy, and The Pre-Law Advising Program, Wooster since 2000.

This year Patrice handled the logistics (and went on) the Mojave Desert field trip, taken during Spring Break 2011. She attended the 2010 Annual GLCA Conference of Academic Administrative Assistants at Dennison University, and attended and organized several sessions for the College of Wooster Academic Administrative Coordinators. She also organized many special activities hosted by both Geology, Philosophy, and The Pre-Law Advising Program, including the holiday luncheon for Geology and Philosophy majors, The Thirtieth Annual Osgood Lecture, The Fourteenth Bell Distinguished Lectureship in Law, The Fourth Lindner Lecture in Ethics, and Philosophy’s Phi Sigma Tau (Honor Society) dinner and induction ceremony. She was again the Tournament Coordinator of the American Collegiate Moot Court Association Midwest Regional Tournament.

This fall Patrice’s son is getting married, and her daughter will begin her sophomore year at The College of Wooster.

Fall 2010 Mineralogy field trip
The following attended the annual GSA Alumni Reception held October 31—November 3, at the Colorado Convention Center, Denver, Colorado:

Becky Alcorn ('11)  Katherine Marenco ('03)
Sarah Appleton ('12)  Andrea Martin ('02)
Scott Bair ('73)  Tina Niemi ('85)
Brian Bodenbender ('87)  Lisa Park ('88)
Kathy Bremer-Hollis ('03)  Meagen Pollock
Erica Clites ('06)  Andrew Retzler ('11)
Jesse Davenport ('11)  Micah Risacher ('11)
George ('64 and Merrily Davis  Fred Siewers ('85)
Elizabeth Deering ('11)  John Sime ('09)
Nick Fedorchuk ('12)  Ali (Drushal) Sloan ('09)
Megan Innis ('11)  Michael Snader ('11)
Stephanie Jarvis ('11)  Abe Springer ('87)
Shelley Judge  Bob Varga (former faculty)
Tricia Kelley ('75)  Andrew Welshhans ('08)
Andrea Koziol (former faculty)  Greg Wiles
Elyssa Krivicich ('09)  Mark Wilson ('78)
Sophie Lehmann ('08)  Bill Woessner ('71)
Travis Louvain ('12)  Nick Young ('05)

The 2011 GSA Annual Meeting will take place October 9 – 12, 2011, at the Minneapolis Convention Center, Minneapolis, Minnesota. We will take a group photo at 8:00 p.m. during the Alumni Reception.
Geology Majors

Class of 2011
Rebecca Alcorn
   Pittsburgh, Pennsylvania
Jesse Davenport
   Granville, Ohio
Elizabeth Deering
   Cincinnati, Ohio
Megan Innis
   Whitmore Lake, Michigan
Stephanie Jarvis
   Shelbyville, Kentucky
Andrew Retzler
   Wooster, Ohio
Micah Risacher
   Westerville, Ohio
Michael Snader
   West Salem, Ohio
Samantha Spencer
   Wooster, Ohio
La Shawna Weeks
   Baltimore, Maryland

Class of 2012
Sarah Appleton
   Portsmouth, Ohio
Lindsey Bowman
   Londonderry, Vermont
Andrew Collins
   South Freeport, Maine
Nicholas Fedorchuk
   Versailles, Kentucky
Travis Louvain
   Geneseo, New York
Rachel Matt
   Hudson, Ohio

Katharine Schleich
   Bexley, Ohio
Anastasia Wallace
   Delaware, Ohio

Class of 2013
Will Cary
   Wooster, Ohio
Richa Ekka
   Jamshedpur, India
Jennifer Horton
   Worthington, Ohio
Anna Mudd
   Fruita, Colorado
Jonah Novek
   Silver Spring, Maryland
Matthew Peppers
   St. Charles, Illinois
Katherine Price
   Ann Arbor, Michigan
Kevin Silver
   Akron, Ohio
Whitney Sims
   Maple Heights, Ohio
Melissa Torma
   Evanston, Illinois
Lauren Vargo
   Mentor, Ohio
Joseph Wilch
   Albion, Michigan

Class of 2014
Stephanie Bosch
   Elkins Park, Pennsylvania
Tricia Hall
   Marion, Ohio
Achievements of the Class of 2011

front: Megan Innis, Samantha Spencer, Elizabeth Deering, Andrew Retzler, Rebecca Alcorn
back: La Shawna Weeks, Stephanie Jarvis, Micah Risacher, Michael Snader, Jesse Davenport

Awards, Scholarships, Prizes, and Activities

Rebecca Alcorn
Dean’s List, spring semester
Department of Geology Teaching Assistant, fall and spring semesters
Departmental and Cum Laude Honors at graduation and Honors on Senior I.S. Thesis
Frederic Kent Warner Endowed Scholarship recipient
Geology Club member
Mojave Desert Field Trip, Spring Break 2011
Participated in College of Wooster Senior I.S. Research Symposium
Presentation of I.S. research at national and joint northeast-north central meetings of GSA
Scot Marching Band member
This Summer Becky was the camp manager for the Bowling Green State University (BGSU) field camp.
In the Fall she will begin a two year Masters in Science program at BGSU and will be working in geospatial science and volcanic risk assessment and mitigation.
**Jesse Davenport**
Assistant Scoutmaster Troop 66  
Attended GSA meeting in Denver, Colorado  
Cross Country and Track and Field Team member  
DJ Bangover on Melt Your Face Radio at WOO 91  
Geology Club and Math Club member  
Geology Symposium, First official Scientific Publication  
Honors on Senior I.S. Thesis  
Participated in College of Wooster Senior I.S. Research Symposium  
Program House Volunteer at Trinity UCC

In the Fall Jesse will attend Notre Dame University working towards a Masters Degree in igneous petrology with Dr. Clive Neal. He then plans to work towards his Ph.D. in metamorphic petrology (institution yet to be determined).

**Elizabeth Deering**
Attended GSA meeting in Denver, Colorado  
Geology Club member  
Wooster Ethic committee member  
This summer Elizabeth will be working in Thermopolis, Wyoming, at the Wyoming Dinosaur Center where she will be excavating sauropod and theropod dinosaurs as well as running educational outreach programs for the public.  
In the Fall she will be attending Fort Hays State University in Hays, Kansas, where she will begin work on her Master’s Degree in Geosciences with a focus in vertebrate paleontology. While at FHSU she will be working as the assistant curator at the Sternburg Museum.

**Megan Innis**
Attended GSA meeting in Denver, Colorado  
Dean’s List, fall and spring semesters  
Department of Geology Teaching Assistant, fall and spring semesters  
Departmental and Magna Cum Laude Honors at graduation and Honors on Senior I.S. Thesis  
Desk and Derrick Educational Trust Scholarship recipient  
Geology Club member  
Gospel Choir member, fall and spring semesters  
Joan Blanchard Scholarship recipient  
Karl Ver Steeg Memorial Scholarship recipient  
Marching Band, fall semester  
National Oceanographic and Atmospheric Administration student research volunteer  
Participated in Science Day  
Phi Beta Kappa society member  
Student/Faculty Collaboration Presenter at the Senior I.S. Research Symposium  
Symphonic Band, spring semester  
In late July Megan began her staff geologist/hydrogeologist position with the environmental consulting firm Environmental Resource Management (ERM) in Annapolis, Maryland.
Stephanie Jarvis
AIPG’s The Professional Geologist Student Voice columnist
Bike Program President
Biology Greenhouse Attendant
Campus Recycling Committee student member
Committee for a Sustainable Campus student member
Dean’s List, fall and spring semesters
Department of Geology Teaching Assistant, fall semester
Departmental and Magna Cum Laude Honors at graduation and Honors on Senior I.S. Thesis
Geology Club Vice President
Local Roots member and volunteer
Organic Farming member
Participated in College of Wooster Senior I.S. Research Symposium
Phi Beta Kappa Prize winner
Resident Assistant
The Alice Hutchison Lytle Biology Award recipient
The Horace N. Mateer Prize in Biology recipient
The Robert W. McDowell Prize in Geology recipient
The William A. Galpin Award (1st place woman)
The Women’s Advisory Board Scholarship recipient
WOODS member
YMCA Assistant Swim Coach (4th year!)
This summer Stephanie will be going to Montana with Southern Illinois University’s field camp. She will be attending SIU in the fall on a Master’s Fellowship.

Andrew Retzler
Attended GSA meeting in Denver, Colorado
Charles B. Moke Endowed Scholarship recipient
Charles B. Moke Prize recipient
Dean’s List, spring semester
Departmental Honors at graduation and Honors on Senior I.S. Thesis
Geology Club President
Participated in College of Wooster Senior I.S. Research Symposium
Poster presentation of I.S. research at GSA meeting in Denver, Colorado, and OFIC Undergraduate Research Symposium
Andrew will attend Idaho State University in the fall for an M.S. in Geosciences, focusing on Invertebrate Paleontology

Micah Risacher
Attended GSA meeting in Denver, Colorado
Geology Club member
Micah is working for Dominion Resources, as a GIS Design Draftsman. He has also been accepted into USC’s online GIS program.

Michael Snader
Attended GSA meeting in Denver, Colorado
Geology Club member
Sam Spencer
American Red Cross Blood Drive
Cooking Club member
Mojave Desert Field Trip, Spring Break 2011
Geology Club member
Humane Society Volunteer
Participated in College of Wooster Senior I.S. Research Symposium
Relay for Life team member
Social entrepreneurship
Zeta Phi Gamma member
Samantha’s brother is in the Air Force and is currently deployed; she has moved to Little Rock, Arkansas, to be with her sister-in-law and nephew.

La Shawna Weeks
College of Wooster NAACP Chapter President
College of Wooster Security Student Officer
Geology Club member
Presented her senior I.S. Research on Alaskan glaciers at the NE/NC GSA meeting in Pittsburgh, Pennsylvania
Women of Images member
La Shawna is currently very busy with her twin daughters who just turned one on July 4th.

I.S. Monday
Micah Risacher, Shelley Judge, Elizabeth Deering, Michael Snader, Megan Innis, Megan Pollock, Andrew Retzler (shark), and Becky Alcorn
Achievements of our Current Students

Class of 2012

Sarah Appleton

21st Annual North American Dendroecological Fieldweek at Mountain Lake Biological Station in Pembroke, Virginia
Dean’s List, spring semester
Department of Geology Teaching Assistant, fall and spring semesters
Geology Club member
Mojave Desert Field Trip, Spring Break 2011
Oral Presentation of Sophomore research project on “Tree Ring Records of Environmental Change in Glacier Bay National Park and Preserve, SE Alaska, and their relation to 18th century Tlingit Migration” at the Geologic Society of America Annual Meeting and Exposition in Denver, Colorado
Resident Assistant of Wagner Hall
Senior I.S. Research in Glacier Bay National Park and Preserve, Alaska, with Dr. Greg Wiles
Sophomore Research Assistant for Dr. Greg Wiles
Summer Research Assistant for Dr. Greg Wiles
Women’s Athletic and Recreational Association President
Women’s Cross Country and Track and Field member (3 years)

Lindsey Bowman

Athletic Trainer
Dean’s List, fall semester
Geology Club member
Mojave Desert Field Trip, Spring Break 2011
Office of Admissions Tour Guide
Resident Director
Senior I.S. Research in Iceland with Dr. Meagen Pollock
Summer Research Assistant for Dr. Meagen Pollock
Wooster Ethic Committee Chairwoman

Andrew Collins

Dean’s List, spring semester
Department of Geology Teaching Assistant, spring semester
Geology Club member
Intramural Soccer
Karl Ver Steeg Prize in Geology and Geography recipient
Off campus study in New Zealand, fall semester
Orchestra Percussionist
Percussion Ensemble Featured Percussionist
Pipe Band Drummer
Stepping Stones Volunteer
Symphonic Band Percussionist (principle)
Wooster Voice Photography Editor
Summer I.S. Research through Keck at Franklin & Marshall; NASA Goddard Space Flight Center in Greenbelt, Maryland; and in Hawaii, with Drs. Andy de Wet, Jake Bleacher, and Brent Garry.
During a portion of this summer Andrew will be working for a geotechnical firm.
In August Andrew will be working with Drs. Judge and Wiles to compile photogeologic databases of the Wooster region.

**Nick Fedorchuk**  
Attended GSA meeting in Denver, Colorado  
Club Ice Hockey Team  
Dean’s List, fall semester  
Department of Geology Teaching Assistant, spring semester  
Don J. Miller Scholarship recipient  
Geology Club member  
Mojave Desert Field Trip, Spring Break 2011  
Resident Assistant  
Senior I.S. Research in Estonia with Dr. Mark Wilson

**Travis Louvain**  
Attended GSA meeting in Denver, Colorado  
Boy Scouts of America  
Chemistry Minor  
Geology Club member  
Humane Society volunteer  
Merry Quween of Skots member  
Mojave Desert Field Trip, Spring Break 2011  
Senior I.S. Research in Iceland with Dr. Meagen Pollock  
Xi Chi Psi member

**Rachel Matt**  
Geology Club member  
Mojave Desert Field Trip, Spring Break 2011  
Senior I.S. Research in Estonia with Dr. Mark Wilson

**Katharine Schleich**  
Delta Theta Psi service chair  
Highland Dancer  
Senior I.S. Research through Keck in Iceland  
Wooster Chorus

**Anastasia Wallace**  
Captain of the Wooster equestrian team (western team), qualified and competed at regionals this year, placing 4th in the region  
Geology Club member  
Geology/Archaeology double major  
Working on an excavation at Orange Townships Earthworks in Delaware, Ohio
Class of 2013

William Cary
Geology Club member
Summer Research Assistant to Dr. Mark Wilson for their trip to Israel
Ultimate Frisbee Team Captain

Richa Ekka
Geology Club member
Media Library Assistant
Resident Assistant in Compton Hall
Spring Break volunteer work week in Camden, Mississippi
This summer Richa will be living with her sister in Washington, D.C., until she leaves for her semester of off campus study in Australia.

Jennifer Horton
Every Woman’s House volunteer
Geology Club member
W.A.R.A. member
Women’s Softball Team
This summer Jennifer is interning at Columbus State Community College with the Allied Health Department.

Anna Mudd
American Institute of Professional Geologists scholarship recipient; scholarship essay will be published in The Professional Geologist.
Dean’s List, fall semester
Geology Club member
Marching Band Snare Drum
Martin L. Stout Scholarship recipient from the Association of Environmental and Engineering Geologists (AEG)
Mojave Desert Field Trip, Spring Break 2011
Office of Admissions Tour Guide
Summer Sophomore Research Assistant for Dr. Greg Wiles
Wooster Community Bike Program
Wooster Symphony Orchestra

Jonah Novek
Geology Club member
Judicial Board Member
Resident Assistant, Bissman Hall
Service Center Trucking Assistant
Smithsonian Institution National Museum of Natural History Summer Intern
   Paleo-Collections Department
WCWS Woo 91 DJ

Matthew Peppers
Geology Club member
IM Bowling
This summer Matt will be working as an intern at the Christopher B. Burke Engineering Firm in Chicago.
Katherine Price
Dean’s List, fall and spring semesters
Elias Compton Freshman Prize recipient
Geology Club member
Margaret Moke Scholarship and the Clay Scholarship recipient
Media Library employee
Sophomore Research Assistant for Dr. Meagen Pollock
Summer Field Camp in Utah

Kevin Silver
Geology Club Member

Whitney Sims
Geology Club member
Highland Dancer
Students Helping Students
Women of Images

Melissa Torma
Delta Theta Psi
Geology Club member
Gospel Choir
Highland Dancing
Lincoln Way Reads volunteer at Lincoln Way Elementary School

Lauren Vargo
Athletic Department employee
Geology Club member
Varsity Lacrosse Team
Volunteered with and lived in the Akaa Project House.
This summer Lauren has been working on an urban farm in Slavic Village with Green Corps through the Cleveland Botanical Gardens.

Joe Wilch
Geology Club member
Sophomore Research Assistant for Dr. Greg Wiles in Alaska and Wooster
Varsity swimming

Class of 2014
Stephanie Bosch
Archaeology double major
Anthropology minor
Geology Club member
Archaeological Student Colloquium
Equestrian Team member
Pipe Band tenor drum

Tricia Hall
Geology Club member
Wooster Cello Ensemble
Varsity Track & Field team
During the summer Tricia has a restaurant job in her hometown.
Below are brief descriptions of the Geology scholarships and awards presented to our Geology majors during this year.

The Charles B. Moke Prize is given in memory of Charlie Moke (’31) who taught in the Department of Geology for 36 years. This prize consists of a Brunton Compass which is awarded to the graduating senior who plans to make Geology a vocation and who has shown the greatest academic improvement during his or her college career. This year’s recipient was Andrew Retzler.

The Margaret Reed and John O. Clay Endowed Scholarship was established in 1985 by John R. Clay, the son of Margaret (’45) and John Clay (’43). This scholarship is awarded annually to a student who has demonstrated academic achievement. This year’s recipient was Katherine Price.

The Charles B. Moke and Margaret Kate Moke Endowed Scholarships were established in December of 1983 with a generous donation provided by Fritz Kate (’38), Margaret’s brother. These two scholarships are awarded annually to Geology majors who have distinguished themselves by dedication to quality in their academic work, have demonstrated self-reliance, and have a sincere interest in and a concern for other people, characteristics which were exemplified by Charlie and Margaret Moke. This year’s recipients were Katherine Price and Andrew Retzler.
The Robert W. McDowell Prize in Geology was established in 1945 by Philip C. ('14) and Sarah Wright McDowell ('14) in memory of their son, Robert W. McDowell ('45), who lost his life in World War II. It is awarded annually to the geology major who has the highest general standing during the junior and senior years. This year’s recipient was Stephanie Jarvis.

The Karl Ver Steeg Memorial Scholarship is in honor and memory of Karl Ver Steeg, who taught in the Department of Geology from 1923 until 1952. It is awarded annually to a deserving student who is majoring in Geology. This year’s recipient was Megan Innis.

The Don J. Miller Memorial Fund was established in 1961 by the family and friends of Don J. Miller, of the class of 1940. In recognition of Mr. Miller’s devotion to the science of geology, the scholarship which this fund provides is awarded annually to a student who is majoring in geology. This year’s recipient was Nicholas Fedorchuk.
The Frederic Kent Warner Endowed Scholarship Fund was established in 1986 by family and friends in memory of Fred Warner ('76). Fred, originally from Orrville, Ohio, was killed in 1985 in a helicopter crash en route to an off-shore Alabama oil rig to examine a core while working for ARCO. This scholarship is awarded annually to a Geology major. This year’s recipient was Rebecca Alcorn.

The Karl Ver Steeg Prize in Geology and Geography, established in 1958, honors Karl Ver Steeg who taught in the Department of Geology and Geography from 1923 until 1952. This prize is awarded annually to the Geology major who has the highest general standing at the middle of the Junior year. This year’s recipient was Andrew Collins.

Granite Rocks
Mojave Desert, Spring 2011
During the 2010-2011 academic year The College of Wooster Geology Club participated in several outreach events. During the first semester, students helped put together several mineral and rock identification kits for use during our visits at elementary schools and several other programs. The kits were fashioned together while watching a popular pastime of many of the students, ‘The Magic School Bus.’ In the second semester, GeoClub again participated in the college-wide Science Day. Kids from around the community were able to come and learn about the science programs at the College, while also learning interesting geology facts, creating their own fossil molds, and enjoying an awesome ‘Coke and Mentos’ volcanic eruption. Throughout both semesters, the newly organized outreach program went to several schools and groups to spread our interests in geology and teach kids the fundamentals of the very Earth they live on!

2010-2011 Geology Club Officers:
President: Andrew Retzler
Vice President: Stephanie Jarvis
Treasurer: Becky Alcorn

2011-2012 Geology Club Officers:
President: Nick Fedorchuk
Vice President: Lindsey Bowman
Treasurer: Sarah Appleton

Left to right - Front Row: Sarah Appleton ('12), Megan Innis ('11), Katharine Schleich ('12), Anna Mudd ('13), Ilana Ben-Zvi ('13), Melissa Torma ('13), Jennifer Horton ('13).
Second Row: Tyler Rhoades ('13), Samantha Spencer ('11), Elizabeth Deering ('11), Meagen Pollock.
Third Row: Patrice Reeder, Anastasia Wallace ('12), Lindsey Bowman ('12), Matt Peppers ('13), Andrew Retzler ('11), Michael Snader ('11), Rachel Matt ('12), Katherine Price ('13), Tricia Hall ('14).
Fourth Row: Lily Christman ('13), Shelley Judge, Bridget Kraynik ('11), La Shawna Weeks ('11).
Fifth Row: Mark Wilson, Junbin Sun ('14), Travis Louvain ('12), Ananda Menon ('14), Stephanie Jarvis ('11) hanging on to Micah Risacher ('11), Greg Wiles, Nick Fedorchuk ('12), Will Cary ('13), Jesse Davenport ('11), and Becky Alcorn ('11).
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2</td>
<td>Departmental Meeting and Geology Club Photograph</td>
</tr>
<tr>
<td>September 9</td>
<td>Summer Geology Experiences (various students)</td>
</tr>
<tr>
<td>September 16</td>
<td>Career Services, Grad School Presentation</td>
</tr>
<tr>
<td>September 23</td>
<td><strong>Senior I.S. Seminars</strong></td>
</tr>
<tr>
<td></td>
<td>Andrew Retzler – “Paleoecological Reconstruction of the Makhtesh Ramon Structure, Southern Israel, Using Shark Teeth from the Menuha Formation (Upper Cretaceous, Santonian)”</td>
</tr>
<tr>
<td></td>
<td>Micah Risacher – “Paleoenvironmental Analysis of the Zichor Formation in the Late Cretaceous of Southern Israel”</td>
</tr>
<tr>
<td>September 30</td>
<td><strong>Senior I.S. Seminars</strong></td>
</tr>
<tr>
<td></td>
<td>Megan Innis – “Marine Hard Substrate Communities at the Cretaceous-Paleogene Boundary in Alabama and Mississippi (USA)”</td>
</tr>
<tr>
<td></td>
<td>Michael Snader – “A Look at a Core of the (Mississippian) Black Hand Sandstone of Ohio”</td>
</tr>
<tr>
<td>October 7</td>
<td><strong>Senior I.S. Seminars</strong></td>
</tr>
<tr>
<td></td>
<td>Becky Alcorn – “A Three-Dimensional Investigation of Subglacial Pillows, Reykhanes Peninsula, Iceland”</td>
</tr>
<tr>
<td></td>
<td>Samantha Spencer – “Petrogenesis of Jurassic Diabase, Southeast Pensylvania”</td>
</tr>
<tr>
<td>October 14</td>
<td><strong>Earth Science Week</strong></td>
</tr>
<tr>
<td>October 21</td>
<td><strong>Senior I.S. Seminars</strong></td>
</tr>
<tr>
<td></td>
<td>Jesse Davenport – “Protolith Determination of Mylonitic Rocks Adjacent to the Madison Mylonite Zone of the Antelope Basin, Henry’s Lake Mountains, Madison County, Southwestern Montana”</td>
</tr>
<tr>
<td></td>
<td>Elizabeth Deering – “The Paleoecology of Stromatolite Facies in the Lacustrine Eocene Green River Formation (Tgr), Sanpete County, Central Utah”</td>
</tr>
<tr>
<td>October 28</td>
<td><strong>Senior I.S. Seminars</strong></td>
</tr>
<tr>
<td></td>
<td>Stephanie Jarvis – “Climate Sensitivity of Mountain Hemlock (tusga mertensiana) in Glacier Bay, Alaska and Implications for Climate Reconstruction”</td>
</tr>
<tr>
<td></td>
<td>La Shawna Weeks – “Measuring Ice Marginal Changes of Alpine Glaciers in Kenai Fjords, Alaska, Using Satellite Imagery”</td>
</tr>
<tr>
<td>November 4</td>
<td>GSA - No GeoClub</td>
</tr>
<tr>
<td>November 11</td>
<td>Geology Games/Movie Day</td>
</tr>
<tr>
<td>November 18</td>
<td>Bryan Mark, The Ohio State University</td>
</tr>
<tr>
<td></td>
<td>“The Geography of Tropical Glaciers in a Changing Climate”</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| December 2 | John Peck, Associate Professor, University of Akron  
“Dam Science: Quantifying the Geologic Impacts of Dam Removals in the Middle Cuyahoga River, Ohio” |
| January 20 | Departmental Meeting – Welcome Back                                 |
| January 27 | **Senior I.S. Seminars**  
**Andrew Retzler** - “Paleoecological Implications of Chondrichthyan Teeth from the Menuha Formation (Upper Cretaceous, Santonian), Makhtesh Ramon region, southern Israel”  
**Micah Risacher** - “Paleoenvironmental Analysis of the Zichor Formation in the Late Cretaceous of Southern Israel” |
| February 3 | **Senior I.S. Seminars**  
**Megan Innis** - “Bioerosion on Oysters Across the Cretaceous-Paleogene Boundary in Alabama and Mississippi (USA)”  
**Michael Snader** - “A Look at a Core of the (Mississippian) Black Hand Sandstone of Ohio” |
| February 8 | Ed Young, UCLA  
“Meteorites, Oxygen Isotopes, and the Origins and Evolution of the Solar System” |
| February 17 | **Senior I.S. Seminars**  
**Becky Alcorn** - “Construction of a Subglacial Pollow Ridge: Insights from Field Relationships and Compositional Variations, Undirhlithar Quarry, Southwest Iceland”  
**Samantha Spencer** - “Petrogenesis of Jurassic Diabase, Southeast Pennsylvania” |
| February 24 | **Senior I.S. Seminars**  
**Jesse Davenport** - “Protolith Determination of PreCambrian Mylonitic Rocks adjacent to the Madison Mylonite Zone, Henry’s Lake Mountains, Southwest Montana and Idaho”  
**Elizabeth Deering** - “The Paleoecology of Stromatolite Facies in the Lacustrine Eocene Green River Formation (Pggr), Sanpete County, Central Utah” |
| March 3 | **Senior I.S. Seminars**  
**Stephanie Jarvis** - “Non-stationarity in Climatic Response of Coastal Tree Species Along the Gulf of Alaska”  
**La Shawna Weeks** - “Measuring Ice Marginal Changes of Alpine Glaciers in Kenai Fjords, Alaska using Satellite Imagery” |
| March 10 | Career Services: Resume Writing and Job Searching                   |
| March 31 | **Andrew Collins** (’12) – Study Abroad Experience                 |
| April 7  | Mark Wilson, Department of Geology  
Joint GeoClub and Philosophy Roundtable session  
“Scientia et Religio Ex Uno Fonte: The Early History of Evolution at Wooster” |
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 11</td>
<td>Thirtieth Annual Osgood Lecture, Susan Lozier (Duke)</td>
</tr>
<tr>
<td>April 14</td>
<td>Scott Bair ('73), The Ohio State University Professor “The Science Beneath the OSU Geothermal Field”</td>
</tr>
<tr>
<td>April 21</td>
<td>James van Orman, Case Western Associate Professor “Are the Core and Mantle on Speaking Terms?”</td>
</tr>
<tr>
<td>April 28</td>
<td>Jeopardy Geology Game</td>
</tr>
<tr>
<td>May 5</td>
<td>Annual Geology Club Picnic</td>
</tr>
</tbody>
</table>

Geomorphology/Hydrogeology Field trips  
Spring 2011
Construction of a Subglacial Pillow Ridge: Insights from Field Relationships and Compositional Variations, Undirhliðar Quarry, Southwest Iceland

by Rebecca Alcorn

Common in Iceland, tindars are one of two main types of subglacial volcanic edifices. Tindars form during the eruption of a volcanic fissure beneath a glacier. Pillow basalts commonly form the basal unit of tindars due to the high pressure of the overlying ice sheet, and often contain various intrusive units. Undirhliðar quarry, at the northern end of the Krisuvík Ridge, on the Reykjanes Peninsula, Southwest Iceland, provides a three-dimensional cross section of the basal unit of a Weischelian tindar.

Based on field relationships within the southern wall of the quarry, there are three eruptive events followed by at least two intrusive events. From mineralogical analyses, it is clear two of the eruptive events are related by the same parent magma. Mineralogical analyses also confirm there are two different intrusive events: intrusions with olivine and intrusions without olivine. Thus, based on mineralogy, there are three different batches of magma represented within the quarry. However, the chemical data reveals that olivine may not be an appropriate indicator of different magma batches. Chemical results reveal that there are only two different batches of magma represented within the quarry: the intrusions (high- MgO, low-(La:Sm)N) and extrusions (low-MgO, high-(La:Sm)N). Although mineralogically different (based on the presence of olivine), the chemistry shows that all of the intrusions have high-MgO and low-(La:Sm)N. Additionally, the sheet is mineralogically similar to the intrusions, in that it contains olivine, but it has low-MgO and high-(La:Sm)N; therefore it is from the same parent magma as the pillows. As a result, olivine may not be a good indicator of magma batches. Using MELTS to model crystallization from the most primitive Undirhliðar sample, it is obvious that the chemical differences cannot be explained by crystallization from a single parent magma, therefore, it is clear that multiple parents must be interacting in the construction of the pillow ridge.
Protolith determination of mylonitic rocks adjacent to the Madison Mylonite Zone, Henry’s Lake Mountains, southwest Montana and Idaho

by Jesse Davenport

Elemental and petrographic analysis was performed on mylonitic and meta-igneous rock samples south of the Pony Middle Mountain, Spuhler Peak, and Indian Creek Metamorphic Suites, located in the Antelope Basin of the Henry’s Lake Mountains in southwestern Montana. The findings bolster the continental arc collision model of the Big Sky orogeny (1.7-1.8 Ga) and the subsequent metamorphism and ductile deformation of rocks in the Montana Metasedimentary Terrane (MMT). Trends observed from variation diagrams coupled with rare earth element (REE) plots suggest an igneous, continental arc setting with a bimodal volcanic distribution spanning a basalt-andesite-dacite-rhyolite series. The Antelope Basin samples show enrichment in the LILEs and the LREEs and depletion in the HREEs. Significant variability between major, minor, and trace elemental concentrations indicate sheared, well-foliated rocks are not derived from adjacent non-sheared, non-foliated rocks. The enrichment of Fe, Al, and the presence of chlorite, epidote, and other secondary mineral within the Antelope Basin samples are most likely due to hydrothermal alteration and low grade greenschist-facies metamorphism. The collision of the Big Sky orogeny along with the simultaneous tectonism of the Trans Hudson orogeny on the eastern margin and in the Cheyenne Belt to the south raise unanswered questions about the processes by which the Wyoming province was accreted to the North American craton. However, the determination of the protolith of mylonites in the Antelope Basin aids in the further reconstruction of the effects of the Big Sky orogeny on the formation of the northwestern Wyoming province.
The Paleoecology of Stromatolite Facies and Depositional Environment of the Lacustrine Eocene Green River Formation (P guerr), Sanpete County, Central Utah

by Elizabeth Deering

The Eocene Green River Formation is a lacustrine deposit exposed in southern Wyoming, northwestern Colorado, and northeast and central Utah. In Utah, several intermontane ponded basins developed, including central Utah’s Lake Flagstaff. Localities of interest in Sanpete County include a series of Green River cuestas and slide blocks, spanning approximately 15 miles from Spring City to Manti, Utah; these localities were positioned along the eastern shoreline of Lake Flagstaff. The purpose of this research is to develop an accurate history of carbonate microbial mat communities within the Green River Formation of Lake Flagstaff.

The stratigraphy of the Green River Formation in central Utah exhibits a variety of interbedded siliciclastic and carbonate lithologies in both the lower and upper members: calcareous mudstones, shales, wackestones, packstones, and grainstones. Volcanic tuffs, which interrupt normal lacustrine deposition, can be found in both members and vary in thickness from a few centimeters to over a meter in thickness. Stromatolite facies (boundstones) also are observed in both members, and stromatolite preservation varies stratigraphically and geographically. Many specimens show typical carbonate preservation, but at some localities, the stromatolite laminae (mm) are highly silicified or are preserved with stevensite. Further, localities show diverse size distributions; most range from 1-55 cm in height. Many of the stromatolites exhibit a spaced-linked form with close-linked forms as a microstructure in the constituent laminae. Others are vertically stacked structures and concentrically stacked spheroids with laminae. In addition, other fossils found in the stromatolite facies include fish scales, caddisfly casings, and burrows.
Sclerobionts on oysters from the Late Cretaceous and Paleogene of southern Alabama and northern Mississippi show that boring sponges increased their abundance across the extinction boundary while other encrusters and borers were significantly reduced. Nine sclerobionts were found on these oysters: *Entobia* borings; *Gastrochaenolites* borings; *Oichnus* borings; *Talpina* borings; serpulids; encrusting oysters; encrusting foraminiferans; *Stomatopora* bryozoans; and “*Berenicea*” bryozoans. The bioerosion pattern across the K/Pg boundary is distinctive on similar shelly substrates such as *Exogyra costata* and *Pycnodonte convexa*. *Entobia* became more common on these oyster substrates in the Danian (earliest Paleocene) than in the Maastrichtian (latest Cretaceous). *Gastrochaenolites* shows the opposite distribution. The encrusting serpulids are more common on the Maastrichtian oysters than on those from the Danian. No bryozoans, encrusting oysters or foraminiferans are found on Danian *E. costata* and *P. convexa*. An interpretation of these patterns is that clionaid sponges survived the extinction and flourished on the oyster shells. The other sclerobionts were greatly reduced and apparently suffered significant extinctions. This could be because the sponges were opportunistic and could survive on any available carbonate hard substrate.
Stationarity, or uniformity, in growth response of trees to climate over time is assumed in dendroclimatic studies. Recent observations, such as divergence and the decline of the Alaskan yellow-cedar (*Chamaecyparis nootkatensis* (D. Don) Spach) suggest that this assumption may not be valid. Using mean monthly temperature and precipitation data from Sitka, AK that begin in the 1830s, correlation of annual growth in mountain hemlock (*Tsuga mertensiana* (Bong.) Carrière) to climate is compared at different elevations over time. Results indicate that mountain hemlocks at low elevations are experiencing a negative change in correlation to warm temperatures with time, whereas those at high elevations are experiencing a release in growth. Low-elevation correlation patterns are similar to those of Alaskan yellow-cedar, which is currently in decline. An increasing positive trend in correlation to April precipitation indicates that spring snowpack may be playing an increased role in growth as temperatures warm, as with the yellow-cedar.
Paleoecological Reconstruction of the Menuha Formation
(Upper Cretaceous, Santonian), Makhtesh Ramon Region, Southern Israel

by Andrew Retzler

Exposures of the Menuha Formation (Santonian, Mount Scopus Group) in the Makhtesh Ramon region of the southern Negev have produced numerous chondrichthyan teeth. The isolated teeth represent at least 10 different species: Cretalamna appendiculata, Cretoxyrhina mantelli, Squalicorax falcatus?, S. kaupi, Scapanorhynchus rapax, S. raphiodon?, Carcharias samhammeri, C. holmdelensis, and two other fish (Hadrodus priscus and Micropycnodon kansasensis?). The majority of teeth were contained within a glauconite-rich, yellow-brown, soft chalk that included oysters (Pycnodonte vesicularis), trace fossils (Planolites, Thalassinoides, and Chondrites), phosphatic peloids, and planktic/benthic foraminifera (Lenticulina sp., Heterohelix sp., and Globigerinida). West of the Makhtesh Ramon structure, a marine conglomerate contained numerous isolated Carcharias sp. and Scapanorhynchus sp. teeth.

The teeth were collected mainly through surface sampling, with only a few found using sieving techniques. Many of the teeth are well preserved, showing signs of complete root, cusplets, laminations/folds, and nutrient grooves, depending on the characteristics of the shark species. Although little is known about the habitual ranges for shark species, a few have been described as having wide ranges in nearshore and offshore environments. Some are compared to extant relatives, such as Scapanorhynchus sp. whose extant-related species Mitsukurina owstoni occupies outer continental shelf areas. Combining the plausible habitats of each shark species and other fossils with the lithology of the surrounding rock, the Late Cretaceous paleoenvironment was likely a temperate to subtropical, outer continental shelf or middle slope. This environment would have also included other marine life to sustain the shark population, such as: plesiosaurs, ichthyodectids, mosasaurs, shrimp, and squid. This environment seems to display striking similarities to those within the Western Interior Seaway of North America, providing an excellent analogue of many shallow marine communities in the Late Cretaceous. With little to no published material describing the chondrichthyan fauna of the Menuha Formation, this data will improve interpretations of its paleoenvironment within the Makhtesh Ramon region, southern Israel.
Paleoenvironmental Analysis of the Zichor Formation in the Cretaceous of Southern Israel

by Micah Risacher

During the Late Cretaceous, the marine communities in the Makhtesh Ramon region of southern Israel were on the southern margin of the Tethys Sea and dominated by echinoids. The lithology and paleontology of the Zichor Formation both point towards a shallow shelf environment during this time. Factors such as *Thalassinoides* trace fossils, infaunal echinoids, and high mud content lead to this determination. The echinoids themselves are also excellent indicators of the paleoecology of the Zichor in relation to the world at this time. Echinoids used to determine a link with other sites are: *Hemiaster batnensis, Rachiosoma delamarri, Coenholectypus excises, and Salenia cossiae*. These echinoids are found in similar assemblages throughout the Tethys Sea region of the Late Cretaceous, which shows that the Zichor is a typical example of a shallow marine environment of the Late Cretaceous. The skeletons of these echinoids are calcitic original hard parts. There is also a shale to limestone sequence indicative of a transgression during the lower/middle of the Zichor to the top, just before the Menuha Formation.

The samples taken are biomicritic packstones in the lower/middle region of the formation while the top lithology is a biomicritic wackestone. Determining the paleoenvironment of the Zichor can help to put it into perspective along with other similar sites to get an idea of the general paleoenvironment during the Late Cretaceous.
Evidence in Hiatus Concretions of Regressions Recorded Within the Black Hand Sandstone (Osagean) of Ohio

by Michael Snader

The Black Hand Sandstone is found in central Ohio and was deposited during the Mississippian Period. It is the youngest member of the Cuyahoga Formation and is found beneath the Logan Formation and above the Raccoon, Portsmouth, and Wooster members of the Cuyahoga Formation.

While studying a core of the Black Hand Sandstone from Ohio, hiatus concretions were found which are thought to represent regressions. Since the concretions appear both as pebbles (which are the concretions that represent regressions) and in situ, it is likely that the concretions which are not in situ represent intervals of regression. The concretions originally existed in shale, some of which are found toward the bottom of the core in the actual shale layer. Although there is a layer in the core composed almost entirely of shale, most of the shale was eroded through the process of regressions. Since the concretions have the same composition and also contain similar burrows, it shows the concretions most likely came from the same setting.
A Chemical Analysis of the Morgantown Sheet, Southeast Pennsylvania

by Samantha Spencer

The Morgantown sheet is a Jurassic diabase sill that is part of the Central Atlantic Magmatic Province (CAMP). CAMP is important to understand because it is thought to have contributed to the Triassic-Jurassic boundary extinction. The diabase is also economically valuable and used for building materials and as aggregate. The goal of this study is to determine whether the Morgantown Sheet and surrounding diabase bodies are comagmatic. Chemical analyses of diabase samples from six different locations were done by DCP-AES for major elements and ICP-MS for trace elements. Overall, CAMP has three specific chemical types: York Haven, Rossville, and Quarryville. The Morgantown Sheet and surrounding samples are typical diabase, have a chemical type of York Haven, which is high in TiO2, and is quartz normative. The six different locations around the sill show the same REE pattern but have various abundances of REE. These data support the hypothesis that the diabase bodies are comagmatic and may have experienced different degrees of crystallization.
Glaciers are sensitive to decadal and century-scale warming. Their retreat over the past few hundred years provides a context from which to evaluate ice loss over the last few decades. Along the Gulf of Alaska is one of the largest volumes of land-based ice outside of continental ice sheets and ice loss there has contributed significantly to sea level rise. This study examines tidewater, land-terminating and lake-terminating glaciers from the Kenai Fjords National Park and the Prince William Sound in the south central Alaska and uses Landsat imagery to track ice retreat and advance appended to the record based on glacial moraines. South central Alaska is an ideal location for this study as it has multiple types of glaciers and a well documented glacial record.

Retreat from the Little Ice Age Maximum (LIA) in the 18th and 19th centuries has generally accelerated over the last one hundred years in response to contemporary warming and has been temporarily halted as decadal shifts in the North Pacific have forced minor advances. Results show there is a difference in the amount of retreat and advance among the three types of glaciers with tidewater glaciers typically retreating tens of kilometers, whereas land-terminating glaciers have retreated only kilometers over the same interval. The retreats of lake terminating glaciers fall in between these ranges, retreating from kilometers to tens of kilometers.

The tidewater glaciers in the study had retreated from their outer moraines more than 16km by the year 2007. Within this period, positive mass balance beginning in the mid 1970’s resulted in a short lived period of readvance that persisted through the early 1990’s. Similarly, two of the land terminating glaciers Nuka and Exit paralleled this readvance pulse following the 1970’s shift. Overall, the average cumulative retreat of these glaciers was approximately 1.6 km. The lake terminating glaciers which had an average cumulative retreat of 7km also experienced a slight period of advance at this time with the exceptions of Bear and Grewingk glaciers. Thus, from the end of the 18th and 19th centuries LIA advances to the year 2007, there has been an overall trend of retreating glaciers in south-central Alaska.
Glacier Shopping
Alaska, Summer 2011

Paleontology fieldtrip
Fall 2010

Petrology/Structure fieldtrip
Gettysburg, Pennsylvania, Spring 2011
(left to right) Anna Mudd, Lily Christman,
Richa Ekka ('13s), Katharine Schleich ('12),
Melissa Torma, Will Cary, and Whitney Sims ('13s).
The Richard G. Osgood, Jr. Memorial Lectureship in Geology was endowed in 1981 by his three sons in memory of their father, a paleontologist with an international reputation who taught at Wooster from 1967 until 1981. Funds from this endowment are used to bring a well-known scientist interested in paleontology and/or stratigraphy to the campus each year to lecture and meet with students.

April 11, 2011, was the date of the Thirtieth Annual Richard G. Osgood, Jr., Memorial Lecture in the Department of Geology. Susan Lozier, Ph.D., Earth and Ocean Sciences Division, Nicholas School of Environment, Duke University, presented “Overturning the Ocean.”

Dr. Susan Lozier is a physical oceanographer with interests in large-scale ocean circulation. Her research interests center on the structure and pattern of an ocean basin’s flow and property fields, with a specific interest in how active and passive tracers are distributed from source regions. The application of her work has focused on the North Atlantic basin; a current field program focuses on Labrador Sea Water pathways, while a recently funded modeling project focuses on the climatic variability of the Mediterranean overflow waters.

She received her Ph.D. from the University of Washington; the first woman to graduate from the physical oceanography program. Following postdoctoral studies at Woods Hole Oceanographic Institution (WHOI), she joined the faculty of Duke University, where she is now a full professor and holds the Truman and Nellie Semans chair in Earth and Ocean Sciences.

The Recipient of an Early Career Award from the NSF, Lozier has also been awarded a Bass Chair for Excellence in Research and Teaching, received a Duke University Award for Excellence in Mentoring, and was named an AMS Fellow. She teaches undergraduate and graduate courses at Duke and is currently the Director of Undergraduate Studies for her department and an adjunct scientist at WHOI.
# Osgood Lecturers

<table>
<thead>
<tr>
<th>Year</th>
<th>Lecturer</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>John Pojeta, Jr.</td>
<td>United States Geological Survey</td>
</tr>
<tr>
<td>1983</td>
<td>J. William Schopf</td>
<td>The University of California, Los Angeles</td>
</tr>
<tr>
<td>1984</td>
<td>David Jablonski</td>
<td>The University of Chicago</td>
</tr>
<tr>
<td>1985</td>
<td><strong>Walter Manger ('66)</strong></td>
<td>The University of Arkansas</td>
</tr>
<tr>
<td>1986</td>
<td>Susan Kidwell</td>
<td>The University of Chicago</td>
</tr>
<tr>
<td>1987</td>
<td>Niles Eldredge</td>
<td>The American Museum of Natural History</td>
</tr>
<tr>
<td>1988</td>
<td>Steven Stanley</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>1989</td>
<td>Paul Taylor</td>
<td>The Natural History Museum, London</td>
</tr>
<tr>
<td>1990</td>
<td>Erle Kauffman</td>
<td>The University of Colorado</td>
</tr>
<tr>
<td>1991</td>
<td>Rodney M. Feldmann</td>
<td>Kent State University</td>
</tr>
<tr>
<td>1992</td>
<td><strong>Molly F. Miller ('69)</strong></td>
<td>Vanderbilt University</td>
</tr>
<tr>
<td>1993</td>
<td><strong>John Van Wagoner ('72)</strong></td>
<td>Exxon Production Research Company</td>
</tr>
<tr>
<td>1994</td>
<td>Adrienne Zihlman</td>
<td>The University of California, Santa Cruz</td>
</tr>
<tr>
<td>1995</td>
<td>Martin Lockley</td>
<td>The University of Colorado at Denver</td>
</tr>
<tr>
<td>1996</td>
<td>Timothy J. Palmer</td>
<td>The University of Wales, Aberystwyth</td>
</tr>
<tr>
<td>1997</td>
<td>Jeffrey F. Mount</td>
<td>The University of California, Davis</td>
</tr>
<tr>
<td>1998</td>
<td>Mary Droser</td>
<td>The University of California, Riverside</td>
</tr>
<tr>
<td>1999</td>
<td>Bruce Latimer</td>
<td>The Cleveland Museum of Natural History</td>
</tr>
<tr>
<td>2000</td>
<td>Paul C. Mayewski</td>
<td>The University of New Hampshire</td>
</tr>
<tr>
<td>2001</td>
<td>Carlton E. Brett</td>
<td>The University of Cincinnati</td>
</tr>
<tr>
<td>2002</td>
<td>Douglas H. Erwin</td>
<td>The Smithsonian Institution</td>
</tr>
<tr>
<td>2003</td>
<td>Mark A. Norell</td>
<td>The American Museum of Natural History</td>
</tr>
<tr>
<td>2004</td>
<td>Lonnie Thompson</td>
<td>The Ohio State University</td>
</tr>
<tr>
<td>2005</td>
<td><strong>Patricia H. Kelley ('75)</strong></td>
<td>University of North Carolina at Wilmington</td>
</tr>
<tr>
<td>2006</td>
<td>Orrin H. Pilkey</td>
<td>Duke University</td>
</tr>
<tr>
<td>2007</td>
<td>Richard Alley</td>
<td>Pennsylvania State University</td>
</tr>
<tr>
<td>2008</td>
<td>Paul Olsen</td>
<td>Columbia University</td>
</tr>
<tr>
<td>2009</td>
<td>David A. Burney</td>
<td>National Tropical Botanical Garden, Hawaii</td>
</tr>
<tr>
<td>2010</td>
<td>James W. Hagadorn</td>
<td>Amherst College</td>
</tr>
<tr>
<td>2011</td>
<td>M. Susan Lozier</td>
<td>Duke University</td>
</tr>
</tbody>
</table>

The 2012 Osgood Lecturer will be **Dr. George Davis ('64)**, University of Arizona.
Stanley Totten ('58) received his fourth Hall of Fame Award from the Ohio Department of Natural Resources for his outstanding contributions to the protection and enjoyment of the state’s natural resources. We also thank Stan for his gifts to Department of Geology.

After 34 years of working for USGS, David Moore ('61), retired in October 2009, and accepted emeritus status. He worked on various projects including structural mapping in Idaho Thrust Belt, high-level radioactive waste storage, earthquake hazard analysis (upper Mississippi Valley), and aquifer studies in west-central Texas.

In December, Jim Johnson ('74) stopped by to see Scovel Hall. It was the first time he had seen it since the renovation in the 80’s. He is currently a “100 ton Captain” with American Cruise Lines, currently serving on the American Star.

Patricia Kelley ('75) shares that they are now grandparents. Their granddaughter, McKenzie Katherine Ilona Kelley, was born 10/13/10.

Kaz Aoki ('77) and his family live in Japan and see firsthand the tremendous devastation the tsunami caused. A month prior to the earthquake Kaz and his wife, Sachiko, became grandparents to a baby boy. Hotaro Kitagawa was born to daughter, Yuka, and her husband, Tomo, on February 3.

We were pleased this past Fall to receive a spectacular donation of rocks and fossils from Linda (Tichy) Riffle ('77) and her mother Rose. Their family collected geological specimens for decades and developed a museum in their Middleburg Heights, Ohio, home. Generations of children and friends enjoyed the dinosaur bones, ammonites, trilobites, crystals, petrified wood, fluorescent minerals and thousands of other objects they lovingly assembled. Now these treasures are in the teaching collections and display cabinets of Scovel Hall to enchant current and future students.

Donald Bordine ('79) is Associate Director of Operations for the Office of Animal Care and Use under the Office of Intramural Research in the National Institutes of Health Office of the Director.

Mike Smith ('82) lives in Wilmington, Delaware, and has been teaching and serving as Science Department Chair at Wilmington Friends School since 2005. This past year he served as the President of the Eastern Section of NAGT and has served as the Eastern Region Director of the National Earth Science Teachers Association since 2009. In 2010, he hosted the NAGT Eastern Section meeting in Wilmington, Delaware, and co-led “geology of the Philadelphia region” field trips for NAGT and NESTA. Mike has three daughters. Kylie lives in Istanbul, Turkey, and is a senior at American University in Washington, D.C.; Hillary is entering her first year of college at Wilmington University; and Hannah is entering her senior year of high school. Mike says, “Here’s to the 30th year reunion in 2012. I hope to see some geology department alums there!”
Robert H. Moorman ('83) is Professor and Robert Daugherty Chair in Management at Creighton University, Omaha, Nebraska. He is also the Founding Director of the Anna Tyler Waite Center for Leadership, which sponsors the Waite Leadership Scholars Program. Rob has been teaching Executive Education leadership courses at the University of Otago since 2002.

Lisa M. Hall ('84) is a Certified Financial Planner Professional at Coulter Financial Advisors.

Julie (Ferguson) Haines ('86) joined Parsons’ Infrastructure & Technology group as Vice President and Client Service Leader of its International Development Practice. She is responsible for leading growth in the United States Agency for International Development (USAID) market and expanding Parsons’ sustainable infrastructure footprint worldwide. She is based in Washington, D.C. She and her family recently visited us in Scovel.

Brian Carl ('87) and family are now in Chengdu, Sichuan, China. They miss their friends and the ease of life in Brunei, but overall are adjusting well.

Tim Nicholson ('88) writes, “We have been home for about 6 years now after living overseas and are enjoying life in Texas. My family includes my wife Robyn, daughter Mallory (13) and son Jacob (11). I am very excited that my niece is interested in geology and is considering The College of Wooster!”

Jay Simonds ('90) owns a small environmental drilling firm located in Columbus, Ohio. He is a Licensed Professional Geologist and a licensed well driller and has practiced as a professional geologist in the environmental industry for over 20 years.

Ravi Bedi ('96) has been living in Singapore for over four years, been married for more than seven. He and his wife have two lovely children (son Jaiveer and daughter Naira). He was in New Delhi visiting his parents and going through a lot of old boxes and came across his I.S. Project on conodonts, and remembered Dr. Wilson.

Nate Wiles ('97) is the Content and Information Coordinator at the University of Illinois. He stopped by the Department in June with Sam, Henry, and Tommy.

Andrea Martin ('02) will be leaving AGI on August 3. On August 8 she will start with a new position at NASA. She will be splitting her time between Goddard Space Flight Center in Maryland and NASA Headquarters in DC. She has been hired to start a communications program for the Applied Sciences Program, one of the three wings of NASA’s Earth Science Directorate. They are the group who take the satellite images of the Earth and use the data to track climate change, pollution, famine, drought, and changes from natural disasters. It is very similar to what she does at AGI, so she will still be writing and traveling a lot.

Jessica Conroy ('03) just received her Ph.D. from the University of Arizona. This fall she will begin her postdoctoral work in the School of Earth and Atmospheric Sciences at Georgia Tech as an NSF Earth Sciences Postdoctoral Fellow. She recently became engaged to a fellow geoscientist and liberal arts enthusiast, Willy Guenthner (Carleton

Megan (Kennedy) Williams (‘03) and her husband are going to Alaska in August, to celebrate her birthday! They will fly into Anchorage and stay for a few days, then go on two ‘excursions’; the first is a train trip to Denali with an overnight stay, and the second is a day cruise out of Seward through a portion of the Kenai Fjords National Park. Megan is an Associate Geologist for Environmental Resources Management, where Megan Innis (‘11) is now working. Megan W. shares, “I am excited to share that the C.O.W. Geology Department now has a second representative at ERM’s Annapolis, MD office...Megan Innis (‘11) recently started working here in our Contaminated Site Management group. We’re excited to be working together, and to compare stories about our Wooster Geology experiences!”  

Nick Young (‘05) is a Ph.D. student at The University of Buffalo, working in Greenland, Alaska, and other areas.  

Will Driscoll (‘05) is a graduate student at the University of Arizona. He visited us in January.  

Peter Johnson (‘06) is working at Earth Resources Technology in Maryland and enjoys the additional responsibility he has in both fieldwork and office work.  

Anne Krawiec (‘06) is working on a master’s thesis at Northern Arizona University, on a desolate island in the Aleutians, Alaska.  

Eva Lyon (‘07) is the National Fossil Day Coordinator. She obtains new partners and organizes the event. Their website is http://nature.nps.gov/geology/nationalfossilday/ Eva recently coauthored (with Greg Wiles, Daniel E. Lawson, Nicholas Wiesenber, and R.D. D’Arrigo) the paper, “Tree-ring dates on two pre-Little Ice Age advances in Glacier Bay National Park and Preserve, Alaska, USA,” which appeared in Quaternary Research. http://www.sciencedirect.com/science/article/pii/S0033589411000688  

Elyse Zavar (‘07) graduated from UCLA with her M.A. in geography. Her thesis examined vegetation response to climate change by analyzing pollen from the Western Siberian Lowlands. She moved to Austin, Texas, in the summer of 2009 and worked as a flood map analyst for an insurance company before returning to school at Texas State University, San Marcos. Elyse recently coauthored (with Mark Wilson and Michal Zaton) the paper, “Diverse sclerozoan assemblages encrusting large bivalve shells from the Callovian (Middle Jurassic) of southern Poland,” which appeared in Palaeogeography, Palaeoclimatology, Palaeoecology. http://www.sciencedirect.com/science/article/pii/S0031018211002677  

We have had several visitors this past year, some recent alumni and some not so recent. It was great to see Gene Toy (‘87) and his family, Denise Hardman (‘07), and Andrew Horst (‘07).  

Andrew Welshhans (‘08) is in a Ph.D. program at West Virginia University. He received his Masters from the University of Louisiana at Lafayette.  

41
Ali (Drushal) Sloan (’09) passed her master’s thesis defense in Geology from the University of Colorado. She and husband, Justin, will soon be moving to Houston where she will begin her position as a geologist for Marathon Oil. Ali and Justin are expecting their first child in November.

Elyssa Krivicich (’09) received her M.S. in Geology from The Ohio State University. She will be in a year long Master’s of Education in Instruction and Curriculum with an Emphasis in Secondary Level Education program at Grand Valley State University in Grand Rapids, Michigan. After her first year, she will be applying to school districts across Michigan to be a teacher of earth/space science in a Title 1 school district.

Kelly Aughenbaugh (’10) stopped in to visit us. She served in Cleveland, Ohio, with City Year for the 2010-2011 academic year and will also serve 2011-2012. Kelly helps to tutor and coach students in high schools, and also does service work in the Cleveland community.

After working as a Mudlogger in the Marcellus Shale, Phil Blecher (’10) just accepted a new position as a Rig Geologist for Earth Data in Queensland, Australia.

Rob Lydell (’10) stopped by to visit us this year. He is working for Haley and Aldrich.

Rob McConnell (’10) is living in Warren, Pennsylvania, and working for PGE. He has his College of Wooster Geology textbooks and notes from all his courses on a shelf in his office and references them often.

Palmer Shonk (’10) is living in Pittsburgh and working for Hatch Mott MacDonald consulting firm. He is doing 70% fieldwork collecting data on streams above mines, and 30% of time in the office.

Terry Workman (’10) was an archeology major, but he did a Geology I.S. and is in a geology program at Miami of Ohio doing research in Jordan.

We are saddened by the death of the following alumni and friends:

Robert E. Carter (’79)  
March 12, 2011

Calvin E. Dagg (’42)  
March 4, 2011

William F. Donati (’61)  
October 17, 2010

Robert Emmanuel (’48)  
June 14, 2011

David B. Glade (’52)  
January 21, 2010

Edward A. Horvath (’50)  
May 24, 2011

Charles W. Hutton (’39)  
February 12, 2011

Margaret E. Munson (’39)  
October 19, 2010

Robert G. Prentice (’42)  
December 11, 2010
Special Thanks

Thank you to David (’61) and Marta Moore, and Michael Smith (’82) for the gifts to the Department. ✤

Thank you to Becky Jensen (’78) for her annual gift to the Geology Department, which was placed in The James R. Baroffio Fund for Geologic Research. ✤

Thank you to Jessica Clemons (College of Wooster Science Librarian), the Calhoun Family, the Riffle Family, and the Van Curran Family for the collections of rock and minerals. These are much appreciated and help to round out our current collections. ✤

If you would like to give a gift to the Geology Department, feel free to send your gift directly to the Department or to the College Development Office. It is very helpful to us if you designate how you would like your gift to be used, or if you would like it placed in a specific fund. Gifts that are not specifically designated will go in the general Geology Department annual budget to be used for the day-to-day operations of the department. ✤

Amboy Crater, Mojave Desert
Name: ____________________________________________________________

Maiden Name (if applicable): _________________________________________

Class: ____________________   I.S. Advisor: ____________________________

Home Address: ____________________________________________________

_________________________________________________________________

Telephone: ______________________   E-mail: ____________________________

Advanced Degrees: ______________________   Year: ______________________

Institution: _______________________________________________________

Position Title: ____________________________________________________

Business Name and Address: _________________________________________

_________________________________________________________________

Telephone: ______________________   E-mail: ____________________________

Occupation: _______________________________________________________

If your occupation is related to geology, please check one or more of the following:

_____ Environmental   _____ Petroleum

_____ Government   _____ Student

_____ Hydrogeology/Hydrology   _____ Teaching

_____ Minerals   _____ Other (please explain)

_____ Energy (Other) ________________________________________________

Other news you’d like to share:

Thank you for responding to this request. You may complete this form at
http://tinyurl.com/2011GeologyAlumniUpdate, or send it to us
via U.S. Mail, fax (330–263–2249), or by e-mail to preeder@wooster.edu
Scovel Hall, originally built in 1902 and renovated in 1983-1984, is the home of the Departments of Geology, Philosophy, and The Pre-Law Advising Program. It bears the name of Dr. Sylvester F. Scovel, the third president of The College of Wooster.

http://www.wooster.edu/Academics/Areas-of-Study/Geology.aspx

http://woostergeologists.scotblogs.wooster.edu/

Don’t forget to “friend” us on Facebook.