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On the cover:

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Dear Alumni and Friends,

It is an honor to write to you as the new Chair of the Department of Geology at Wooster. Mark Wilson has handed the chairship over to me and will be taking a well-deserved break from these duties starting with a semester’s leave this coming fall. Most of you know that Mark will still be directing many aspects of geology at Wooster regardless of his leave; one of his latest contributions to the department is the initiation of the Wooster Geologist’s blog (http://woostergeologists.scotblogs.wooster.edu/). This site has allowed all of us to keep track of ongoing summer research projects. We will continue to update the blog periodically during the academic year to keep you updated on activities relevant to Wooster Geology.

We are excited to introduce the fourth tenure-track member of the department, Shelley Judge, who was visiting last year and will start as our structural geologist. Shelley came to Wooster after earning a Ph.D. at The Ohio State University and teaching at Muskingum University. She advised student theses last year and field projects in Utah this summer. Along with Meagen Pollock, who joined us last year as a mineralogist-petrologist, the department is now at full-strength.

The Department of Geology underwent its ten-year curricular review this past year. The review was positive and will help guide us as we outfit new research labs and facilities planned for teaching and research, especially in mineralogy-petrology and structural geology. The College is also renovating the department’s GIS lab, which is housed in Scovel Hall.

As always we greatly appreciate the donor support for student field research to the Wengerd, Danner, and Baroffio funds. These funds have expanded student field experiences this summer in Estonia, Iceland, Utah, and Alaska. You may visit the blog site to see how these funds contribute and enrich student research in geology.

Sherlyn Myers and Sue DeCapua continue the heroic job of keeping our labs, classrooms, and work spaces presentable. Our outside reviewers remarked that the geology department was one of the cleanest they had seen and we greatly appreciate their efforts.

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

Sincerely,

Gregory C. Wiles
Chair
Faculty and Staff

Shelley Judge
Assistant Professor of Geology

(B.S. Mount Union College, 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 Environmental Geology and Structural Geology, and during the Spring Semester, she taught Oceanography and Concepts & Processes of Geology.

This past academic year, Shelley worked with two seniors, Meggie Edwards and Jodi Sprajcar ('09s) on their I.S. projects. Meggie worked with Integrated Ocean Drilling Program (IODP) samples from Expedition 306 Site U1314 to the North Atlantic Ocean. She focused on the Pleistocene input of ice-rafted debris through Marine Isotope Stages 12-15 and attempted to correlate the accumulation of ice-rafted debris to climate variations and deep water stability in the subpolar Atlantic. Jodi’s project was part of the Keck Geology Consortium’s 2008 Mongolia trip that aimed to better understand the Quaternary tectonic and geomorphic evolution of a portion of the Mongolian Altai. Jodi focused on calculating the rate of dextral strike-slip motion along the Hôh Serh fault through GPS mapping of the fault and by measuring distances of offset drainages and shutter ridges.

In the fall semester, Shelley gave two presentations on her research in central Utah. One was at Wooster, while the other was at a colloquium at Kent State University. In addition to continuing her work in Utah, funding through ANDRILL (Antarctic Drilling Program) allowed her to begin work on core from Southern McMurdo Sound; this work will continue during the next academic year.

During the summer of 2009, Shelley helped teach the first half of Ohio State University’s field camp, which is based in Ephraim, Utah. She has been going to Utah regularly for the past 14 summers and has either instructed or been a teaching assistant for OSU’s field camp for eight of those summers. After her field camp teaching stint, two Wooster students, Phil Blecher and Bill Thomas ('10s), joined her in Utah during July to conduct field work in the Sanpete Valley for their Senior I.S. projects for the upcoming academic year. Both Phil and Bill are working in the Eocene Green River Formation, a famous lacustrine deposit known for its oil shale and fossil fish. Phil is tackling a regional correlation of the eastern margin of the Sanpete embayment in order to show lake water level changes through time along the shoreline. Bill is studying the geochemistry of numerous tuff deposits that he mapped with GPS equipment while in the field; these tuffs were erupted into the Green River Lake.
Meagen Pollock
Assistant Professor of Geology


Meagen kicked off her first year at Wooster with a trip to Iceland, accompanied by Ali Drushal ('09) and Rob Lydell ('10). Ali completed her senior I.S. on the formation of the Hjallin Lens, a study of a basaltic extrusive body through crystal size distribution (CSD) coupled with cooling models. Rob began a project that focused on determining the zeolite distribution in a flexure zone with the goal of understanding depths of burial. Rob returned to Iceland again with Meagen this summer, along with Todd Spillman ('10) and Adam Samale ('10).

Meagen also worked with Bob Nowak ('09) on his senior I.S., which was part of the Keck Geology Consortium Adirondacks project. Bob examined the protolith of the Hyde School Gneiss marginal bodies through petrographic, geochemical, and isotopic analysis. Both Bob and Ali presented their results at the North Central Meeting of GSA in April.

LaShawna Weeks ('11), Andrew Collins ('12), and Jesse Davenport ('11) worked with Meagen on sophomore and summer research projects. LaShawna and Andrew identified, categorized, and organized all of the samples in the Mineralogy collection. Jesse is developing a mathematical model that describes the intrusion of dikes under mid-ocean ridges.

A highlight for Petrology students was the field trip to the Mount Rogers area of western Virginia. Several more field trips are planned for the Min/Pet sequence in the coming year, including a joint field trip with the Structure class to the Valley and Ridge of Pennsylvania. This fall Meagen will teach a First Year Seminar (FYS) that explores the facts and myths behind the fall of civilization.

Meagen was certainly busy in her first year at Wooster. She was elected to a three year term as a councilor for the Council on Undergraduate Research (CUR). She presented “Portfolios as a Learning and Assessment Tool in an Undergraduate Mineralogy/Petrology Course,” at the Annual GSA Meeting in Houston, Texas. She also presented “Evolution of Magmatic Processes at Superfast-Spreading Centers: Insights from Spatial Variations in Upper Crustal Composition at the Pito Deep Rift,” with coauthors Emily Klein (Duke University) and Jeffrey Karson (Syracuse University) at the Annual AGU Meeting in San Francisco, California. She was a coauthor on an article titled “Role of upwelling hydrothermal fluids in the development of alteration patterns at fast spreading ridges: Evidence from the sheeted dike complex at Pito Deep,” which appeared in Geochemistry, Geophysics, Geosystems. She was the primary author on a second article titled, “Compositions of dikes and lavas from the Pito Deep Rift: Implications for crustal accretion at superfast spreading centers,” which was published in the Journal of Geophysical Research.
Gregory C. Wiles  
Associate Professor of Geology  
(B.A. Beloit, 1984; M.S. SUNY Binghamton, 1987; Ph.D. University at Buffalo, 1992; Wooster since 1998).

During the Fall Semester Greg taught a First Year Seminar centered on the environmental history of Wooster. (This past year was Wooster’s Bicentennial.) He also taught Climate Change to a group of geologists and archaeologists. In the Spring he taught Geomorphology and Environmental Hydrogeology and Environmental Geology.

Caitlin Fetters ('09) and Mike Krivicich ('09) finished their theses on aspects of glacial geology in Glacier Bay National Park and Preserve. During the summer of 2009 with Tom Lowell (University of Cincinnati), Greg worked with a group of students funded by the Keck Geology Consortium and U.S. Fish and Game. The group, which included Terry Workman ('10) (Archaeology/Geology), Jessa Moser (University of Cincinnati), and Alena Geishe (Middlebury College), took 23 lake cores in the Kenai National Wildlife Refuge. The aim of the project is to examine the changes in past precipitation as recorded in the Holocene lake levels. Terry is working on some of these cores for his I.S.

Earlier in the summer students Colin Mennett ('10) and Kelly Augenbaugh ('10), along with Nick Weisenberg, a local timber framer who works in the Wooster Tree Ring Lab, and Greg were funded by the Center for Entrepreneurship at the College to continue using tree-rings to date historical buildings. The group is building a large tree-ring database and a client base that now includes work on revolutionary war vintage timber structures in Pittsburgh and, with Nick’s initiative, more structures in the Cincinnati market. The group has learned quite a bit about running a business and about U.S. history. Colin and Kelly are also working in Glacier Bay, Alaska, for their I.S. projects. Colin is examining the tree-ring record of Alaska cedar, a valuable tree species that is in strong decline, and Kelly is dating logs overrun by ice in the upper reaches of Glacier Bay during the mid to late Holocene. This work is supported by NSF and the National Park Service and is in collaboration with the U.S. Army and Lamont-Doherty Earth Observatory.

Greg is advising Travis Brown ('10) who traveled to Svalbard to obtain lake cores as part of a Keck Geology Consortium Svalbard project. He is working on aspects of late Holocene Arctic climate change. Travis, Terry Workman, and Greg look forward to ramping up analysis in the new and developing sediment core analysis lab in collaboration with more established labs at Kent State University and the University of Cincinnati.

Together with Anne Krawiec ('06), now a consulting geologist with Conoco Engineers in Massachusetts, and Rosanne D’Arrigo of Lamont, Greg published a paper in Geophysical Research Letters that reconstructed Lake Erie levels over the past 300 years. Greg also was coauthor on papers that appeared in Global and Planetary Change, Quaternary Science
Reviews and Quaternary Research. He continues to serve on various college committees and as associate editor of Tree Ring Research and on the U.S. National Committee of the International Quaternary Society.

Greg will be teaching Environmental Geology and Climate Change in the fall and Environmental andGeomorphology in the spring. He looks forward to taking over as chair for the next three years and working with Mark, Meagen, and Shelley as our new department evolves.

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

(B.A. Wooster, 1978; Ph.D. Berkeley, 1982; Wooster since 1981). During the Fall Semester Mark taught History of Life and Invertebrate Paleontology. In the Spring Semester he taught History of Life and Sedimentology & Stratigraphy.

Mark had three Senior Independent Study students this year. Elyssa Belding (’09) traveled with Mark to the Negev Desert of southern Israel last spring to continue a long-term project on Jurassic stratigraphy and paleoecology. They worked with their colleague Yoav Avni of the Geological Survey of Israel in Makhtesh Gadol on the Matmor Formation. They were able to connect the stratigraphic columns previously measured and described by Sophie Lehmann (’08) and Meredith Sharpe (’08) in this region, producing the first modern complete stratigraphic column of the Matmor Formation. Along with the paleocommunities they described, they were also able to test Yoav’s hypothesis that the Matmor stratigraphy is locally complex because of faulting contemporaneous with sedimentation. Heather Hunt (’09) was the first student in 25 years to return to the Logan Formation exposed in Wooster to assess its paleoecological and sedimentological history. She took advantage of a new series of roadcuts and found a wonderful array of fossils, most of which would be familiar to generations of Wooster geology students who visited the “Little Arizona” outcrop (which is now long gone). John Sime (’09) went with Mark and his colleague Paul Taylor (Natural History Museum, London) to investigate the taphonomy of sclerobiont communities in Late Cretaceous baculitid conchs preserved in the Pierre Shale of South Dakota, Wyoming, and Montana. They found very interesting preservational patterns which may be related to the unusual water chemistry of the Western Interior Seaway at the time. They also have at least one new bryozoan genus and some new trace fossils as well. Part of this work was presented this spring at a bryozoology meeting in Oslo, Norway.

Mark had extensive research travels this past summer. He returned to Israel in May to work with his friend Amihai Sneh (Geological Survey of Israel) in the Jurassic strata in
the north of the country. He also went to Russia in June to investigate Ordovician bioerosion with his new friend Andrei Dronov of the Russian Academy of Sciences. Following the Russian adventure he visited Finland and Norway, taking a long sidetrip to the Arctic islands of Svalbard to explore the Triassic and Jurassic stratigraphy there with Maria Jensen of the University of Norway. He also met with Hans Arne Nakrem of the Natural History Museum in Oslo to discuss future collaborative work in Svalbard. He then went to Estonia to meet his current Senior I.S. students Rob McConnell ('10) and Palmer Shonk ('10), along with Bill Ausich of Ohio State University and Olev Vinn of the University of Tartu, to explore the Silurian rocks and fossils of Saaremaa and Hiiumaa island. After some time back home, Mark then flew to British Columbia to hike up to Burgess Pass and see the famous Burgess Shale on the hundredth anniversary of the discovery of the Burgess Shale Fauna.

Mark had an article appear this year on Middle Paleozoic hardgrounds (the senior authors were Pat McLaughlin and Carl Brett of the University of Cincinnati) in a special paper of the Geological Association of Canada. He and Paul Taylor published a paper on the mysterious hederelloids in Bryozoan Studies 2007. Mark also had a book chapter in Current Developments in Bioerosion. He gave “Darwin’s Birthday” lectures at Wooster and Centre College in Kentucky, along with other lectures to the public.

Mark is still an Overseas Representative for the Palaeontological Association, and a member of the review boards for Choice and American Reference Books Annual.

During the Fall semester Mark will be on a research leave, so he has finished his service on the Conference With Trustees Committee and the Environmental Studies Advisory Board. His leave plans are to finish several papers and do fieldwork on Permian reefs with Tom Yancey of Texas A&M University. He will return to campus in January.

Patrice Reeder
Administrative Coordinator for the Departments of Geology, Philosophy, and The Pre-Law Advising Program. Wooster since 2000.

Patrice assisted in one faculty search for the Geology Department, two for the Philosophy Department, and was the Tournament Coordinator of the 2008 American Collegiate Moot Court Association Midwest Regional Tournament. She organized many special activities hosted by both departments, including the holiday luncheon for Geology and Philosophy majors, The Twenty-Eighth Annual Osgood Lecture, The Twelfth Bell Distinguished Lectureship in Law, The Second Lindner Lecture in Ethics, and Philosophy’s Phi Sigma Tau (Honor Society) dinner and induction ceremony. Patrice also attended several
training sessions and spent great deal of time on the College’s new web pages for the Geology and Philosophy Departments, and the Pre-Law Advising Program.

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Phil Blecher and Bill Thomas ('10s)
White Hill, Utah

Elyssa Belding ('09)
Makhtesh Gadol in the northern Negev Desert

John Sime ('09)
Black Hills Institute of Geological Research
The following attended the annual GSA Alumni Reception held October 5—8, 2008, at the George R. Brown Convention Center in Houston, Texas:

Sara Austin ('02)                         Andrea Koziol (former faculty)
Scott Bair ('73)                           Mike Krivicich ('09)
Elyssa Belding ('09)                       Jade Star Lackey
Brian Bodenbender ('87)                   Katherine Marenco ('03)
Kristina Brady ('03)                       Andrea Martin ('02)
Erica Clites ('06)                         Molly Miller ('69)
Jeff Connelly ('83)                        Tina Niemi ('85)
Ali Drushal ('09)                          Lisa Park ('88)
Caitlin Feters ('09)                      Meagen Pollock
Jessica Hark ('07)                         Fred Siewers ('85)
Karen Havholm ('76)                       John Sime ('09)
Kathy Hollis ('03)                        Jodi Sprajcar ('09)
Aaron House ('04)                         Abe Springer ('87)
Heather Hunt ('09)                        Greg Wiles
Shelley Judge                              Butch Wilson ('68)
Tricia Kelley ('75)                        Mark Wilson ('78)
Mike Kozar ('83)                          

The 2009 annual meeting of GSA will take place at the Oregon Convention Center, October 18—21, 2009. If we remember to bring a camera, we’ll take a group photo at 8:00 p.m. during the Alumni Reception. ✨

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GEOLGY MAJORS

Class of 2009
Elyssa Belding
   Geneva, New York
Ali Drushal
   Lakeville, Ohio
Meggie Edwards
   Lynchburg, Virginia
Caitlin Fetters
   Westlake, Ohio
Heather Hunt
   Lexington, Kentucky
Michael Krivicich
   Athens, Ohio
Robert Nowak
   Lockport, New York
John Sime
   Haddon Heights, New Jersey
Jodi Sprajcar
   Verona, Pennsylvania

Class of 2010 continued
Todd Spillman
   Zoar, Ohio
William Thomas
   Hudson, Ohio

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 J. Risacher
   Westerville, Ohio
Michael Snader
   West Salem, Ohio
Samantha Spencer
   Wooster, Ohio
La Shawna Weeks
   Baltimore, Maryland

Class of 2012
Lindsey Bowman
   Londonderry, Vermont

Class of 2010
Kelly Aughenbaugh
   Wooster, Ohio
Phillip Blecher
   Evanston, Illinois
Travis Brown
   Beverly, West Virginia
Robert Lydell
   Wallingford, Connecticut
Robert McConnell
   Blairsville, Pennsylvania and
   Darby, Montana
Colin Mennett
   Portage, Michigan
Adam Samale
   Nashville, Tennessee
Palmer Shonk
   Dublin, New Hampshire
ACHIEVEMENTS OF THE CLASS OF 2009

front: Elyssa Belding, Michael Krivicich, Ali Drushal, Caitlin Fetters
back: John Sime, Heather Hunt, Jodi Sprajcar, Robert Nowak, and Meggie Edwards

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Academic Honors

Departmental Honors and Honors on Independent Study Thesis

Elyssa Brand Belding
Jayne Alexandra Drushal
Robert Michael Nowak
Awards, Scholarships, Prizes, and Activities

Elyssa Belding
Common Grounds member
Dean’s List, spring semester
Department of Geology Teaching Assistant, fall and spring semesters
Flute Lessons
Geology Club member
Scot Symphonic Band member
Wooster Christian Fellowship member
Elyssa and Michael Krivicich were married on the 20th of June. She will be attending graduate school at The Ohio State University this Fall.

Ali Drushal
Dean’s List, fall semester
Delta Theta Psi webmaster
Department of Geology Teaching Assistant, spring semester
Fighting Scots Volleyball and Women’s track and field teams
Geology Club Vice President
Helped with Girls in Science Day at Knox County
Inter-Greek Council President
Presented research results at the North Central Meeting of GSA in April
Recipient of Charles B. Moke and Dorothy Reid Dalzell Awards
Student Athletic Advisory Committee President
Trip to Maragoli region in Kenya during spring break
In the Fall of 2009 Ali will be attending graduate school at The University of Colorado at Boulder. She will be working towards her master’s degree in geology.

Meggie Edwards
Geology Club member
Swimming and Diving team

Caitlin Fetter
Geology Club member
Highland Dancer
Member of Peace by Peace, Greenhouse, Vegan Co-op, Puebla de Esperanza, and Newman’s Club
Presented poster of research at the fall meeting of GSA in Houston, Texas
Resident Assistant, Douglass Hall

Heather Hunt
Community Concert Band
Geology Club member
Pep Band
Scot Marching Band
This summer Heather worked at the Kentucky Geological Survey, handling oil and gas records for the online database.
In the Fall of 2009 Heather will be attending graduate school at the University of Montana, Missoula.
Michael Krivicich
Common Grounds member
Department of Geology Teaching Assistant, fall semester
Geology Club member
Presented poster of research at the fall meeting of GSA in Houston, Texas
Wooster Christian Fellowship member
Mike and Elyssa Belding were married on the 20th of June.

Robert Nowak
Dean’s List, fall semester
Department of Geology Departmental Assistant, fall semester
Geology Club President
Presented research results at the North Central Meeting of GSA in April
Recipient of Robert W. McDowell Prize in Geology

John Sime
Geology Club member

Jodi Sprajcar
2009 Senior Planning Committee member
Department of Geology Teaching Assistant, spring semester
Geology Club member
Lincoln Way Reads volunteer, a program developed to help elementary students to become better readers
Participated in Scots in Service in the fall of 2008
Phone-a-thon caller for the Alumni Office
President of an all-female a cappella group called the COWBelles
Vice president of Delta Theta Psi
Wayne County Humane Society volunteer

Ali Drushal (’09) in Iceland
ACHIEVEMENTS OF THE CURRENT STUDENTS

Class of 2010
Kelly Aughenbaugh
Geology Club member
Summer I.S. fieldwork in Alaska with Dr. Wiles
Women’s basketball team
Women’s track and field team
Wooster Tree Ring Lab assistant

Phillip Blecher
Geology Club member
Summer I.S. fieldwork in Utah with Dr. Judge

Travis Brown
Bee House
Dean's List, fall and spring semesters
Geology Club member
Effie's Players, student theatre company
Karl Ver Steeg Prize in Geology and Geography
This summer Travis went to Svalbard as part of a Keck project to study the effect of climate change in the Linné Valley.

Robert Lydell
Geology Club member
Department of Geology summer departmental assistant
Department of Geology Teaching Assistant, fall and spring semesters
Summer I.S. fieldwork with Dr. Pollock in Iceland

Robert McConnell
Geology Club member
Men’s varsity indoor/outdoor track team
Summer I.S. fieldwork in Estonia with Dr. Wilson
This summer Rob returned to Montana and continued working at the Triple Creek Ranch

Colin Mennett
Geology Club member
Summer fieldwork in Alaska with Dr. Wiles
Symphonic Pipe Band
Wooster Scottish Arts Society
Wooster Tree Ring Lab assistant

Adam Samale
Geology Club member
Summer I.S. fieldwork in Iceland with Dr. Pollock
Ultimate frisbee player for team RamJam
Palmer Shonk
Geology Club member
Scot Piper
Summer I.S. fieldwork in Estonia with Dr. Wilson
As a piper, led a delegation of Wooster representatives onto the stage at the All-America City competition in Tampa, Florida.

Todd Spillman
Fighting Scots football team
Geology Club member
Summer I.S. fieldwork in Iceland with Dr. Pollock

William Thomas
Department of Geology Teaching Assistant, fall and spring semesters
Geology Club member
Summer I.S. fieldwork in Utah with Dr. Judge

Class of 2011
Rebecca Alcorn
Scot Band
During the summer Becky had an internship with Shaw Environmental and Infrastructure, Inc. inputting data measuring chemicals in groundwater for different sites and making geologic cross sections for various projects and sites.

Jesse Davenport
Department of Geology Teaching Assistant, spring semester
Geology Club member
Judicial Board Hearing Counselor
Math Club member
Mathematics double major
Resident Assistant for Johnson, Kennedy, and Reed Program Houses
Summer research with Dr. Pollock
Trip out west during the summer with Rob Lydell
W.O.O.D.S.

Megan Innis
Dance Class
English Teaching Internship
Geology Club member
IES Study Abroad Program in Vienna, Austria, spring semester
Let's Dance Society
Marching Band
During the summer Megan worked, took summer classes, and enjoyed the great outdoors of her home.
Stephanie Jarvis
AIPG National Student Scholarship Winner
Biology double major
Dean’s List, fall and spring semesters
Department of Geology Teaching Assistant, spring semester
Geology Club member
Helped with Girls in Science Day at Knox County
Summer REU in Kentucky looking at Appalachian headwater health in relation to coal mining and nutrient cycling
Sophomore research assistant to Dr. Solensky in Biology
Swim team

Andrew Retzler
Club Ice Hockey
Geology Club member
Men’s Tennis team
Andrew worked as a summer camp counselor and also enjoyed some backpacking trips during the summer.

Micah Risacher
Geology Club member

Michael Snader
Geology Club member
Trip to Alaska

Sam Spencer
Geology Club member
Swim team
Zeta Phi Gamma Member

La Shawna Weeks
Geology Club member
Sophomore research assistant for Dr. Pollock
Women of Images
REU with the National Center for Earth-Surface Dynamics in Minneapolis, Minnesota, and at Louisiana State University School of the Coast and Environment in Baton Rouge, Louisiana

Class of 2012
Lindsay Bowman
Dean’s List, fall semester
SCHOLARSHIPS AND AWARDS

Following are brief descriptions of the scholarships and awards which have been presented to our Geology majors during this year.

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 Robert Nowak.

Robert Nowak

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 Ali Drushal.

Ali Drushal

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 Stephanie Jarvis.

Stephanie Jarvis
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 Elyssa Belding and Travis Brown.

Elyssa Belding

Travis Brown

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 Kelly Aughenbaugh.

Kelly Aughenbaugh

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 Megan Innis.

Megan Innis
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 Robert Nowak.

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 Travis Brown.

Photo by Travis Brown
Petrology fieldtrip to North Carolina

Structure fieldtrip
Front row: John Sine; Second row: Bill Thomas, Caillinn Fetter, Mike Krivicich, Kelly Aughenbaugh; Third row: Meggie Edwards, Megan Innis, Phil Blecher, Rob Lydell, and Elyssa Belding
Scot Spirit Day, GeoClub lunches in Lowry, the Holiday Luncheon, and the GeoClub picnic – these are only a few activities in which the Geology Club participated during the 2008-2009 year.

2008-2009 Geology Club Officers: 2009-2010 Geology Club Officers:
President: Bob Nowak President: Rob Lydell
Vice President: Ali Drushal Vice President: Rob McConnell
Treasurer: Bill Thomas Treasurer: Kelly Aughenbaugh

2008-2009 Geology Club Presentations:

August 28 Departmental Meeting and Geology Club Photograph
September 4 Dr. Tom Lowell, University of Cincinnati
“The Role of Lake Agassiz in Climate Change – Friend or Foe?”
September 11 Summer Geology Adventures (various students)
September 18 Senior I.S. Seminars
Caitlin Fetters ('09) – “Tlingit Legends and Tree-Ring Dated Little Ice Age Maximum in Glacier Bay During the Early 18th Century”
Michael Krivicich ('09) – “Investigating the Glacial and Climate History of Glacier Bay, Alaska, Through the Tree-Ring Dating of Subfossil Wood”
September 25 Senior I.S. Seminars
Elyssa Belding ('09) – “Jurassic Paleocommunities and Paleoecology in the Matmor Formation (Callovian) of Hamakhtesh Hagadol, Israel”
John Sime ('09) – “The Taphonomy & Paleoecology of a Late Cretaceous Shell-Hosted Cryptic Community (Western Interior Basin, USA)”
October 2 Senior I.S. Seminars
Heather Hunt ('09) – “Paleocommunities & Paleoenvironments of the Logan Formation (Mississippian, Osagean) of Northeastern Ohio”
October 9
Geological Society of America Meeting – Houston, Texas

October 16
Senior I.S. Seminars

Meggie Edwards (’09) – “IRD Associated with Heinrich-like Events, North Atlantic Ocean Site U1314 (IODP Expedition 306)”

Jodi Sprajcar (’09) – “Right-Lateral Strike Slip Faulting Along the Höh Serkh Fault, the Southwestern Border of the Höh Serihyn Durun, Western Mongolia”

October 23
Dr. Alycia Stigall
Ohio University
“Combining Paleoecology and Paleobiogeography to Study the Late Devonian Mass Extinction”

October 30
Dr. Zeb Page
Oberlin College
“Zircons and Garnets and Subduction (Oh my!)”

November 6
Attorneys Doug Drushal, Steve Shrock (’89), Clint Bailey (’03), and John Schaeffer of the law firm Critchfield, Critchfield & Johnston
“What is an Expert Witness and What Do They Do? How Does a Geologist End Up in Court?”

November 13
Berry Lyons
Byrd Polar Research Program
“The McMurdo Dry Valleys Long-Term Ecological Research: The Response of Antarctic Terrestrial Environments to Climate Change”

November 20
Nick Young (’05)
The University at Buffalo
“Using Cosmogenic Exposure Dating to Assess Holocene Warmth on West Greenland and Neoglacial in Alaska”

January 22
Senior I.S. Seminars

Caitlin Fetters (’09) – “Tree-Ring Dated Little Ice Age History and Tlingit Legends During the Early 18th Century in Glacier Bay National Park and Preserve, Alaska”

Michael Krivicich (’09) – “Developing the Glacial History of Middle/Lower Glacier Bay, Alaska Through the Tree-Ring Dating of Subfossil Wood”
<table>
<thead>
<tr>
<th>Date</th>
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<tr>
<td>January 29</td>
<td><strong>Senior I.S. Seminars</strong>&lt;br&gt;<strong>Elyssa Belding (‘09)</strong> – “Jurassic Paleocommunities and Paleoeconomy in the Matmor Formation (Callovian) of Hamakhtesh Hagadol, Israel”&lt;br&gt;<strong>John Sime (‘09)</strong> – “The Taphonomy &amp; Paleoeconomy of a Late Cretaceous Shell-Hosted Cryptic Community (Western Interior Basin, USA)”</td>
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<td>February 12</td>
<td>Mark Wilson, The College of Wooster  &lt;br&gt; Darwin Day Lecture: “Charles Darwin, Geologist”</td>
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<td>March 5</td>
<td>Dr. James Little, Vice President Haley-Aldrich, Inc.  &lt;br&gt;“Geothermal: A Resource for Energy Efficiency”</td>
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<td>March 28</td>
<td>Dr. Timothy Fisher, University of Toledo  &lt;br&gt;“Reconstructing Past Water Levels of the Great Lakes”</td>
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<td>April 2</td>
<td>Dr. Bill Hart, Miami University (Ohio)  &lt;br&gt;“How Old Are We? Discovering our Early Ancestors: A Geologist’s Perspective”</td>
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<td>April 23</td>
<td>Jay Mosley, URS Consultants  &lt;br&gt;“Geology and Water Resources in Private Consulting”</td>
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<td>April 30</td>
<td><strong>Rob McConnell (‘10)</strong> – “Silurian Paleoeconomy and Carbonate Hardgrounds on Saaremaa Island, Estonia”</td>
</tr>
</tbody>
</table>
Front Row: Megan Innis ('11), Ali Drushal ('09), Elyssa Belding ('09),
(left to right) Kelly Aughenbaugh ('10), Michael Krivicich ('09), Stephanie Jarvis ('11),
Jesse Davenport ('11).

Second Row: John Sime ('09), LaShawna Weeks ('11), Jodi Sprajcar ('09),
Robert Nowak ('09), Meggie Edwards ('09), William Thomas ('10).

Third Row: Shelley Judge, Meagen Pollock, Rob McConnell ('10),
Rob Lydell ('10), Caitlin Fetters ('09), Travis Brown ('10).

Fourth Row: Mark Wilson, Patrice Reeder, Greg Wiles, Heather Hunt ('09),
Nick Fedorchuk ('12), Micah Risacher ('11).
Jurassic Paleocommunities and Paleoecology in the Matmor Formation (Callovian) of Hamakhtesh Hagadol, Israel

by

Elyssa Belding

Hamakhtesh Hagadol is an erosional cirque (a makhtesh) located in the northern Negev Desert. The Matmor Formation (Callovian, Middle Jurassic) is exposed in Hamakhtesh Hagadol and contains fossils from a Jurassic equatorial shallow marine environment. The fossils and rock samples in this study were collected from multiple stratigraphic sections. Bivalves, gastropods, sponges, corals, echinoderms, and scleractinians are present in these sections to varying degrees. The preservation of the fossils ranges from original and recrystallized hard parts to internal and external molds. This project also incorporates previous studies conducted in the Matmor Formation by College of Wooster students. This study is the first to combine all the paleontological data into one report. As a result there are a total of six phyla, ten classes, twenty-four orders, fifty-eight known genera, and fifty-seven known species, as well as numerous unknown sponges and corals, within the Matmor Formation.

The fossils from the Elyssa-2 section form two successive communities: The earlier Diverse Echinoderm Community and the later Diverse Mollusk Community. The Diverse Echinoderm Community is found in two subunits (E2-2 and E2-3) which have the highest abundance and diversity of echinoderms. The environment of the Diverse Echinoderm Community was a low energy environment with various pulses of increased sedimentation. The Diverse Mollusk Community is found in three subunits (E2-6 through E2-8) which have the highest abundance and diversity of bivalves and gastropods. This community was in a shallow water environment above the wave base and shallower in depth than the Diverse Echinoderm Community. The substrate was composed of a mixture of fine-grained and coarse-grained sediment that allowed for both epifaunal and infaunal organisms. The fine-grained sediment allowed deposit-feeding organisms to thrive while the coarse-grained sediment allowed suspension-feeding organisms to thrive.
The stratigraphy of the Elyssa-2 through Elyssa-5 sections consists of alternating layers of marl and limestone indicating changes in sea level caused by local small-scale regressions. Normal faulting is present in the Matmor Formation and was contemporaneous with deposition.

The Formation of the Hjallin Lens: A Quantitative Study of Igneous Rock Textures Through Crystal Size Distribution (CSD) and Conductive Cooling Models, Vatnsdalur, Iceland

by

Ali Drushal

Investigation of flexure zones in northwest Iceland has led to questions of the formation of the Hjallin Lens. The lens is an extremely fine-grained, extrusive igneous body 3 km in length and 150-200 m in height. Fresh samples of basalt were collected from the lens in July of 2008. A quantitative analysis of the rock texture using crystal size distribution (CSD) methods was performed on 20 samples to determine the distribution of nucleated plagioclase crystals. Thin sections reveal that plagioclase throughout the Hjallin lens varies in size from 3 micrometers in width and length to 100 micrometers in length and 50 micrometers in width. Backscattered electron composition images were created of each sample on a scanning electron microscope (SEM) at 350X magnification. Length and width of plagioclase crystals on the backscattered electron images were measured using ImageJ by methods previously established by Higgins. Histograms of the crystal size distribution were produced using CSD Corrections (v. 1.38). Textural results of the lens basalt reveal a systematic change from glass and small (~3 micrometer length) crystals at the base of the lens grading upward into larger (~40 micrometer) crystals within 100 meters from the bottom contact. Textural results were related to cooling rate to determine if the lens was emplaced by multiple flows or a single eruptive event. Assuming conductive cooling, the approach modeled by Cashman (1993), and Resmini (2007) was used to determine the cooling rate of the body based on rock textures. The lens cooled within a range of 1 to 5 years, depending on the sample location. These results were compared with a general conductive cooling model proposed by Cashman (1993) to determine if systematic cooling occurred. The
distribution of crystal sizes and variance in cooling rates suggests that the lens was emplaced in multiple events or as a lava lake with catalyzed cooling.

Ice-Rafted Debris Associated with Millennial-Scale Climate Variations and Deep Ocean Stability in the Subpolar Atlantic: IODP Site U1314

by

Meggie Edwards

The mass calving of icebergs and their release of ice-rafted debris (IRD) is contingent upon surrounding environmental influences. These factors, however, are copious and lack verifiability in their perpetration, which is evident in the related critical literature. Through the use of IRD records recovered from ocean cores in Iceland’s Gardar Drift (IODP Site U1314), this study analyzes changes to deep ocean circulation and the glacial history of the subpolar Atlantic during the mid-Pleistocene. The Norwegian-Greenland Sea region, a deep water convection source critical to the production of the North Atlantic Deep Water (NADW), is a region that is climatically sensitive. As a large contributor to the thermohaline circulation, severe weakening of deep water convection in this area would alter the production of the thermohaline, which transports heat and moisture globally. This would also disrupt the regulation of carbon dioxide separation between the atmosphere and the deep ocean, a major control of global climate. Within this study, sand-size fractions (150μm - 2mm) of IRD were observed and mass accumulation rates were calculated to determine peak trends, and petrographically to reveal potential IRD provenance. These samples which were deposited during Marine Isotope Stages (MIS) 12- 15, fall immediately before the mid-Pleistocene transition, where climate variability changed from a 41 kyr trend to a 100 kyr trend. Data records analyzed in this study and studies from neighboring deep water sites reveal a close correspondence to millennial-scale climate change in relation to ice-rafting history and benthic foraminifera isotope (δ18O and δ13C) data. .
Tree-Ring Dated Little Ice Age History and Tlingit Legends During the Early 18th Century in Glacier Bay National Park and Preserve, Alaska

by
Caitlin Fetters

A tree-ring width chronology for Glacier Bay National Park and Preserve was created by crossdating 35 series from 15 logs and 2 cores, with living chronologies from Beartrack and Excursion Ridge in Glacier Bay. This method was chosen to revisit previous studies that used radiocarbon dating, with the objective of obtaining more specific data. By using living chronologies from Beartrack and Excursion Ridge in Glacier Bay, a new chronology has been identified and calendar dated to 1465-1735 AD. Most of these samples in this chronology were overrun in the AD 1720s from their interaction with the Grand Pacific Glacier. The study of this tree-ring series has provided a basis for a more extensive tree-ring chronology of Glacier Bay and helps contextualize Glacier Bay within the Gulf of Alaska region.

Understanding the rate and tracking the movement of the Little Ice Age glaciers is significant because with a rate of 30 mm per year, Glacier Bay is noted for having the most rapid glacio-isostatic uplift in the world, a reaction to the glacial movement which are the subject of this study. From these kill dates, the rate of glacier advance during the Little Ice Age ranged from ~72 to ~490 m per year, the fastest advance rate in Alaska. This data from this study is also compared to Huna Tlingit oral history and through this study it is determined precisely when Bartlett Cove became glaciated.

Paleocommunities and Paleoenvironments of the Logan Formation (Mississippian, Osagean) of Northeastern Ohio

by
Heather Hunt

The Logan Formation (Mississippian, Osagean) is a siliciclastic unit exposed throughout central Ohio. It has not been extensively studied within the past twenty-five years; the most recent study was an Independent Study project performed in 1983. The present study focuses on samples collected from an outcrop near the College of Wooster.
These samples were analyzed and compared to the paleoenvironments and paleocommunities described in previous studies. The Logan Formation was most likely part of a proximal prodelta, being comprised mostly of fine sandstones with some shales and conglomeratic layers.

This study assemblage was a shallow marine filter feeding community dominated by *Aviculopecten* and *Syringothyris*. Other filter feeders include bivalves, crinoids, and bryozoans. A few nektic carnivores, *Mooreoceras* and *Kazakhstania*, preyed on this community, and herbivorous and coprophagous gastropods were also present.

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**Developing the Late Holocene Glacial History of Lower Glacier Bay, Alaska Using Tree-Ring Dating of Subfossil Wood**

by

Michael Krivicich

The glaciers of Alaska have undergone intervals of advance and retreat throughout the Holocene. Over the last 4000 years, the tidewater glacier in Glacier Bay has undergone multiple alternating periods of advance and retreat. Tree-ring analysis and radiocarbon ages from overrun forests provide evidence of these advances.

The oldest dated sample in this study pointed to a possible advance at approximately 4150 BP. Another period of advance, centered on 3000 BP, was constrained by a study in 2007. During the first millennium AD, an advance was determined by the tree-ring dating of overridden logs and may be related to a contemporaneous advance documented in a previous study. Tree-ring dating and the presence of outer rings gave evidence that this advance was occurring by AD 650. Another period of advance is known to have taken place in Glacier Bay during the Little Ice Age. Two samples from this study have been radiocarbon dated to the Little Ice Age advance, but they cannot provide more detail on this advance without tree-ring dating.

The kill dates of AD 650 and roughly AD 1700 are consistent with previous reconstructions of past ice movement within Glacier Bay and other Alaskan glaciers. The first millennium AD and Little Ice Age kill dates have helped to fill gaps in the glacial history of Glacier Bay, in some cases with decadal precision. Since the Glacier Bay glacier was a tidewater glacier, it may not have always responded to changes in climate.
Nonetheless, it is of substantial importance that we understood more about the glacial history and behavior of Glacier Bay and other Alaskan tidewater glaciers.

Protolith Determination of the Hyde School Marginal Gneisses, Adirondack Lowlands, New York

by

Robert Nowak

Elemental and carbon isotope analysis was performed on the distinctive marginal garnet sillimanite gneisses (MGSG), which envelope the Hyde School Gneiss (HSG), located in the NW Adirondack Lowlands. The findings bolster the intrusive model for this Mesoproterozoic suite, opposed to a metavolcanic origin. The trends observed from variation diagrams coupled with rare earth element (REE) plots suggest the MGSG is genetically linked to the alkali-granitic lithology of the HSG through magmatic differentiation. The garnetiferous margins are LREE-enriched and some have negative europium anomalies. The MGSG do not show the HREE-enrichment, which is expected if there had been voluminous melt extraction from these garnet-rich rocks. Also, significant variability and low values of carbon isotope ratios of graphite from the HSG margin rocks challenges the importance of marble assimilation during the formation of the MGSG. The enrichment of Fe and Al within the MGSG is most likely due to hydrothermal alteration. Determining the protolith of the Hyde School Marginal Gneisses aids in the reconstruction of the crustal conditions along the Black Lake Shear Zone (BLSZ), which is theorized to have played an important role in the assembly of the Adirondack Highlands and Lowlands.

The Taphonomy and Paleoecology of a Late Cretaceous Shell-hosted Cryptic Community (Western Interior Basin, USA)

by

John Sime

An ammonite shell-hosted cryptic community is described from the Pierre Shale of the Upper Cretaceous, Western Interior Basin, USA. A shallow epeiric sea covered
much of western North America from the late Aptian to the early Paleocene. Baculite ammonites are abundant fossils in the marine sediments and important index fossils in the biostratigraphy of the Western Interior. The shells of these ammonites were habitat for a cryptic community. The encrusting fauna is preserved in imbedded in the surface of concretionary steinkerns. The unstable ephemeral substrate of the baculite shells supported a sparse low diversity cryptic community relative to communities on more stable cryptic habitats. This includes cheilostome and ctenostome bryozoans, enigmatic encrusting skeletobionts, hydroids, *Radulichnus* Voigt. Exceptional preservation of softbodied ctenostomes and hydroids and the firmground sediment trace Arachnostega indicate that the concretions formed early in diagenesis. The baculite shells experienced necroplanktonic dispersal after the death of the ammonite. Finally, an allogenic ecological succession is driven by the passage of the shell with skeletobionts through environments to which the larvae of and individual skeletobionts were restricted. Pelagic recruitment and fouling, grazing regime, bryozoan encrustation and burial.

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*Calculating the Rate of Dextral Strike-Slip Faulting Along the Höh Serh Fault, the Southwestern Boundary of the Höh Serhiyn Nuruu in the Mongolian Altai, Western Mongolia*

by

**Jodi Sprajcar**

The Höh Serh Fault is one of many active transpressional structures in the Mongolian Altai mountains that is accommodating for the high amount of strain being caused by the Indo-Eurasian Collision. The Höh Serhyin Nuruu, the larger range that the Höh Serh is the southeastern boundary of, exhibits much evidence for late Quaternary faulting events. Along the length of the Höh Serh there is thrust faulting and dextral strike-slip faulting, however, the area being researched for this paper only has an aspect of dextral strike-slip faulting. The thrust faulting can be found just south of the area being discussed in this paper. Along the length of the Höh Serh in this field area is evidence for dextral movement, which is seen in offset shutter ridges, alluvial fans, and drainage channels. Glacial history of this area implies that these alluvial fans and drainage channels were created after the Last Glacial Maximum (LGM), approximately
10000 years ago, and were offset afterwards due to faulting along the Höh Serh. The offset measurements taken in the field season in 2008, and along with the glacial knowledge, were used to calculate the minimum, median, and maximum slip rates along this section of the Höh Serh Fault. ✤

Todd Spillman, Rob Lydell, and Adam Samale ('10s)
Glacial Cave in Iceland

Jodi Sprajcar ('09) in Mongolia
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.

Wednesday, April 15, 2009, was the date of the Twenty-Eighth Annual Richard G. Osgood, Jr., Memorial Lecture in the Department of Geology.

David A. Burney, Ph.D., Director of Conservation at the National Tropical Botanical Garden in Hawaii, presented “Digging into the Past to Find the Future: Paleoecology Meets Restoration Ecology.”

Dr. David A. Burney joined the NTBG as Director of Conservation in 2004, and also became Director of Living Collections and Horticulture in 2006.

Dr. Burney’s past research has focused on endangered species, paleoenvironmental studies, and causes of extinction. He has over 30 years of practical experience in conservation, including serving as a technical consultant for Wildlife Conservation Society, Conservation International, The Nature Conservancy, BBC Natural History Unit, National Museums of Kenya, United Nations Development Program, U.S.D.A., U.S. Fish & Wildlife Service, and other organizations.

Prior to moving to Kaua`i he was a Professor at Fordham University in New York for 15 years. He received an M.Sc. in Conservation Biology from the University of Nairobi (Kenya) and a Ph.D. in Zoology with a minor in Botany from Duke University. He is author of over 100 scientific articles and monographs, many concerning the processes of extinction and environmental change. In 2006 he was awarded a Guggenheim Fellowship to write a book on his work at Makauwahi Cave on Kaua`i, coming out soon at Yale Press. His research has been featured on National Geographic Television, Discovery Channel, Hawaii Public Television, NOVA, and National Public Radio.

With his wife Lida Pigott Burney, he has established the Makauwahi Cave Reserve on Kaua`i to protect, research, and restore Hawaii’s richest fossil and archaeological site and reestablish thousands of native plants on the surrounding landscape. He is currently carrying out large scale native plant restorations at Kilohana Crater, Nu`alolo Kai, Lehua Islet (Niihau), and NTBG’s Limahuli and Lawai gardens.
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<td>John Pojeta, Jr.</td>
<td>United States Geological Survey</td>
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<td>1983</td>
<td>J. William Schopf</td>
<td>The University of California, Los Angeles</td>
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<td>1984</td>
<td>David Jablonski</td>
<td>The University of Chicago</td>
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<td>1985</td>
<td><strong>Walter Manger (’66)</strong></td>
<td>The University of Arkansas</td>
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<td>1986</td>
<td>Susan Kidwell</td>
<td>The University of Chicago</td>
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<td>1987</td>
<td>Niles Eldredge</td>
<td>The American Museum of Natural History</td>
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<td>1988</td>
<td>Steven Stanley</td>
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<td>Paul Taylor</td>
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<td>Erle Kauffman</td>
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<td>Rodney M. Feldmann</td>
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<td><strong>Molly F. Miller (’69)</strong></td>
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<td><strong>John Van Wagoner (’72)</strong></td>
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<td>Adrienne Zihlman</td>
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<td>Martin Lockley</td>
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<td>Timothy J. Palmer</td>
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<td>Bruce Latimer</td>
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<td>The Ohio State University</td>
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<td>2005</td>
<td><strong>Patricia H. Kelley (’75)</strong></td>
<td>University of North Carolina at Wilmington</td>
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<td>2006</td>
<td>Dr. Orrin H. Pilkey</td>
<td>Duke University</td>
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<td>2007</td>
<td>Dr. Richard Alley</td>
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<td>2008</td>
<td>Dr. Paul Olsen</td>
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<td>2009</td>
<td>David A. Burney</td>
<td>National Tropical Botanical Garden, Hawaii</td>
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**The 2010 Osgood Lecturer:**
Whitey Hagadorn, Curator of Earth Sciences
Denver Museum of Science and Nature
Gladys (Fisher) Colwell ('58) and her husband, Peter, were on campus for their 50th class reunion. She met her husband in a freshman geology class taught by Dr. Moke. She happily noted that “Scovel Hall had not changed much, at least on the outside.” Their son, Tom, majored in geology and does environmental work in the Denver area.

Michael Eisenstat ('70) was featured in a September 21, 2008, article in the post-gazette.com titled “Farmer returns to roots in agriculture.” You can read the entire article at http://www.post-gazette.com/pg/08265/913246-34.stm.

Congratulations to Kaz Aoki ('77) who completed his doctorate in subsurface microbiology.

Martha Edick DeLong ('78) has been in New Zealand for almost nine years, doing strictly environmental work, but using her geology every single day (from asbestos mineralogy to contaminated soils - hydrocarbon geochemistry). She lives in Auckland and would be happy to help anyone coming to visit. Martha says, “Woo Geo would LOVE NZ.”

Mark Edwards ('80) loves living in Austin, where they actually have outcrops.

Bill Weidner ('80) recently sold his oil and gas investment business to New York-based Rodman & Renshaw, but continues to be very active arranging and managing equity and debt financings in the independent oil and gas industry.

In May of this year Massachusetts College of Liberal Arts (MCLA) announced the tenure appointment of David Eve ('82), an assistant professor in computer science who has been with MCLA since 2005. David received an Ed.D. in leadership and administration and an M.Ed. in secondary sciences from UMASS-Amherst.

After many years with the University of Texas at Dallas, Nathan Miller ('82) spent 2007 at the University of Missouri at Rolla. Then in early 2008 he accepted a position in the Department of Geosciences at the University of Texas at Austin. This year has been full of travel with Snowball Earth excursions in Namibia and Norway. He was an invited keynote speaker at the 33rd ICG meeting in Oslo. He saw fellow classmate Tim Miller ('82) in Columbus at OAT Hockey Weekend festivities.

Brian Carl ('87) and his family still live in Brunei. You can view their pictures at http://picasaweb.google.com/karen.inbrunei or send them an email at carlsinbrunei@yahoo.com. They hope this adventure will last another year or two.

Matt Owens ('89) has been with the Parsons Corporation for 17 years. He is currently the Senior Project Controls Specialist at their Richmond Heights, Ohio, facility. Now the only rocks he gets to see during work are those from the collection on his desk. He and his wife, Mary, have two daughters (5 and 7) who keep them busy. He says, “Watching
them grow and my hair slowly thin drove me to buy a motorcycle this year. My mid-life crisis does get great gas mileage, though, and is a fun way to commute. Love to hear from past or present C.O.W. geology folks.”

Rob Anderson (’94) was on campus during Alumni Weekend and spent some time reminiscing in Scovel. He ventured into the IS carrels and noticed how little they had changed in 15 years. Rob is beginning his fifth year of residency at the University of Maryland as Chief Resident of Internal Medicine and Emergency Medicine. He and his family may move to Maine next year where he hopes for a faculty position at Maine Medical Center. Their current address is Melina and Rob Anderson, 2600 Ken Oak Road, Baltimore, MD 21215.

John Parsons (’94) also stopped by Scovel Hall during Alumni Weekend. He explored the classrooms and labs and commented that Scovel still has the same smell he remembers from when he was a student.

Suzanne (Spring) Berryman (’97) sent us a note that she has been putting together educational programming for a new Triceratops fossil at the Museum of Science, Boston. She has been having fun with visitors as she challenges them to think about classifying fossils. She even used one of her old geology textbooks to train some volunteers on geologic time and rock dating.

Congratulations to Megan Mandernach Shober (’99) and her husband, Arnie, on the birth of their second daughter, Gretchen.

Russell Kohr (’01) and his wife, Sarah, welcomed their first son, Joseph Micaiah, into their hearts and home on February 15, 2008. Best Wishes!

As part of Sara Austin’s (’02) training program at Devon, she was transferred into the Houston-based Deepwater Gulf of Mexico group last fall. Her new address is 1 Hermann Park Court, Apt. # 121, Houston, Texas 77021; her cell phone number is the same.

In March, Jerome Hall (’02) began working for Shell in Houston. His wife, Sarah Rilling-Hall, finishing her Geology Ph.D. at the University of Michigan and also began working for Shell. After a brief five-year stint of information technology work for Jerome, he is back to his geology roots in exploration and couldn't be happier.

Andrea Martin (’02) has been promoted to Communications Manager at AGI.

Katherine N. Marenco (’03) successfully defended her dissertation on August 21, 2008. Congratulations!

Charlene (Adzima) and Josh Michaels (’05s) moved to Reno, Nevada. Josh is in the graduate studies program at the University of Nevada-Reno in Structural Geology. Char hopes to teach Irish fiddle and work a regular engagement at a casino or pub. There is also the chance she might do geological consulting. They will likely be in Reno for the next four years and are happy to pull up some bed/futon/floor for anyone who would like to come visit. Their mailing address is: 2777 Northtowne Lane, A2004, Reno, Nevada 89512.
Monica Umstead ('06) has been accepted into Ursuline College’s Early Childhood Education program. She hopes to obtain her master’s degree next summer. With her Education Degree she hopes to teach either Kindergarten or be an Elementary school science specialist.

Meredith Sharpe ('08) will be attending the Case Western Law School in Cleveland, starting in August.

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Although we as a department celebrate the accomplishments and news we have from our alumni, we are also saddened by the death of the following alumni and friends:

Robert W. Anderson, Jr. ('48)
February 26, 2009

Robert L. Hawk ('50)
April 11, 2008

Richard S. Ewing ('58)
February 8, 2009

William R. Lang ('56)
June 9, 2008

C.E. Hannum ('35)
September 3, 2008

Clyde T. Metz ('50)
January 26, 2009

H. Gray Multer, 82, of Horseheads, NY, formerly of Arkport, NY, died peacefully at his home on Thursday, October 23, 2008, after a long battle with several cancers. He was born in Syracuse, NY, son of the late Bertha and Harold Multer. Predeceased by this first wife Barbara Love in 1962, he is survived by his wife Susan of 36 years; daughters Christy Multer of Glenville, NY, and Jenny Monroe of Corning, NY; grandchildren Leah Fagerstrom, Sean Monroe, Paul Filbrich and Fletcher Monroe; great grandchildren Kaitlyn and Lucas Monroe.

During his years at Arkport Central School, Gray earned the rank of Eagle Scout and played on the varsity basketball team, winning the county championship. Before graduation he enlisted in the U.S. Navy at age 17 and served on the bridge of a destroyer in the Pacific doing picket duty off Okinawa. He received a medical discharge after the war.

Gray earned his A.B. and M.S. degrees from Syracuse University and was employed for two years as a petroleum geologist with the Texaco Oil Company in California. After he earned a Ph.D. degree from Ohio State University, Dr. Multer had a thirty-year career as Professor of Geology, first at The College of Wooster (where he was also Elder and Superintendent of Sunday School at the Westminster Presbyterian Church) and then at Fairleigh Dickinson University (where he was founding Chairman of its Department of Geology on the Madison, NJ, campus and founding Director of its marine laboratory in St. Croix, U.S. Virgin Islands). He also lectured at the Danforth Foundation, was Visiting Professor at the University of Miami and Bermuda Biological Laboratory, was Director of National Science Foundation-sponsored Short Courses for College Teachers, and a Fulbright Scholar and Senior Professor at Marburg University in Germany.

Dr. Multer authored or coauthored over 70 scientific publications and several books. He received the 1985 John Moss Award for Excellence in College Teaching and a 2008 Honorary Membership from the International Society for Reef Studies for his
distinguished coral reef research and service to the society. In retirement he continued research in Antigua and the Florida Keys. He also worked as a consulting environmental geologist on various projects in the U.S. and overseas.

Gray served as an Elder at the United Presbyterian Church in Hornell and later on the Board of Trustees at the Union University Church in Alfred. He was a volunteer with Habitat for Humanity and at Vincent House for patients on Hospice. He was a founding member of the Steuben County chapter of the League of Women Voters.

A joyful Celebration of Life service and reception was held on November 23, 2008, at the interdenominational Union University Church in Alfred.

-Obituary from Gray’s wife, Susan Multer

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The Iceland Woo Crew completes a successful field season and walks off into the sunset (if only the sun would set!).
SPECIAL THANKS

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 also to Andy Turner ('90) and David Morse ('67) for their gifts to The W. R. “Ted” Danner Fund.

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 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.

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The Wooster 2009 Estonia Geological Research Team
Palmer Shonk ('10), Rob McConnell ('10), and Mark Wilson
Photograph taken by Bill Ausich.
ALUMNI INFORMATION SHEET
Department of Geology
Twenty-Third Annual Report
August 2009

Name: ________________________________________________________________
Maiden Name (if applicable): __________________________________________

Class: ___________________________ I.S. Advisor: __________________________

Home Address: _______________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Telephone: ________________________ E-mail: _____________________________

Advanced Degrees: ___________________________ Year: ___________________

Institution: ___________________________________________________________________
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Business Name and Address: ______________________________________________
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_____________________________________________________________________

Telephone: ________________________ E-mail: _____________________________

Occupation: ___________________________________________________________________

Title: ___________________________________________________________________
(or attach business card)

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://www3.wooster.edu/geology/alumniform.html, 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, houses 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