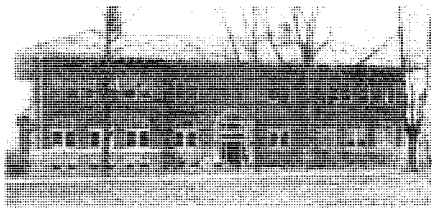
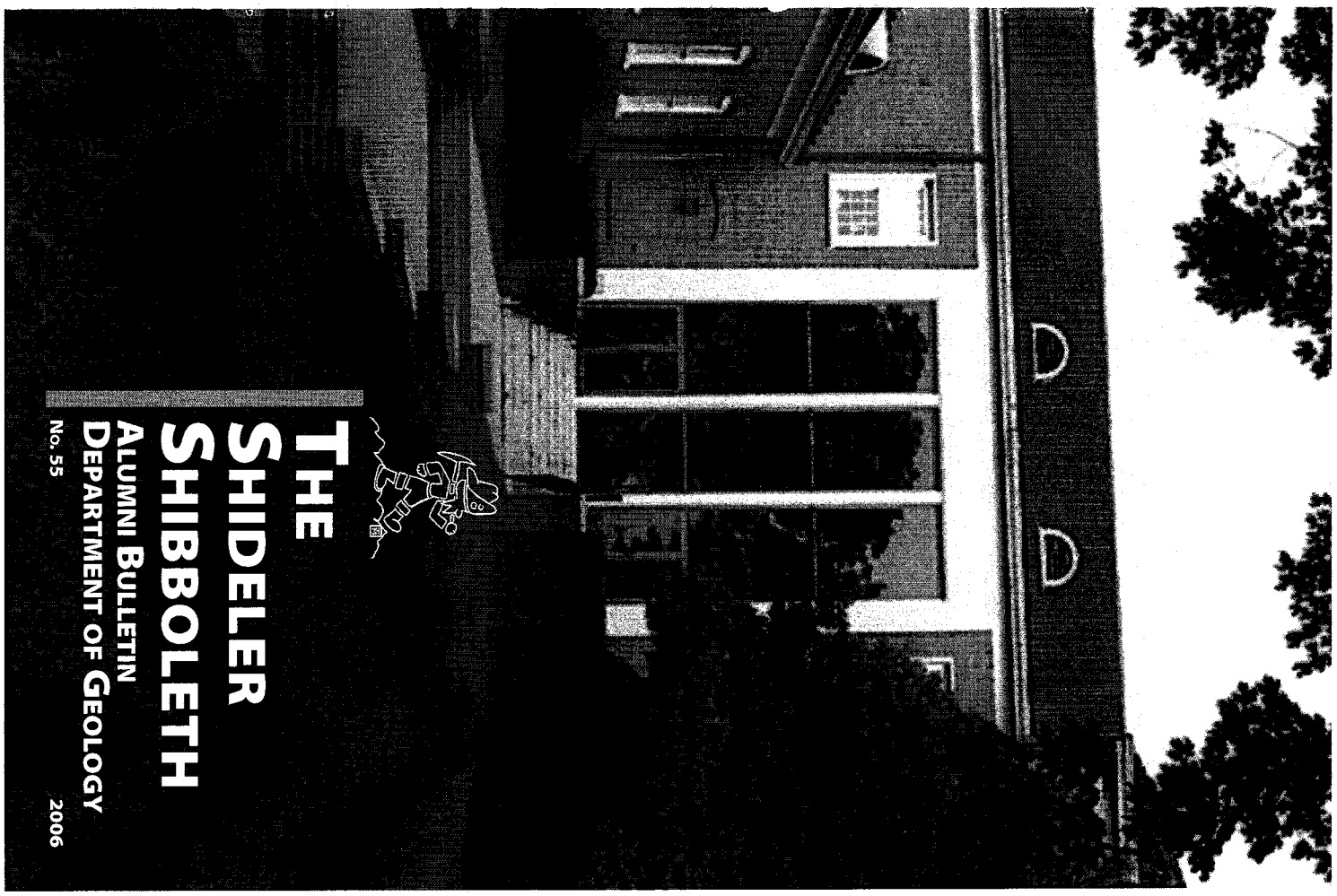
Department of Geology
114 Shideler Hall
Miami University
Oxford, Ohio 45056



Brice Hall

MIAMI UNIVERSITY
OXFORD OHIO



Miami University Department of Geology
2005/2006 Faculty and Staff

Mark R. Boardman – Professor & Director IES
Michael Brudzinski – Assistant Professor
Brian S. Currie – Associate Professor
Yildirim Dilek – Professor
Hailiang Dong – Associate Professor
Cathy Edwards – Master Administrative Assistant
Susan Flowers – GSAB Senior Program Assistant
William K. Hart – Professor & Chair
Kendall Hauer – Museum Manager
Paul Holm – Visiting Assistant Professor
Jeanne Johnston – Accounting Associate
Kathryn Kilroy – Visiting Assistant Professor
Dave Kuentz – Visiting Instructor
Jonathan Levy - Associate Professor
John Rakovan – Associate Professor
Jason Rech – Assistant Professor
Janelle Sikorski – Visiting Instructor
Darin Snyder – Postdoctoral Associate
Elisabeth Widom – Associate Professor

Miami University Department of Geology
Website Information

Departmental Web Address
www.muohio.edu/geology

Field Station Web Address
www.muohio.edu/fieldgeology

Limper Museum Web Address
www.cas.muohio.edu/limpermuseum/

ALUMNI COMINGS AND GOINGS

(fill in sheet, tear out and return to)

Cathy Edwards
Department of Geology
Miami University
Oxford, OH 45056

NAME:_____

Last First Maiden/ Middle Degree/ Yr. Rcd.

NEW (since last report) Position, Address, Mate, Degree, Family Members?

_____

_____

_____

_____

_____

_____

OTHER NEWS (Please let us know what you have been doing):

_____

_____

_____

_____

_____

_____

_____

_____

Please return to us by May 31, 2007!!

FROM THE EDITOR'S DESK

Cathy Edwards

Fourteen years and I'm still sitting in the same chair! I can't believe how much time has passed. You will remember from last year, that we welcomed a new Senior Account Clerk to the department and now that some time has passed, she has settled in and is doing a great job. The department also conducted a national search this past spring to finally fill the museum curator's job. Kendall Hauer has held the interim museum manager position since the retirement of Joe Marak. After interviewing two outside candidates, as well as Kendall, the department was pleased to offer the position to Kendall on a permanent basis. Of course, he accepted our offer!

On a sadder note (much sadder), John Hughes will be leaving the University in mid-June to head to Burlington, Vermont where he will be taking over as Provost and Senior Vice President of the University of Vermont. I am extremely saddened by the news, as John and I have been through a lot together in the past 14 years. However, I am very happy for him and his wife Susan. They will actually get to live together for a change, as Susan has been teaching for the last several years at Butler University in Indianapolis. We all wish John and Susan the best!!

The department hosted its fifth annual Baldwin Frontiers in Geology Lecture on Wednesday, March 2nd. This year's lecture was given by Jeff Post from the National Museum of Natural History. Jeff spoke on, "The Hope Diamond and other Smithsonian Gems: Science and Lore". The talk was attended by approximately 175 people with a reception being hosted in Shideler Hall immediately following the talk. Please watch for news on our website for information on next year's talk. Also, please remember to visit the website for the Alumni Update Form or continue to send in the update card in the back of this issue. As always, I welcome any suggestions for changes to the Shibboleth in order to make it better.

The department continued to experience quite a bit of success; Brian Currie and Hailiang Dong were awarded tenure and promoted to associate professor standing, while many faculty members received grant funding from various national sources.

I am also pleased to report that, for the first time since they graduated, Pete Cox (M.S. '93), Michelle Troksa Croasdaile (M.S. '92), Andrew Perham (M.S. '92) and Chloe Hutto Russman (M.S. '92) recently came to town for a visit with the departmentís former account clerk, Jeanne Via and myself. We were also joined by Kendall Hauer and enjoyed a wonderful afternoon of cornhole games, burgers and hotdogs, and reminiscing. It was wonderful to see all of them again after so many years and catch up with them and hear about their spouses/ significant others and children!

Personally, life continues to be wonderful. Mitch (21) just finished his junior year at Miami and has decided to major in geography and minor in geology. He did a lot of hunting this past fall and "bagged" his first two deer ever. They were both small doe, but it was exciting

nevertheless! Derek (18) is finally graduating from high school with a focus in carpentry. He has a full-time job at Pella Entry Systems in Fairfield, Ohio. He is going to try taking one or two courses at Miami Hamilton and see how he likes college life.

Last year, Doug was offered a position with a large new hardware store here in town, but decided to stay with the smaller,"mom and pop" hardware store he worked at the previous year. This turned out to be the wisest decision he ever made. After some thoughts of leaving the geology department, I have decided to stay put and finish out my time (hopefully) here. There is too much about the department I would miss if I went elsewhere! So, until next year...

FROM THE DESK OF THE CHAIR

William K. Hart, Chair

Greetings from the Department of Geology! It is hard to believe that yet another year has passed so rapidly. At the Department level this year has been a busy and successful one, as you will learn throughout the following pages. At the College and University levels this year marked the onset of much change; the first year with a new Provost, appointment of a new Dean in the College of Arts and Science, and appointment of a new President. An additional major change in the upper administration will take place as of July 1, a change that has a profound impact on the Department (see below). In these dynamic and challenging times, it is indeed a pleasure and an honor to oversee the continued evolution and success of the Department, and to communicate to you the activities and achievements of our faculty, staff, and students.

Faculty and Staff Update

It is with both congratulations and a sense of loss that we bid farewell to John and Susan **Hughes**. As of July 1 John is stepping down as Dean of the Graduate School and Associate Provost for Research and Scholarship and as Professor of Geology in order to assume the position of Provost and Senior Vice President at the University of Vermont. John has had a very successful 25 years here at Miami as a teacher, scholar, and administrator. Countless students and colleagues have benefited from his mineralogic expertise, his outstanding mentorship and leadership, and his warm friendship. On a personal note, John and I go back a long way. We overlapped as undergraduate students at Franklin & Marshall College in the early 1970s and share fond memories of field work in and around the Medicine Lake Highlands of northeastern California and lab work in the thin section, rock crushing, and x-ray fluorescence laboratories in the then Department of Geology at F&M. We extend our sincere thanks and best wishes to John and Susan Hughes as they head off to the mountains of the northeast!

It is with great pleasure that the Department extends its congratulations and welcomes Brian **Currie** and Hailiang **Dong** to the Associate Professor ranks after their successful receipt of tenure and promotion. We look forward to their continued teaching and research successes and the positive impacts that they will continue to have on our students for the years to come. By the way, at this

Jack Garbutt '36
Satya Gargi '85
David L. Giles '60 & '63
Jeffrey Goshorn '76
Mary Graham '38
Wilbert Grove '28 & '35
Ronald Grygo '62
Timothy Gustafson '83
Donald R. Hassell '72
George Henry, Jr. '67
Joseph Herbert '68
Kurt Herman '97
Jill Hippsley '84
Lillie Holton McGinnis '79
Ronald Hood '69
Seth Horstmeyer '00
John Humphreys '94
Terrie Ireland '84
Donald Jessiman '44
Cynthia Barnhart John '74
Joseph A. Kelly '35
Scott R. Kindt '88
Mark Kochan '77
Anne Kogge
Thomas Kridler '82
Jacqueylynn Fritz Loomis '79
Christl Marie Leutz '86
Jillian Lynch '01
Michael Madlen '60
Sue Ann Marshall-Roberts '84
David McMonigle
Denis Meanor '76
John Metzger
Bruce E. Miller '69
Mark Miller '83
Phillip Molling '79
Austin F. Moore '79
Douglas Morell '73 & '78
Laura Lynn Morris '91
David Nielson '74
Catharine Graves Norman '73
David Olson '82
Robert Overhuls '48
Gerald Peterson '51
Cyrus Porter '38
John W. Queen '86
Mary Gaston Rahn '74
Jacob Ratliff '83
Joseph Reese '50
Harriet Leeds Robison '60
Peter B. Schmidt '55
Jeannette Schmitz '00
Tim Seidl '60
Ronald Silver '73
Jack Slayton '51
Edgar Smith '71
William F. Smith '55
Walter Sonnichesen '40
John Spangler '51
Richard Stafford '51
Nancy Reddin Stanley '81
Douglas Stewart '53
Betty Swartz '82
Frank Turner '48
Richard Tyszka
George Ulachos '39
Valerie Walker '74
James Warner
Jerry Weidner
Charlene K. White '88
Philip Wilcox '81
William R. Williamson '54
Josephine Wolter '48
James Young '59

CONTRIBUTIONS BY ALUMNI AND FRIENDS TO THE GEOLOGY DEPARTMENT (June 1, 2005 through May 31, 2006)

This list is presented alphabetically, with sincere thanks to all of you!

Dwight & Barbara Baldwin
Charles Balyeat
Daniel Barnett
William Bishop
Mark R. Boardman
David Eyler
William Fausey
David Flinn
Mark & Lois Frye
Margaret Guccione
Earl Harris, Jr.
William K. Hart
Greg & Carol Hatch
Frank & Claudette Herbert
Louise Limper
Randy & Layne Listerman
Charles Lotreck
Wayne & Helen Martin
Mary McPherson
Brian Payne
David Schuster
Peter Selover
Nancy Shade
John Slack
Thomas Stephenson
Craig & Bev Stichtenoth
Estate of Robert Storch
Thomas & Carol Swinehart
George Vandersluis
Betty White

LOST ALUMNI

If anyone has information regarding a person(s) on this list, please let us know so that we can update our files and assure that these people continue to receive Departmental news

William Adams '78
Wendy Ahlschlager '73
Namik Atalan '70
Valija Axelrod '65
Lina Balseiro '54
Francisco Barrientos '57
Kevin Bartol '89
Sheldon Bergman '51
Elizabeth Keller Bishop '84
Robert Bluhm '57
Katherine Boulger '75
David Bratton '83
Thomas Brown '79
Todd C. Brown '84
R. Craig Butler '78
Thomas Camp '68
C. Merlin Campbell '44
Robert Carlson '54
Chi-Jen Chang '49
Nicol Chojnowski '95
Shannon Collier '00
Robert Cunningham '43
Philip Davis '74
Lewis Davison '52
Bonnie Blake Eberlin '81
Lawrence Evans '84

writing, both are out of the country on research trips, Brian to Tibet and Hailiang to China. Dr. Michael **Brudzinski**, our newest tenure-track assistant professor (solid earth geophysics), certainly hit the ground running this year. Congratulations to Mike on the receipt of three National Science Foundation research grants and, of course, for surviving his first full year in residence. I also am pleased to report that Yildirim **Dilek** served in his second year as a Harrison Scholars Professor, a position that required his time to be split between Geology and the Honors and Scholars Program during this past academic year. Yildirim will continue in this role again next year. In addition, two Geology faculty (**Hart** and **Hughes**) were honored to be elected as Distinguished Scholars of the Graduate Faculty.

The Karl E. Limper Geology Museum remains a very important departmental teaching and research resource and plays an ever-growing role in our public educational outreach and geology student recruitment efforts. I am very pleased to inform you that after a national search Dr. Kendall L. **Hauer** (Ph.D. 1995) has been selected as the new Museum Manager. Kendall has been serving in this capacity on an interim basis since January 2002 following Joe Marak's retirement. While congratulating Kendall on this appointment, I also take this opportunity to invite you to stop by the museum and see the many new and redesigned displays and the modifications that are in progress.

And finally, I would like to acknowledge the excellent job that our numerous visiting faculty/staff are doing. They have been instrumental in allowing us to meet the very high university-wide demands for introductory geology courses and have been contributing in numerous other teaching, research, and technical capacities. Our cadre of visitors includes Dr. Paul **Holm** (part-time visiting assistant professor), Dr. Kathryn **Kilroy** (visiting assistant professor), Dave Kuentz (instructor/isotope lab manager), and Janelle **Sikorski** (instructor). All four have been reappointed for the coming academic year.

A Brief Summary of Activities

During the 2005-2006 academic year the Department of Geology furthered its strong commitment to undergraduate and graduate education, faculty and student scholarship, and professional activities and service. This year the department profile included nine full-time, in-house faculty (11 total), four visiting faculty, two research associates, two active emeritus faculty (**Martin** and **McWilliams**), four support personnel, 40 majors and minors, and 25 graduate students.

Nearly 100 students participated in the two department hosted thematic sequences (Oceanography and The Water Planet) and approximately 2,700 students were enrolled in Geology Miami Plan Foundation courses (The Dynamic Earth, Understanding the Earth, Environmental Geology, and Geology of the US National Parks). The department also offered two honors courses, Gems and Gem Mineral Formation (**Rakovan**) and Understanding the Earth (**Hart** and **Snyder**), and a first-year seminar course in Earth History and Evolution of Geology (**Currie**). Over 700 teachers and non-traditional students participated in on-campus and distance learning workshops and courses sponsored by the Department of Geology. Field experiences linked to many on-campus courses and the number of independent study commitments remained high. Our emphasis on field-based

education extends into the summer and over spring and winter breaks. For example, this year, approximately 110 undergraduate and graduate students and 85 Ohio teachers benefited from 9 national and international workshop courses ranging from one to five weeks in duration. In addition to these field-based experiences, Geology faculty (**Brudzinski, Currie, Dilek, Dong, Levy, Rech**) also supervised the laboratory and/or field oriented independent research of numerous Miami undergraduate students, including mentorship of one Undergraduate Summer Scholar, five presentations at the Miami University Undergraduate Research forum, and numerous publications and presentations at regional and national meetings.

This has been another excellent year for Geology faculty and student scholarship. The faculty received 15 new externally funded equipment, research, and education grant awards totaling over $960K (**Brudzinski, Currie, Dilek, Dong, Hart, Rakovan, Rech, Widom**), and 23 new internal grants ($57K) in support of teaching and research. Our undergraduate, M.S., and Ph.D. students were very successful in obtaining approximately $25K from external and internal sources in support of their research and conference presentation efforts. In addition, the department generated 30 research papers in leading journals and edited volumes, including two in Nature (**Currie** and **Hart**) and one in Science (**Brudzinski**), 17 published reports/notes/reviews, and 60 published abstracts of formal meeting presentations. Over one-third of these contributions were authored or co-authored by Miami undergraduate and graduate students. We look forward to continued and enhanced student research contributions from our undergraduate students next year and from our current graduate students and a very strong group of entering graduate students.

The research activities and overall profile of our faculty and graduate students are diverse and multi-national. Ongoing collaborations with scholars throughout North America and from countries such as Albania, Argentina, Chile, China, Egypt, Ethiopia, France, Great Britain, Greece, India, Jordan, Kenya, Italy, Japan, Norway, Pakistan, Poland, Portugal, Romania, Russia, Turkey, and Zambia have yielded field and laboratory opportunities for our undergraduate and graduate students.

The department also contributed to a spectrum of professional, community, and university organizations and functions this year. Numerous Geology faculty members served as officers of major international scientific organizations (**Dilek, Hughes, Rakovan**), as editors of major journals and edited volumes (**Dilek, Rakovan**), and as conveners of national and international symposia. Our faculty continued to serve on a variety of college and university committees and actively contributed in a number of other arenas, including the Honors and Scholars Program, the Institute for Environmental Sciences, the School of Interdisciplinary Studies, the Graduate Teaching Enhancement Program, CELT, Project ESTEEM, University-wide assessment initiatives, the Environmental Science Co-Major, and the Institute for Learning in Retirement, to name a few. Accompanying these commitments, faculty, staff, and graduate students were very active in outreach to local school districts and to local/regional professional organizations. Many of our outreach activities are linked to the Limper Geology Museum (**Hauer**).

Storch, Robert (B.S. '49, M.S. '50) – Robert passed away in January, 2005 in Denver, Colorado. Robert earned a bachelor's degree in marketing and advertising from Miami University and a Master's in geology, also from Miami University.

Robert was an independent consultant associated with Ball Associates, Ltd. in Denver, Colorado. Robert was a big supporter of the Geology Department and will be missed by all who knew him.

IN MEMORIUM

Since the publication of last year's edition of the Shideler Shibboleth, we have received notice of the death of the following alumna, friends and faculty of the Department:

Morrow, David L. (A.B. '48, M.S. '49) – We learned of the passing of David last July. If anyone has any details regarding David's life, family, etc. please pass them on to me for inclusion in next year's Shibboleth.

Murray, Ted Robert (A.B. '42) – We recently learned of Ted's September, 2003 passing. Ted grew up in Indianapolis, IN and after graduating from Miami he worked for Cities Service Oil Company for 35 years in the Oklahoma and northwest Texas area. His wife of 58 years, Alice, preceded him in death.

Ted is survived by his brother Jim, a sister Virginia, his daughter Barbara, his son Robert, 4 grandchildren and 6 great-grandchildren.

Reinhart, Roy (B.S. '41, Geology Dept. '51 – '82) – Sadly Roy passed away on December 11, 2005 after a brief illness. Roy earned his B.S. here at Miami University in 1941, a Master of Science from the University of Chicago and his Ph.D. from the University California, Berkeley. Married to Betty Whitesell while an undergraduate student at Miami they enjoyed 64 years of marriage.

Roy served with honor and distinction in WWII as a lieutenant Combat Engineer, commanding a unit in Patton's Third Army. He helped with the Allied Liberation of Paris, fought in the Battle of the Bulge and Crossing the Rhine and helped liberate Buchenwald. Roy then went on to found the Department of Geology at West Texas State College before coming to Miami to teach paleontology.

Roy was a renowned educator and author winning the AK Morris Award in 1991, the John E. Dolibois Award in 1994, and served on the board of the Miami University Alumni Association and the Hughes Society for several years. He and Betty were named Parents of the Year in 1972. Through a bequest, now known as the Reinhart Reserve, Roy was able to preserve a 44-acre tract of land in its natural state for future generations.

Roy was an avid cross-country runner most of his life and a naturalist who eagerly pursued fossils of all kinds. He discovered and described a new Order of marine mammals, Desmostylia, one of a handful of new Orders described in the 20th century. Over Roy's lifetime, he developed one of the finest collections of Mound Builder relics in the United States. He was an accomplished artist and cartoonist, whose work ran in various newspapers.

Roy is survived by his wife Betty, daughters Johanna of Reston, Virginia and Jan Christine of Oxford, a son William and his wife Sandra of Rockville, Indiana, three grandchildren, five great-grandchildren and many nieces and nephews. He was preceded in death by his grandparents, parents, his brother John and his sister Walburga (Binnie). Roy will be missed by all.

Sardi, Otto (M.S. '62) – Otto passed away peacefully in February, 2004 in Hartford, Connecticut. He was born September 4, 1932 in Hungary and immigrated to the United States in 1956 during the Hungarian Revolution. He held a diploma from the Eotvos Lorand University in Budapest, Hungary, a Master's degree in geology from Miami University and a Doctorate from Indiana University in mineralogy and crystallography.

Dr. Sardi was a professor in the Department of Earth and Physical Science at Eastern Connecticut University and was one of the first scientists to evaluate the lunar rock samples returned from the Apollo 11 mission to the moon.

Geology Field Station

Summer 2005 marked the 59th consecutive year that the Miami University Department of Geology has sponsored geological field courses based out of Timberline Ranch in Dubois, Wyoming. Participating in the 2005 program were five Miami University graduate students, ten Miami University undergraduate students, and five students from other colleges and universities around the country. Bill **Hart** (Field Station Director), Chris Haley (former Visiting Assistant Professor, now at Virginia Wesleyan), Brian **Currie**, and Matt **Brueseke** (Geology Research Associate) were the primary program instructors.

The basic field geology course is now joined by a course designed to provide advanced graduate students with skills and experience in teaching geology in the complex and unpredictable field setting. The courses, run in parallel, are broken down into two sections: [1] two traveling weeks that introduce students to the regional geology of the western Cordillera through examination and interpretation of geologic features within and between Grand Teton and Yellowstone National Parks (WY), Hagerman Fossil Beds and Craters of the Moon National Monuments (ID), and Banff, Yoho and Jasper National Parks (AB, BC, Canada), and [2] three weeks based out of our facility at Timberline Ranch, during which time students apply knowledge and skills gained during previous geology coursework and during the traveling portion of this course to the construction and interpretation of geologic maps and cross-sections.

Building on a major modernization of materials and equipment that took place between 1999-2002 and additional purchases since then, we continue to integrate the use of satellite-based navigation techniques (GPS technology) into the courses. The ability to record precise field locations with hand-held GPS units and to download these points into computer mapping software significantly enhances the learning experience. The current design of the field programs, including the international travel component, the participation by students from throughout the U.S., the modernized curriculum, the participation of graduate students, and the very essence of learning outside the confines of the typical classroom/laboratory setting, continues to provide an excellent capstone experience for geology majors.

Closing Comments

I invite you to learn more about our activities by reading the detailed accounts that follow. I also wish to express our sincere gratitude for the support that you, our alumni and friends, have shown over this past year. Your gifts to the Department are used in many ways. Some gifts support the **Karl E. Limper Geology Museum**, which is an important part of our outreach mission. Other gifts, to the **Wayne D. Martin Field Fund** or the **James E. Bever/David M. Scotford Laboratory Fund**, are designated to support students in fieldwork or field trips, or laboratory studies. Gifts to the **Baldwin Frontiers in Geology Distinguished Lectureship** support an annual lecture by a distinguished scientist (2006 lecture by Jeff Post; "The Hope Diamond and other Smithsonian Gems: Science and Lore"). Unrestricted gifts or gifts to the **Shideler Fund** are used to enhance the academic mission of the Department. A newly established expendable fund (**Geology Field Station Fund**) was created through a generous bequest from the late David Delo (A.B. Geology,

1926) who was one of the "founding fathers" of what is now the Miami University Geology Field Station. For those interested in directly supporting our efforts to train future generations of field geologists, please consider a gift to this fund. Overall, your gifts and your involvement in providing employment and internship information and opportunities for our students are greatly appreciated. You play an active and important role in our accomplishments, so please keep in touch and stop by if you find yourself in the Oxford area.

FULL-TIME FACULTY PROFILES

Mark R. Boardman
(professor and director IES)
Ph.D. University of North Carolina 1978
Carbonate sedimentology, geochemistry, climatology

Michael R. Brudzinski
(assistant professor)
Ph.D. University of Illinois at Urbana 2002
Geophysics, seismology, mantle dynamics

Brian S. Currie (associate professor)
Ph.D. University of Arizona 1998
Tectonics, sedimentology, basin analysis

Yildirim Dilek (professor)
Ph.D. University of California at Davis 1989
Tectonics, structural geology, tectonic geomorphology

Hailiang Dong (associate professor)
Ph.D. University of Michigan 1997
Geomicrobiology, geochemistry, mineralogy

William K. Hart
(professor and chair)
Ph.D. Case Western Reserve University 1982
Volcanology, igneous petrology, geochemistry

Jonathan Levy (associate professor)
Ph.D. University of Wisconsin at Madison 1993
Hydrogeology, contaminant transport

John F. Rakovan
(associate professor)
Ph.D. SUNY at Stony Brook 1996
Mineral surface geochemistry, mineralogy

Jason A. Rech (assistant professor)
Ph.D. University of Arizona 2001
Paleoclimatology, surficial processes, geochemistry

Elisabeth Widom
(associate professor)
Ph.D. University of California at Santa Cruz 1991
Isotope geochemistry, crust/mantle processes

in arranging some interesting talks ranging from Sediment Transport in the Cuyahoga River to Tsunami's to hominid evolution. He encourages any Miami alums in the Cleveland area to join NOGS. Matt recruited Rob Porges (A.B. '96) and they arranged a Hocking Hills visit. Matt also took and passed the ASBOG in Texas in March 2005 so he is now a PG there.

Harris-Noel, Ann Graetsch (M.S. '58) – Ann is presently working with the Pennsylvania Department of Environmental Protection Mine Subsidence Section. Ann is supplying them with maps and mining information on Lawrence, Mercer and Beaver counties; in return they are exchanging the information that they have on disk. She was a co-instructor with Phil Brease for the Denali Institute for a teacher workshop on "The Geology of Denali National Park. " Ann was there when the first dinosaur footprint that has ever been found in the interior of Alaska was uncovered.

Kilburn, Richard (A.B. '64) – Richard finally retired from Northrop Grumman Corporation in January. He says, "Let the games begin."

LaMoreaux, Philip ('43) – Philip's Exodus book has been translated into French and will be published by a Swiss firm. He continues to work at AGI as chairman of Environmental Awareness Committee, publishing booklets on water, minerals, soils, energy, etc. to make the public more aware of the importance of geoscience.

Mendel, Stuart (A.B. '83) – Stuart is the Assistant Dean for the Maxine Goodman Levin College of Urban Affairs and Co-Founder and Co-Director of the Center for Nonprofit Policy and Practice. His research includes the nature of the nonprofit sector, uses of nonprofit organizations in civil society, social capital, private/public partnerships, the political capacity of nonprofit organizations and urban history.

Paxson, Kevin (A.B. '78, M.S. '85) – Kevin is now a deep water development geologist with Kerr-McGee in Houston. He was with Texaco in New Orleans and Houston from 1982 to 2001. Kevin can be reached at kbpaxson@aol.com.

Thompson, Dale (Dick) R. (M.S. '63) – Dick and his wife took their fourth motoring trip west to visit our 50th state, North Dakota. They got to see a lot of the U.S. that they had not seen on their other trips. Dick ran into Jerry Weidner in Terra Haute, Indiana.

Van Hart, Dirk (M.S. '67) – Since mid 2003, Dirk has been semi-retired. His two sons are grown and out of the nest (free, free at last!). He has spent most of his time since retiring writing a book about the combined geology and history of northwestern New Mexico, where he and his wife Rusty have resided for 20 years.

As was the case in last year's edition, the return card, which you are asked to fill in and return to the Department, is now printed on the last page of the Shibboleth. **Please tear this page out, fill in your "coming and goings" and put it in the mail. Your editor asks that you do it *now* while it is still on your mind.**

for First Link Medical. He is also a substitute teacher for the Collier County Public School System and for the Community School of Naples, a local private K-12 school.

Doug has found southern Florida much to his liking, the beach is only 7 miles away, the skies are so blue and are usually sunny most of the year, and one can play tennis (or golf) year round. Aside from Hurricane Wilma, their weather has been fabulous! In August/September 2005, Ann and Doug vacationed with Ann's parents in Dubois. Dr. Martin and Doug spent some modest time looking for ventifcats and Oconlites, and tried our hand at fishing. Unfortunately, the only thing that they caught was a submerged tree branch. Ann and Doug also visited Timberline Ranch and reminisced about the ranch's Neal Diamond 8-track tapes, mystery meat sandwiches and "train wreck" dinners. They observed that over 30 years time, there were some changes, but by and large, Dubois and the ranch remain much the same. Doug and Ann would love to hear from you and can be reached at dcnac@earthlink.net.

Fisher, Robert S. (A.B. '68, M.S. '75) – Robert spent 19 years in Austin, Texas, much of it as a hydrochemist with the Bureau of Economic Geology at UT. Nine years ago, he moved to the University of Kentucky, where he is involved in groundwater monitoring networks and regional groundwater-quality assessments. Robert says he has fond memories of Perry Stewart, Wayne Martin, Russel Honea, Alan Stueber, Dave Scotford and Dwight Baldwin.

Frey, Robert (M.S. '76, Ph.D. '83) – Bob was sorry to hear about the passing of Dr. Reinhart and says he will always have fond memories of spending Saturdays during the 1974-75 school year, tooling around the Tri-State are in Dr. Reinhart's big white Ford Galaxy station wagon as part of his field-based Biostratigraphy class. Bob says "Rocky" had a great sense of humor and lots of wonderful reminiscences about Doc Shideler and his undergraduate years at Miami during the 40's. The world will be a somewhat darker and certainly duller place without him.

Bob is still with the Ohio Department of Health as Chief of the Health Assessment Section. Their cooperative agreement grant with the Agency for Toxic Substances and Disease Registry was just renewed for another 5-year program period. He continues to dapple in paleontology when he has a chance, co-authoring the chapter on Nautiloid Cephalopods for a recent (2005) volume on The Great Ordovician Biodiversification Event published by Columbia Press. He has several papers in the works on Ordovician nautiloids from British Columbia and the Platteville Group in Illinois and SE Wisconsin. He recently stepped down, after 5 years on the board, and as Science Committee Chair for the Friends of the Lower Olentangy River Watershed, a local river advocacy group in the Columbus area.

Bob's wife Cathy is a supervisor with the Chase Manhattan Mortgage Company in Columbus. Daughter Carrie is married to a captain in the 82nd Airborne and stationed at Ft. Bragg in NC. After graduating at the top of her class at the police academy, she has been working for the past year on road patrol as a Deputy with the Cumberland County Sheriff's Department. Son Chet is attending Columbus State Community College and will likely be transferring to Ohio State next year.

Hammer, Matthew (A.B. '96) – Matt is living in Akron, Ohio and doing well. He is serving as the President of the Northern Ohio Geological Society (NOGS) after being Vice President last year. Matt was successful, as Vice President,

FACULTY AND STAFF NEWS

Mike Brudzinski - e-mail: brudzimr@muohio.edu

Hi, I'm the new geophysicist faculty here at Miami and I'm looking forward to getting to know some of you. In the meantime, I thought you might like to know a little more about me. I have come to Miami after receiving a Ph.D. in Geophysics at the University of Illinois in Urbana-Champaign and 3 years of postdoctoral research at the University of Wisconsin-Madison. My research program contributes to our understanding of the Earth's structure and composition as well as how it deforms. My approach employs primarily seismic and geodetic tools to study first-order problems that are of broad interest. A long-term focus of this research is to investigate processes related to subduction, a fundamental feature of the plate tectonic engine that drives the evolution of the Earth. However, the complexity of subduction zones is formidable and it's hard to get your hands on a subducted plate at the Earth's surface, which make subduction zones arguably the most poorly understood part of plate tectonics. By constructing innovative experiments, I am looking to place new constraints on unresolved problems like the generation of earthquakes, convection deep within the Earth, and the evolution of tectonic plates.

My choice to come to Miami has been great for my research, as I have received funding from the National Science Foundation for two research projects involving students at Miami. The first is a field project in southern Mexico using a combination of measurements from Miami's newly purchased seismometers and Wisconsin's global position systems to look at how the subduction zone deforms. This is a project with direct impact on seismic hazard because it focuses on a newly discovered phenomenon of slow-slip and tremor that appear to be related to the likelihood of damaging megathrust earthquakes. The second project is a study of deep subducted plates beneath the western Pacific that will use previously recorded data to examine the eventual fate of a plate, including its path inside the Earth, its ability to produce earthquakes, and its changes in rock properties. This project is possible through collaboration with researchers from New Caledonia in the southwest Pacific.

This first year has also brought excitement in the classroom as I was able to teach two new courses. In the fall it was Geophysics for seniors and grad students that focused on solid earth geophysics concepts and problems. I will be teaching Geophysics again this upcoming fall, and I'm looking forward to developing new in-class computer activities for students to see how geophysics actually works. This past spring, they let me loose on 85 students in intro-level Environmental Geology, which I adjusted slightly to have a focus on natural disasters. Students seemed to enjoy this focus as well as the in-class participation with the new "clickers" that work like remote controls and allow me to "Ask the Audience" like on Who Wants to Be a Millionaire.

Lastly, I just want to express how fulfilling this first year has been from a personal standpoint too. My wife Erika and I had high hopes for this transition but weren't quite sure what to expect, and yet things have completely exceeded our expectations. We built a house on a beautiful wooded lot south of Oxford, and have

had a great time at home, in town, and all around southwestern Ohio. We get to carpool to work most days since Erika works in Oxford too, as a Geriatric doctor. And when I'm at work, I've been very impressed by the quality of resources for teaching and research, the high level of student performance, and the camaraderie at Miami, particularly within the Geology Department. Each of these would be remarkable in their own right, but together they make Miami a unique place and I'm looking forward to spending many years here.

Brian Currie – email: curriebs@muohio.edu

This past year has been eventful. Last summer I taught field camp in Wyoming, helped two graduate students complete their theses, and spent time in the field in Utah with two others. I enjoyed being out at field camp in Dubois for the first time since the summer of 2000. I'm sure those who have spent time at the Timberline Ranch would be little surprised to learn that not much has changed. Both Kristin Guthrie and Tony Albrecht finished their theses and graduated in August. Kristin's thesis was focused on documenting the relationships between normal faulting and stratigraphic architecture in the Upper Triassic Ischigualasto Formation, while Tony was mapping a syndepositional detachment-fault in Middle Triassic lacustrine strata. I spent two weeks with my other two students, Bill Wilcox and Justin Pierson, working on the Mesozoic stratigraphy of eastern Utah. Bill is still working out the sequence stratigraphy of the Upper Jurassic rocks in the region and is scheduled to defend his thesis this August. Justin has spent the past year working on a petroleum reservoir characterization project in the Cretaceous Dakota Formation. Justin's project is funded by the Utah Geological Survey and is being conducted in collaboration with Mary McPherson, a consulting geologist in Vernal.

Last fall I spent my time getting my Tenure and Promotion materials in order, finishing up a couple of manuscripts for Nature, and working on a few NSF grant proposals. Luckily, I was successful in all areas as the winter and spring brought news of my being granted tenure, the publication of Nature articles on Tibet and Ethiopia, and new funding for projects working on the relationships between climatic change and mountain building in the Central Andes (with Jason Rech here at Miami and Terry Jordan at Cornell), and the stable isotope-based paleoaltimetry of Tibet (with David Rowley at the University of Chicago). In May I spent a month in Tibet with Rowley and soon-to-be Ph.D. candidate Bill Wilcox, working on the paleoaltimetry project.

On the home front, both my wife Kate and son Jack (age 2) are doing great. Jack spends much of his time playing baseball in the backyard and living room, while Kate and I try to find the energy to supply run and defensive support that are up to his standards! We have moved from the farmhouse in Indiana back into Oxford. In spite of the late-night parties, Oxford is a great place to raise a family and we all enjoy being within walking distance to everything we do.

Bamberger, Mark (A.B. '80) – Mark has been a full-time professor of geology and environmental studies since leaving consulting some years back. He is more than halfway through getting his JD in environmental law from Capital University and hopes to practice animal rights and American Indian law when he "grows up". Mark is currently completing a legal internship at the Ohio EPA in Columbus. The one hobby Mark has time for is riding his Kawasaki Ninja motorcycle. You can contact Mark to say hey at mbamberger@yahoo.com.

Barkley, Matthew (B.S. '02) – Matt received a Masters of Environmental Management at Duke University in May, 2005. He married Sarah Rust (MU '03) in August, 2005 and is now employed with the environmental consulting firm, Blasland, Bouck and Lee.

Bersticker, Al (A.B. '56, M.S. '58) – Al reports that nothing has changed except he is now fully retired with no more corporate or non-profit positions. He says his health is good for an old geezer. Al enjoyed visits from John Hughes last June and Wayne and Helen Martin last August. Al and his wife Fran now have 6 grandchildren.

Brace, Benjamin (M.S. '68) – Ben's 2nd career in real estate is going very well. He and Judy's kids, Chris and Shawn, are doing well and they have two grandkids ages 6 and 2. Judy is still teaching pre-school. You can contact Ben at BenBrace@BenBrace.com.

Burgdorf, Greg (A.B. '78) – Greg has a new position as Senior Geologist/Geoscience Group Leader for URS Corporation in Harrisburg, PA. He has the pleasure of working with Mark Pennell ('86). Greg and his family visited Yellowstone and Grand Teton National Parks in July of 2005 and visited Timberline Ranch while out there. They, amazingly, ran into Dr. McWilliams and his teacher's group at Gros Ventre Slide.

Chimney, Pete (M.S. '77) – Pete is still with Chevron and has moved from California to Texas. After 28 years with the company, Pete is still in the Southern African Business Unit exploring for oil and gas offshore from Cabinda, Angola.

Crowell, Catherine Shafer (M.S. '79) – Katie has spent 18 years with the Ohio EPA working in hydrogeology with hazardous waste sites, while being stretched into geostatistics, web page design and some GIS. Katie's son Buzz, who avoided geology, now works as a mechanical engineer for Schlumberger on oil rigs in the gulf. Scott is flying jet fighter trainers for the Air Force and Rip is a junior at OSU in Aerospace Engineering. Katie enjoyed a summer in Europe, camping and working with hurricane victims in the fall.

Crowell, Doug (A.B. '74, M.S. '77) – Doug and Ann Martin (daughter of Dr. Wayne and Helen Martin) were married November 17, 2005, about 32 years and 5 months since they first met out at field camp in Dubois, Wyoming. Their home is in Naples, Florida, at Longshore Lake, a 550-home tennis community. Ann has worked for Life Line Screening for the past 12 years, where she is a Senior Health Service Coordinator. Doug retired in February 2005 after 28 years service with the Ohio Geological Survey. Over the past year, he has been learning to play tennis, which is something Ann excels at. Doug works part time as a medical technician for Life Line Screening and as a health coordinator

UNDERGRADUATE RESEARCH ACCOMPLISHMENTS

2005 Undergraduate Summer Scholars: this program is an initiative aimed at heightening the intellectual challenge of the learning environment at Miami University.

Andrew Kuss

DEPARTMENTAL STUDENT SCHOLARSHIP AWARDEES

The H.Van der Veer Hilker Memorial Scholarship: Awarded to a junior geology major selected on the basis of academic achievement and potential contribution to the community, need for financial assistance, and the recommendation of the Department.

Lauren Allen

The Wells Scholarship: Awarded to a student attending field camp on the basis of grade point average and need:

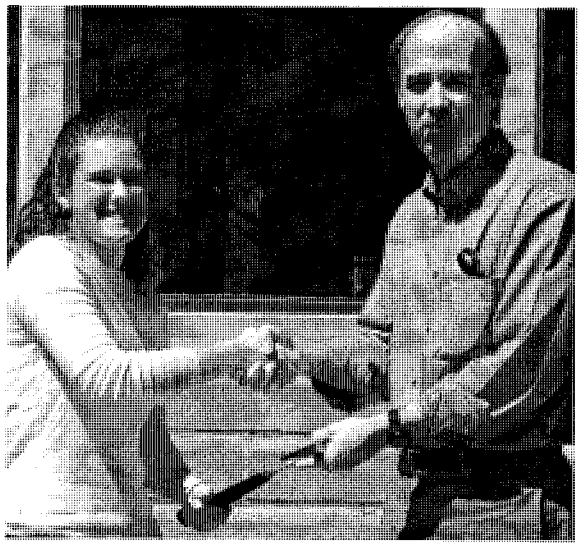
Lauren Allen

Robert E. Radabaugh Geology Scholarship: Awarded to outstanding geology majors on the basis of need.

Brittany Brewer ***Carly Denlinger*** ***Jared Gooley***

The Wayne D. Martin Field Fund: This is a fund established to help students cover field expense.

Brittany Brewer ***Carly Denlinger*** ***Stephanie Eakes***
Clint Harris
Ryan McCall



Undergraduate award winner: Lauren Allen with William K. Hart

Yildirim Dilek – email: dileky@muohio.edu

It has been a great year with lots of activities both on the teaching and research front. I continued mentoring the First and Second Year Harrison Scholars in the Honors Program, while teaching Structural Geology and Advanced Tectonics for our majors and graduate students in the department. We had interesting and exciting trips with the First Year Harrison Scholars to New York City and then to Ireland. In New York City, we visited the U.N. Headquarters and learned about how this international entity functions. In Ireland we examined, admired, and enjoyed the landscape, the culture, and the rich history of this unique country. It was also fun to learn how the Irish make their famous beer, the Guinness, in its own factory. The Structural Geology students were introduced to the basement tectonics of southwest Kentucky over a weekend trip in October. The weather was fine, the campground was in great shape, and the outcrops were superb with little vegetation, so we really enjoyed two days of fantastic geology combined with a unique culinary experience in a local BBQ joint in Kentucky.

My two graduate students, Dina Ghikas and Zeynep Oner, worked on their projects and preliminary data during this past year. Dina mapped the metamorphic sole of the various ophiolite in northern Greece last summer. She is back in the field again this summer collecting more structural field data and samples from the bottom of this Hellenic ophiolite to figure out when and how the Pindos ocean basin collapsed in the Late Jurassic in and around the Balkan Peninsula. Zeynep just started her Ph.D. She will be working on the structure and tectonics of some of the major graben systems within the Aegean extensional province in western Turkey. She, too, will be spending much of her summer in the field this year, mapping and collecting samples. Both projects are very interesting, and I look forward to seeing Dina's and Zeynep's work in the fall. After having finished his M.S. thesis last year, John Alten has been enjoying his professional life in an environmental company in the Cincinnati area. He keeps inviting me to his place to enjoy outdoor activities together in a cool setting by his private river in eastern Cincinnati. I haven't yet been able to do this, but it is on my high-priority list and I will connect with him in the fall.

I finally finished my edited book on the post-collisional tectonics of the Mediterranean region and Asia during this past year. It is in press now. It has taken more time than I had anticipated (they always do, I just keep forgetting!), but it has turned out to be a nice piece of work. It was fascinating to learn more about the collision-driven tectonic evolution of Asia and the Mediterranean region as I was working on this book. So, this experience has substantiated my earlier belief in that "if you want to learn more about a topic, just write a book on it."

I also worked on my research projects on the subduction tectonics of the Nankai Trough (Japan) and on the Cenozoic magmatism in the Aegean region throughout this past year. Several papers are in the works as a result of these projects. I am getting into the Precambrian geology of Greenland nowadays, and this is proving to be quite fascinating. We may have Archean ophiolites preserved

on this gigantic island after all, and if so the plate tectonics must have been operating on very early in the evolution of the Earth (~3.8 Ga). I can hardly wait to walk over this very old piece of real estate in the near future.

Sophie enjoys swimming and select soccer. She will be in the 6th grade next year. I cannot believe time is flying so fast; I should know this better; it has been 10 years since I arrived at Miami! Best wishes to all for a great summer and a wonderful autumn.

Hailiang Dong – email: dongh@muohio.edu

Time flies. This past year has been full of travels as usual. I am writing from Beijing. My entire family has been here for the past month. I am combining business with family fun. First, I am participating in a deep drilling project in Northeastern China. The goal of this drilling is to study globally significant events during the Cretaceous. My role is to study geomicrobial processes. I will chair a special session at a Western Pacific Geophysical Meeting late in July in Beijing.

Looking back, it has been another productive year. The most important news to report is that Brian and I are now tenured in the department. I am going to take a leave in Spring 2007 to get some fresh ideas from my domestic and international collaborators. I am going to spend a significant amount of time at China University of Geosciences in Beijing (CUGB) to develop various research projects in China. They are full of research opportunities there. Miami University and CUGB are considering joint graduate programs at this time.

Teaching is going as usual. Liz Widom and I co-teach GLG 211, Chemistry of Earth Systems. I also offer Isotopes in Environmental Processes and Geomicrobiology on a biannual basis.

My first graduate student, Gengxin Zhang, has accepted a post-doc position at Penn State University. His main research project is on deep subsurface microbiology from China Continental Scientific Deep Drilling in Eastern China. His research findings indicate that novel microbes exist in ultra-high pressure metamorphic rocks from a few kilometers depth. He has published a few papers and is getting ready for his defense in August. Hongchen Jiang and Deb Jaisi are now the main researchers in the lab. Hongchen is working on the geomicrobiology of saline lakes on the Tibetan Plateau with various other smaller projects. The long-term goal is to determine how microbes change in response to climatic and tectonic changes in the region. Deb is mainly working in microbial reduction of ferric iron in clay minerals and use of biogenic clays to sequester heavy metals and radionuclides such as Tc and U. This has important implications for environmental bioremediation of contaminated water and soils. We have research projects going on in collaboration with scientists at Pacific Northwest National Lab. A new student, Shanshan Ji is going to join our group this fall. Her potential research will be geomicrobiology in oceans, especially deep sea.

Our publication has remained high. Our group has published 8 – 10 papers this paper year in various geology, microbiology and engineering journals. Most of these papers are led by my students as a part of their dissertation research.

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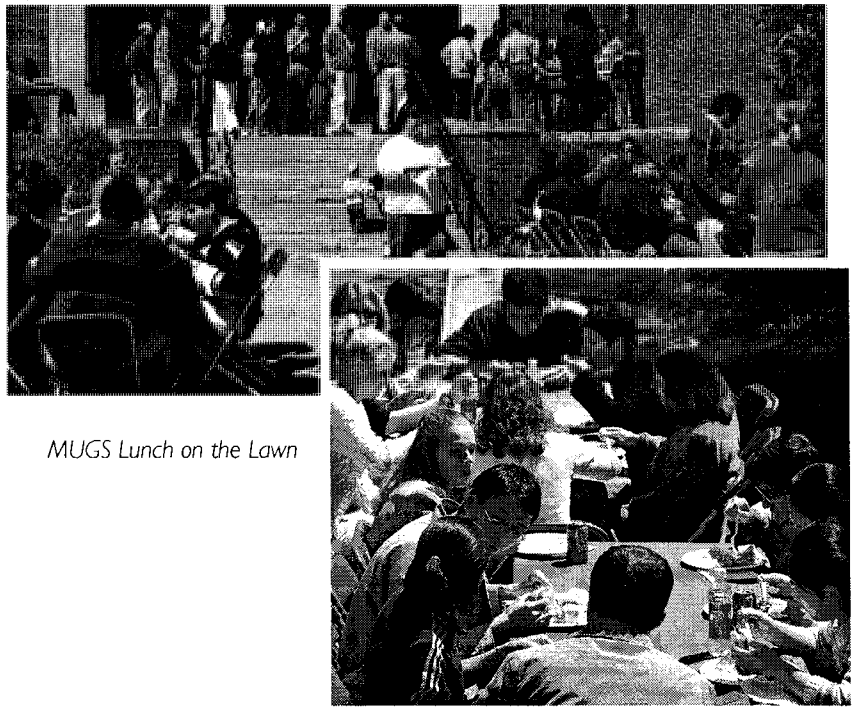
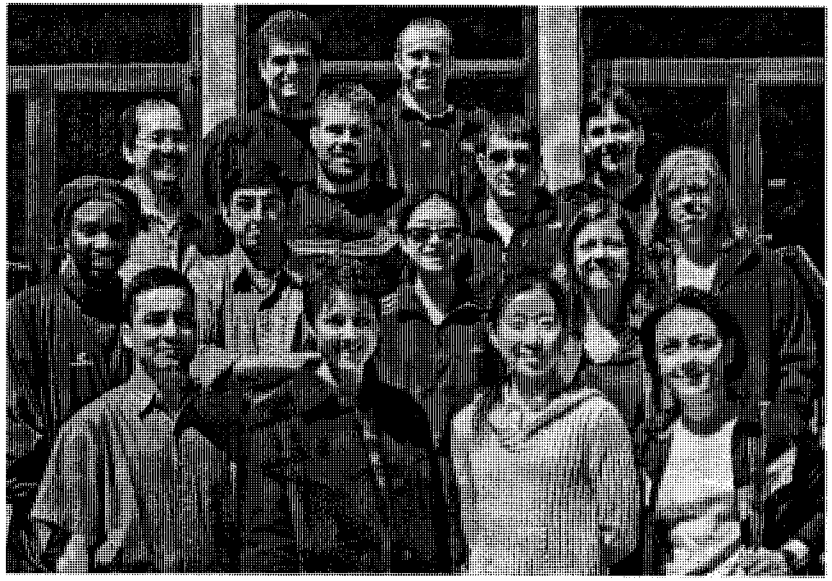


MUGS Lunch on the Lawn

Undergrad students from left to right (front row): Lauren Allen, Emily Davis, Stephanie Eakes; (middle row): Jared Gooley, Jamie Jastrab, Carly Denlinger, Brittany Brewer; (back row): Jerry Sebold, Andy Kuss, Clint Harris, Ryan McCall



Graduate students, left to right (front row): Deb Jaisi, Dina Ghikas Yun Luo, Zeynep Oner, (2nd row): Sam Mutiti, Ninad Bondre, Zu Watanabe, Emily Winer, (3rd row): Hongchen Jiang, Bill Wilcox, Justin Pierson, Joel Prellwitz, Amy Gelinas; (4th row): Steve Pasquale, Olaf Borkiewicz

Bill Hart - e-mail: hartwk@muohio.edu

At last writing, I was getting ready to spend a rather unusual summer; one that involved recovering from some significant medical issues and treatments and one that did not, for the first time in 20 years, involve departing Oxford for points west of the Rockies. To make a long story short, summer 2005 passed in a positive way. I discovered the lovely hot and humid southern Ohio summer weather that I had conveniently missed for 20 years, I caught up with some administrative and research projects, and Judi and I found some good spots for casual kayaking. While I was going about the above business, Matt Brueseke (research associate), Ninad Bondre (Ph.D. student), and Steve Pasquale (M.S. student) all headed west, Matt to assist with Field Camp and Ninad and Steve to conduct fieldwork in SE Oregon. One thing that last summer had in common with all the others, it was too short! Before I knew it I was back to the Chair administrative chores that ramp up once the academic year begins.

On the research and graduate advising front, I am very pleased to report that Matt Brueseke, after spending a year as a research associate, accepted a temporary teaching position at Eastern Illinois University and, very importantly, successfully defended his Ph.D. and formally graduated in May 2006. Matt will remain at Eastern Illinois next year and will continue to teach at the Miami Field Station this coming summer. Matt's research in the Santa Rosa and Calico Volcanic Field of northern Nevada has yielded very interesting results and one manuscript based on this work is now in press (Bulletin of Volcanology) and two are under review. My two in-house graduate students Ninad Bondre and Steve Pasquale continued to make substantial progress in their research, and both presented aspects of their work at national/international meetings, with Steve recently returning from a meeting in Anchorage, Alaska. In addition, Ninad's first dissertation-related publication came to press (Journal of Geology) and he recently returned from a research raft trip down a portion of the Owyhee River Canyon in SE Oregon. This past year also saw multiple presentations at the national GSA Meeting (Salt Lake City) and acceptance of a manuscript (GSA Special Paper) based on the continuing efforts of Darin Snyder (post-doctoral fellow), myself, and external collaborators to understand the Cretaceous to Recent igneous history within the Wrangellia Terrane of southeast-central Alaska. Darin will spend three weeks this coming summer up in Alaska conducting additional fieldwork associated with this ongoing research. Associated with and following the national GSA Meeting I led a field trip to SE Oregon as part of our NSF funded project (see below). And finally, three collaborative publications summarizing aspects of my ongoing Ethiopian research came to press, one in Nature, one in Eos, and one in the Journal of Volcanology and Geothermal Research.

On the teaching front, I continue to offer undergraduate Igneous and Metamorphic Petrology and graduate Igneous Petrology on an annual basis, and I again team-taught an Honors section of our GLG 115 lab course.

At this writing, I am t-minus 2 days from departing for Dubois, Wyoming. After the five-week field course ends in early July, two new entering M.S. students (Emily Short and Tom Hinterberger) will be accompanying me out to central and eastern

Oregon for fieldwork and for a group meeting/workshop and field trips associated with our ongoing NSF Continental Dynamics Program funded collaborative research More than ever I am looking forward to the summer activities! Have a great year and stay tuned for next year's update.

John Hughes – e-mail: hughesjm@muohio.edu

It was an interesting and busy year for me as well as the entire Hughes family, as we all will be beginning new jobs within a few weeks of each other. It is indeed bittersweet to announce that after 25 years I will be leaving Miami University to take the position of Provost and Senior Vice President at the University of Vermont. This completes the circle, as Susan and I moved here almost exactly 25 years ago form the Green Mountain State. I begin July 1, and Susan will join the faculty there in August after finishing her obligations at Butler University. After 18 years of commuting, we will finally be living together in one house, on the UVM campus. Although it is with very mixed emotions that I leave the only university position that I have known, as well as the wonderful people and relationships that I have had, I truly look forward to the challenges of the new position; and living between the Green Mountains and the Adirondacks will not be difficult either. I am so grateful for my time at Miami and I have learned so much from so many talented people. If you are ever in Burlington, do please stop in. I can be reached by email at JohnMHughes@UVM.edu

It is a beautiful place, on the eastern shore of Lake Champlain. If you would like to visit in the summer, this year that will be from July 6th–8th...

In addition to Susan and I taking new positions, both children are as well. Gareth recently left his position at Houghton-Mifflin to take a job in the media department with the New England Patriots. Not a bad job....as of this writing he has only been on the job for a few days, but he is delighted by the change. Many of you may remember Gareth as the little two-year old we moved here from Vermont with, but now 27-year-old Gareth will be getting married this September. Rebecca was certainly not the only family member who was not going to be changing jobs, and felt it was time to leave her internship at the Federal Trade Commission. She has accepted a position as a staff member at New York University. She wanted to move to NYC, and she fortunately did to a place where she can now pursue her graduate work for free!

So this is the last Shibboleth entry you will read from me, and I want to thank all of you for your friendship over the years. One cannot spend 25 years at an institution without feeling an incredible strong link; I will certainly never spend as long at any position in my lifetime...thanks to all of you for your friendship.

BACHELOR'S, MASTER'S AND PH.D. DEGREES AWARDED AUGUST 2005-MAY 2006

BACHELOR OF ARTS RECIPIENTS:

Alyson Adams
Nicholas Biddinger
Jacob Knight
John Miller
Rachel Rutherford
Christopher Sayre
Michael Gripshover
Katharine Smeltz
Andrew Kuss
Katherine York

MASTER OF ARTS RECIPIENT:

Krista Morisen

BACHELOR OF SCIENCE RECIPIENTS:

Katharine Middleton
Eric Shullenberger

MASTER OF SCIENCE RECIPIENTS:

Guthrie, Kristin – Structural controls on extensional basin development, Triassic Ischigualasto Formation, NW Argentina (Advisor: Brian Currie).

Albrecht, Anthony – A Triassic syndepositional detachment system, Ischigualasto Provincial Park, northwestern Argentina (Advisor: Brian Currie).

DOCTOR OF PHILOSOPHY RECIPIENT:

Brueseke, Matthew – "Mid-Miocene Magmatic System Development in the Northwestern United States" (Advisor: William K. Hart)

SPECIAL INVITATIONS

As in past years, we would very much like to invite you to visit the Department to meet our new faculty and see the changes in equipment and space use that have occurred since you graduated. You are always welcome in the department. Three special alumni events that occur each year and are open to all alumni are:

Alumni Reception at GSA - The Geological Society of America meetings are always a good place to re-establish ties with Miami friends. This year the meeting will be held October 22 – 25 in Philadelphia, Pennsylvania. As in past years, we will participate in the group alumni reception and look forward to seeing all the alumni who can make it to GSA. The reception will be held on Monday, October 23 from 7:00 – 9:30 pm at the Loews Philadelphia Hotel in Millenium Hall. We hope to see many of you there!

Baldwin Frontiers in Geology Distinguished Lectureship – This is an endowed account set-up to honor A. Dwight Baldwin, Jr. to bring to campus scholars with national or international reputations to interact with faculty and students. The fifth lecture took place during the spring semester 2006 with Jeff Post from the National Museum of Natural History. Dr. Post spoke on "The Hope Diamond and Other Smithsonian Gems: Science and Lore". Anyone wishing to contribute to this endowment can do so by sending contributions to the Geology Department.

Limper Lecture Series -Each fall the Department sponsors a Saturday morning lecture series for the general public on a theme related to the earth sciences. These talks have proven interesting and lively, and have served as a vehicle for introducing geology to the public and for drawing alumni back to the Kendall Hauer at (513) 529-3220. We hope that you will join us for a cup of coffee or tea, a donut and a stimulating discussion on some point of geological interest.

SPECIAL RECOGNITION

One of the real pleasures each year for the editors is the recognition of alumni, faculty and students who have received special recognition or awards during the past year. Please let us know if you receive such recognition so that we can pass on the good news.

Jonathan Levy – email: levyj@muohio.edu

At this time last year, I was just about to head off to Africa to explore water resource issues in Kenya and Zambia. It was a great trip, very educational for me. With the help of Professor Kim Medley from Geography, I traveled through the Kasigau/Taita region of southern Kenya and learned about water scarcity and water quality issues in the rural villages that all share the water that originates as rain on Mt. Kasigau. How exciting to drive from village to village, never knowing what might pop out of the bush in front of you: elephants, giraffes, zebras, or even lions. Unfortunately, the water-quality analysis results were rather sad, with water in all the villages contaminated with pretty high levels of coliform and fecal bacteria. Zambia was equally fascinating and a completely different experience. I spent most of my time in the capital city of Lusaka where people get their water from a karst aquifer. I had the opportunity to travel around with professors from the University of Zambia, officials from the Environmental Council and with water supply officials. Among other things, I learned that while Lusaka has a well-developed municipal water supply, the biggest water-quality problem is that a large portion of Lusaka's population lives in unplanned communities. In these areas, people are getting their water any way they can, often from hand-dug wells. Because of the karst geology, this means that wells and nearby sources of contamination (like latrines) have the potential to be directly connected by large underground conduits.

In between Kenya and Zambia, I took some time for myself and went on a 6-day trek up Mt. Kilimanjaro. I had the pleasure of being accompanied by my friend and former Masters student, Nat Warner. This was actually the third continent in which Nat and I have traveled together, and Nat's seventh overall! The climb to the top of Kilimanjaro (5895 m) is completely non-technical (no ropes needed), and you have the opportunity to pass from tropical rain forest, through a fascinating volcanic terrain, up to a dry, glaciated climate zone. Dealing with the altitude made it among the toughest things I've ever done. Now that the suffering has long passed, it's easy to look back and think happy thoughts about the experience.

To continue my African education, at the end of this coming summer, I'll be traveling to Namibia on an Earth Expeditions venture run by Professor Chris Myers (School of Interdisciplinary Studies) in partnership with the Cincinnati Zoo. The focus of the Earth Expedition course is cheetah conservation, but I'll be splitting off from the group much of the time to again learn firsthand about water use and water issues. As before, I'll be exploring future research and teaching opportunities.

Last summer's trip has opened up many possibilities for future research and teaching. In Summer 2007, Mark Boardman and I will be running a workshop to Kenya and Tanzania and we hope to take 10 to 15 Miami undergraduates and graduate students. The course will be research focused, exploring the sources, availability and sustainability of water in the semi-arid area of southern Kenya. We will continue to investigate the drinking-water quality in the area villages and we will try to identify the sources of contamination and consider potential solutions to the problems. We also hope to investigate the negative impacts of past water-development efforts from both groundwater exploitation and dam building. We will then travel to Tanzania where we will learn about urban water sources in Arusha, a medium-sized (population 270,000) Tanzanian city. We will visit villages on the slopes of Mt. Kili-

manjaro to learn about water use and agriculture there. Finally, we will investigate the impact of tourism development on natural ecosystems in Ngorogoro crater, a Tanzanian National Park.

My Ph.D. student, Sam Mutiti, is back in Kenya right now collecting some more field data. In addition to collecting more water-quality data, he is also testing a method he has developed using remote sensing to locate potential spots for developing supplies of shallow groundwater. Picking the spots is something he can work on in Ohio at a computer. Testing to see whether they might actually be useful locations required Sam's taking a heavy set of hand augers with him. I haven't heard from him since he left, so I'm hoping the augers made it through customs alright. In addition to the work in Kenya, Sam and I have just started investigating virus transport at a site of induced infiltration along the Great Miami River. In the next couple of years, we'll be sampling water in the river, in monitoring wells and in the City of Cincinnati production wells to see how virus concentrations change along their predicted flow paths from river to wells. Through a series of laboratory, field and modeling experiments, we'll try to get a better idea of the most important controlling hydrologic, geologic and chemical variables. To fund this work, we've submitted a proposal to the USGS along with Hailiang Dong, who will be advising Sam on the laboratory virus analyses.

My investigations of induced infiltration and groundwater/surface-water interactions along the Great Miami have also continued with a host of students and Visiting Professor Kati Kilroy. We are looking at the temporal and spatial variability of the riverbed hydraulic conductivity, one of the key factors controlling the amount, speed and quality of the river water as it is sucked toward the production wells. The student most involved in the field investigations was Matt Birck, from the Institute of Environmental Science (IES). I'm happy to report that Matt just defended his thesis yesterday and did a great job. Matt is now spearheading the effort to publish this work in the journal Ground Water. In our article, we argue that while there is constant scour and deposition occurring to the riverbed in response to storm events, these processes don't have much impact on the rates of river-water infiltration to the groundwater system or the water quality at the Cincinnati production wells. Matt will be leaving and getting a real job (I've warned him against this, but to no avail) but the work continues for now with another IES student, Britt Windeler, at the helm.

Next year I'll again teach Hydrogeology, Contaminant Hydrogeology and Water and Society while continuing efforts to write manuscripts and fund research for the work along the Great Miami and in Africa. I'm looking forward to the arrival of Alicja Wojnar from the AGH University of Science and Technology in Krakow, Poland. Alicja will be starting a Masters degree and possibly heading laboratory experiments of virus transport through sediment cores collected at the Great Miami site.

Tim Lowenstein (Binghamton University) – "Variations in seawater chemistry over the past 550 million years and influence on marine life".

Claudio Latorre (Universidad Catolica de Chile) – "50,000 years of climate change in northern Chile's Atacama Desert as told by rodent middens".

Tai-Lin Tseng (University of Illinois @ Urbana-Champaign) – "Seismic Constraints on Mantle Discontinuities Beneath Convergent Margins".

Steve Guggenheim (University of Illinois @ Chicago) – "Clay and Gas (Methane) Hydrate Complexes: Potential Effects Relating to Climate Change, Energy and Hazards".

Chris Condit (University of Massachusetts) – "Publishing Your Geology Using Dynamic Digital Maps".

Ali Polat (University of Windsor, Canada) – "Crust-building Geodynamic Processes in the Archean (3.8 – 2.5 Ga)".

Joseph Stucki (University of Illinois @ Urbana-Champaign) – "Redox Processes in Smectite Clay Minerals".

Jeff Post (National Museum of Natural History) – "Synchrotron Applications in Environmental Mineralogy".

Jeff Post** (National Museum of Natural History) – "The Hope Diamond and Other Smithsonian Gems: Science and Lore".

Maciej Manecki (AGH – University of Science and Technology, Poland) – "Anionic Isomorphic Substitutions $PO_4 - AsO_4 - VO_4$ in Lead Apatites".

Robert Creaser (University of Alberta, Canada) – "Advances in crustal geochronology using Re-Os: sedimentary rocks, sulphides, and hydrocarbons".

In addition, graduate students proposed or defended their theses and dissertations. We again thank all alumni whose financial support has helped cover some of the costs incurred in maintaining this seminar series.

This is the Fifth Annual Baldwin Frontiers in Geology Lecture

EMPLOYMENT INFORMATION

We still maintain a bulletin board for posting all position openings. The postings include the names and address of companies and agencies looking for geologists. Information about the postings can be obtained by calling Cathy Edwards or Teresa Kolb at (513)-529-3216.

We have found that the most current job leads come from former students. Thus we would be **very appreciative** if you would continue to provide us information about openings for qualified geologists in your organizations. Again, this information can be passed on to Cathy Edwards at the number above. Thanks for your help!

UNDERGRADUATE INTERNSHIP PROGRAM

The Department also continues to maintain a listing of organizations having internship openings and encourages undergraduate students to apply for these summer positions. This program began nine years ago with 3 students who spent their summer with Amoco in Houston, Texas We would be interested in any internship opportunities for undergraduate geology majors that might exist in your organization. Even if such a program does not exist now in your firm, imagine the extra work that could be accomplished, at little cost, if you were to hire a highly energetic and intelligent student for the summer. Give it some thought, and call either Cathy Edwards or Bill Hart (513-529-3216) if you decide you could use some help.

THE 2005-2006 GEOLOGY SPRING SEMINAR SERIES

Eric Ferre (Southern Illinois University) – "The magnetic fabric of deformed peridotites".

Alycia Rode Stigall (Ohio University) – "Deciphering the role of invasive species during the Late Devonian Mass Extinction: Using GIS to integrate paleobiogeography and paleoecology".

Harold Rowe (University of Kentucky & MU Alum) – "Coupling Geochemical and Sedimentological Records of Redox Conditions in the Appalachian and Illinois Basins: Working Toward a Redox Continuum".

Ron Cole (Allegheny College) – "Tertiary Volcanism in Denali National Park and South Central Alaska: Record of Terrance Accretion, Strike-Slip Faulting, and Slab Window Development".

Matthew Salzman (Ohio State University) – "Evolution of the Paleozoic Carbon Cycle".

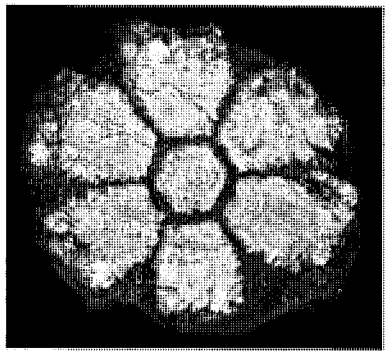
Michael Bevis (Ohio State University) – "Geodesy and the Geodynamics of South America".

Julie Libarkin (Ohio University and NAGT Distinguished Lecturer) – "When wrong answers ask the right questions about student learning: conceptual change and assessment in college science classrooms".

John Rakovan – e-mail: rakovajf@muohio.edu

2005 was a year that I will always remember with great fondness. From January 5, through the middle of August 2005 my wife Monica and I lived in Kyoto, Japan. During this time I conducted research and taught in the Graduate School of Human and Environmental Sciences at Kyoto University. My host was professor Osamu Tamada. Tamada-san and his graduate students (Kaieko, Nao, Daijo, Hide, and Teru) were great to work with and shared with us many aspects of their country and culture that most visitors do not get to see. We became good friends with another visiting professor Kazuhiko Ito, from Osaka, and his wife Yukari. Kaz and Yukari had never been to the US and in December Monica and I took them on a two-week trip through northern Arizona and New Mexico.

Aside from several research papers I published a series of four articles on Mineralogy in Japan in the journal Rocks & Minerals. Three were published in 2005 and the fourth in the May/June 2006 issue. These are the first and only extensive articles on minerals and mineralogy of Japan in modern (20th and 21st century) popular western literature. A fifth paper on the origin of *sakura ishi* (cherry blossom stones) was published in the July/August 2006 issue. I developed a fascination with these unique minerals over a series of trips to Japan and our extended stay last year allowed me the opportunity to study them in depth.



The *sakura ishi* are metamorphic minerals, which form in hornfels at the contacts of igneous intrusions and the pelagic sediments of the Tamba group. It took quite an effort to unravel their complex formational history and the key was finding unaltered (unreplaced) samples on Daimoji-yama (Daimonji mountain) in Kyoto City. In short, they started their growth history as a single crystal of indialite (the high temperature, hexagonal polymorph of cordierite). What remains of the indialite is the hexagonal center in the specimen shown in figure 1. Due to changing pressure and temperature conditions cordierite began to grow outwards from each of the prism faces of the indialite (these are the six "peddles" of the *sakura ishi* in figure 1). Eventually, the original indialite transforms to cordierite, and finally, the intergrowths of cordierite and indialite were replaced by fine-grained mica.

The complex formational history of *sakura ishi* required a pressure-temperature-compositional pathway of very narrow conditions. This may be the reason for their rarity and occurrence restricted to central Japan. Although the sakura (cherry blossoms) are ephemeral in their beauty, lasting only a few weeks each year, their image has been set in stone in the *sakura ishi* of Kyoto. This city (Kyoto) has been the cultural center of Japan for a millennium and it seems to me fortuitous that *sakura ishi* would be from an area so intimately associated with an admiration for cherry blossoms.

Jason Rech – e-mail: rechja@muohio.edu

Last summer at this time I was enjoying the Mediterranean with my family and getting ready to start a summer of field work in Jordan. We had a wonderful time. I tried to consume as many fresh vegetables and olive oil as possible, we took Eva to Petra, the Dead Sea, and out into the Desert, and we enjoyed the comforts of Amman. This summer we will be in Oxford most of the time, which will also be quite enjoyable. I will do my best to grow and consume vegetables, Eva (now 6 years old) will play in the fountain uptown and enjoy the long summer evenings playing with her friends, and Alysia will enjoy gardening and other summer pursuits.

My field work last summer in Jordan on Quaternary hydrology and climate change was fun and productive. My graduate student, Emily Winer and I surveyed and mapped spring, wetland, and lake deposits throughout Jordan. We identified a good field area, Wadi Hasa, for quantifying changes in climate and hydrology in western Jordan. Emily be will be mapping and dating the wetland and lake deposits in this region for her master's thesis. We were funded by the National Geographic Society for this project and Emily will return to Jordan in early July for about a month of field work, while I will go to Jordan at the end of July for about two weeks. One of our most exciting projects last summer was working with lower Paleolithic archaeologists Leslie Quintero and Phil Wilke from the University of California Riverside out in al Jafr Basin in southeastern Jordan. Phil and Leslie have been working on dense scatters of Acheulina hand axes (the butchering tools of homo erectus) between ~500,000 and 250,000 years old. Phil and Leslie had mapped over 1600 hand axes within desert pavements in the northern area of the basin. Emily and I went there for about 10 days to try and determine the paleoenvironmental context for these archaeological sites, which was a great natural puzzle to work on. It turned out that these Lower Paleolithic archaeological sites are clustered around old groundwater discharge conduits. Results from this research will be published in the journal Geoarchaeology.

I am still working in the Atacama Desert of northern Chile on a number of projects. Joel Prellwitz, a new MS student from the University of Wisconsin, is working on nitrate soils in the core of the Atacama Desert. Last October we went down to Chile for 2 weeks with Brenda Buck (a soil scientist from UNLV) and two of her students, and Greg Michalski (an atmospheric chemist from Purdue). Our primary objective for this field outing was to describe, sample, and map some extremely old and stable landscape surfaces in the Atacama Desert and try to understand the development of these surfaces and the processes that control their formation. We think these surfaces may be 10 to 15 million years old and are one of the best analogs for soils on Mars. We collected soil samples from 3 old geomorphic surfaces (2 alluvial fans and a fluvial terrace) and Joel is analyzing the soluble salts in these samples and determining their isotopic composition.

Brian Currie and I, with student Angela Cowan, are also still working on using fossil Miocene soils to understand climate change on the west flank of the Andes and its relation to the uplift of the Andes Mountains. Initial results from the central Atacama suggest that the transition from semiaridity to hyperaridity occurred between 19 - 12 Ma, and was the result of the uplift of the Andes Mountains to elevations >2km. These results will be published in the journal Geology in the fall, and we just

THE KARL E. LIMPER MUSEUM

Kendall Hauer – e-mail: hauerkl@muohio.edu

Another busy year has come and gone. Museum visitation has grown somewhat, at least partly due to the presence of the 16-ince long *Isotelus maximus* (trilobite) specimen on loan to us from Tom Johnson. New exhibits include one showcasing ore minerals from the collections of Dr. James Bever, and two near-real-time exhibits of global seismic and volcanic activity. One of these is an interactive kiosk in the museum and the other is a continuously updated large-format screen in the main lobby. People are constantly amazed at the amount of volcanic and seismic activity that occurs on a daily basis around the world. Also, work is progressing on a local geology exhibit, and includes the results of efforts by technical and scientific communication students who created some of the content and design, as well as an accompanying brochure.

I continue to contribute to summer teachers' courses given by the Hefner Zoology Museum—with Wayne Martin's valuable help, of course. I've also become involved in several other summer programs, most of which are designed to provide elementary school students with enriched science and mathematics experiences. Jill Mignery, a Shideler alumnus and high school science teacher for Mason City Schools, has provided indispensable input and welcome assistance for these efforts. Outreach efforts are growing at a fairly rapid rate, with a good share of my summer devoted to these activities.

Again this year, a total of about 500 people attended five fall semester Limper Lectures. Presentations included geology faculty members Elisabeth Widom—"*Fogo, Furnas, and Fuji Volcanoes–Friends or Foes?*" and Jonathan Levy—"*Into Africa –Exploring Environmental Sustainability from Victoria Falls to Kilimanjaro*"; Tom Johnson—"*Discovering the Mysterious Trilobites*", and Dr. Andrea Koziol from the University of Dayton—"*Life on Mars? The Story from Martian Meteorite ALH84001*". Once again, the weather cooperated for the Peffer Park trip, and everyone had an enjoyable time.

Lastly, I'm very happy to report that my position here at the museum has become "permanent", after the results of a national search for a museum director. I thank everyone who helped me attain this goal and I look forward to really digging my heals into carrying out long-term plans to continue to develop the museum and its outreach activities.

Robert McWilliams – mcwillrg@muohio.edu

Once again, I taught 85 teachers enrolled in Environmental Science for Elementary School Teachers at Timber Line Ranch. This program was supported by a $218,761 Improving Teacher Quality Grant from the Ohio Board of Regents. So far, I have received a total of $1,709,153 in Improving Teacher Quality and Eisenhower Grants to train Ohio teachers in field geology and environmental science.

This summer is my 37th year at Timber Line and the 21st consecutive year for teacher workshops taught at the field station. To date, 1,583 teachers, mostly from Ohio, but also from all over the United States have completed courses at the field station.

Mary and I will celebrate our 40th wedding anniversary after the field course with an inland cruise to Alaska.

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found out that we were funded by NSF to test these initial results over the next 3 years and identify nature and timing of climate change along the western margin of the Atacama Desert. Brian and I will go down to Chile with our collaborator Terry Jordan (Cornell University) for a short field season at the end of the summer. But for now, I will enjoy the summer in Oxford, enjoying quality time with the family while also working hard in the lab and trying to get some manuscripts submitted before my trips to Jordan and Chile at the end of the summer.

Elisabeth Widom – e-mail: widome@muohio.edu

The past year has been hectic and fun as usual! The Fall semester was particularly crazy, in addition to teaching Chemistry of Earth Systems (GLG211) and Isotope Geochemistry (GLG427/527), I decided that it was important for the graduate students to have an intensive laboratory-based workshop on Isotope Geochemistry and Mass Spectrometry, in order to really learn the nitty-gritty of isotope work. Developing and executing this new workshop was extremely time consuming, but ultimately the students and I (!!) learned a lot, and I anticipate continuing to teach this workshop on an as-needed, but relatively routine basis. The Spring semester was a little calmer, but equally exciting. I spent two weeks in January attending a volcanology meeting in Quito, Ecuador, one week of which involved a field trip to the Galapagos Islands. This was truly fabulous!!! We saw absolutely spectacular geology, including the site of the October 2005 eruption of Sierra Negra, which occurred only a few months prior to our visit and still had beautifully preserved Pele's hair. And of course we also saw all kinds of exotic animals, including marine and land iguanas, giant tortoises, and frigate birds with bizarre red balloons on their necks. The snorkeling was fantastic, too and we saw all kinds of beautiful fish, and got to swim with penguins, sea lions, and even some small sharks (apparently they don't usually eat people, but it was a little worrisome nonetheless!). I am also pleased to say that the trip resulted in the opportunity to participate in some new collaborative research projects on Galapagos geology, which I am very much looking forward to. I did have to pay penance for the trip afterwards by teaching a spring version of GLG111, but even as we wind up the last week of this intensive course, I have to say it was well worth it for the opportunity to see the Galapagos Islands!

I am writing this Shibboleth update from Idaho Falls, Idaho, where I am currently attending a workshop group meeting for the HIPIR (high precision isotope ratio) Consortium. This has been a great experience, including a visit to the Idaho National Labs where they are establishing some very innovative new techniques in mass spectrometry. Our working group has been focused on the development of a mass spectrometry short course for graduate students, which is much needed in the discipline, and should come to fruition a year from now (assuming the working group members keep plugging away on all their respective tasks!).

From here I head back to Oxford to complete the final week of the term, and then I will be rushing off to the Azores once again. I have been invited to participate in a workshop on volcanism on Pico Island, followed by a short field season on Flores and Corvo Islands, which are the two islands off by themselves to the west of the mid-Atlantic ridge. I am very excited to finally get to these two islands as this will be my first time to visit these islands, and they are often reported to be the two

most beautiful of all the Azores Islands (although they do have stiff competition from the others!).

After the Azores trip, I am hoping to have a relaxing and productive summer in Oxford. I have carefully avoided any additional travel commitments, but I did make time in my schedule for a couple of craft summer classes, just to keep my right brain exercised!

FACULTY AND STAFF

Faculty/staff pictured left to right: (front row): Wayne Martin, Cathy Edwards, Kati Kilroy, Mark Boardman; (2nd row): Hailiang Dong, Liz Widom, Dave Kuentz, Janelle Sikorski; (3rd row): Kendall Hauer, John Hughes, Bill Hart, Jeanne Johnston; (4th row): Brian Currie, Darin Snyder, Jonathan Levy; (5th row): Jason Rech, Yildirim Dilek

EMERITI UPDATE

A. Dwight Baldwin, Jr.

Life continues its busy pace in retirement. I can certainly attest to the fact that what we call "retirement" does not mean that one is retiring from life. We have been to Ohio four times this past year to visit family in Upper Arlington and to see old friends in Oxford. Although I only had a very brief time to stop by the Department, it was very good to see several friends who I had not seen for several years now. It has also been a pleasure to welcome several Oxford friends to Durham—we love to catch up on Oxford "gossip" and to show people our lovely environment!

Our big trip this year was taken this spring to the Lower Rio Grande of Texas. This southwestern corner of our country is world famous for the large variety of rare and unusual birds that can be found there. So we spent a week from dawn to dusk walking woodland paths with binoculars hung around our necks and had a wonderful time. We saw over 130 different species, many of which were new to us. Not only was the birding great, but also the warm weather was a welcome respite from the winter cold of New Hampshire.

I continue to keep my finger in the water-quality and environmental issues in New Hampshire. This brings me in touch with interesting people doing interesting things, which is always fun!

Wayne Martin

Helen and I will not make a trip to Wyoming this summer. Last summer, our son-in-law, Doug Crowell (MS '77), and our daughter Ann visited with us for a few days in Dubois.

As in the previous two summers, Wayne assisted Kendall Hauer in conducting field trips to rock outcrops in nearby Indiana. The trips were for students enrolled in the Museum Resources for Teachers class, sponsored by the Hefner Zoology Museum.

The field guide utilized for these trips has been expanded and is available from the Limper Museum. The title of the guide is: "A brief description of the Cincinnatian Series (Upper Ordovician) of Ohio, Indiana and northern Kentucky." To order the guide, phone Kendall Hauer at 513-529-3220 or via e-mail at hauerkl@muohio.edu

Again this year, the booklet prepared in 2001, entitled: "The Geology Field Station at Timberline Ranch, 1940-2001" is available from the department. Please contact Cathy Edwards at 513-529-3216 or via e-mail: edwardca@muohio.edu to obtain the publication.