

Brice Hall



MIAMI UNIVERSITY
Department of Geology
College of Arts & Science
Oxford, Ohio 45056

The Shideler Shibboleth



ALUMNI BULLETIN
DEPARTMENT OF GEOLOGY



MIAMI UNIVERSITY

No. 38
1989

OXFORD, OHIO 45056

Elizabeth & James White (Elizabeth, M.U. '49; Jim, A.B. '50, M.S. '51)
Stephen K. Wiman (M.U. '67)
Kathleen Gardner Wissinger (A.B. '78)
Nancy & Reesor Woodling (Reesor, A.B. '59)

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INVITATIONS

You are cordially invited to attend the Miami gala Alumni reception to be held during the 1989 GSA Annual Meeting in St. Louis, Missouri. This year's event will be held at the Adam's Mark hotel on Monday, November 6th from 7:00-9:30 pm. Check at the front desk for the exact location (to be assigned in late July). We hope those of you attending will drop by, to help make this another mini-reunion!

We also remind you to stop in at the department any time you are at Miami or in the Oxford area. Times of special celebration (when you are certain to find faculty and even a cup of coffee or tea) include graduation day in May and Saturday morning of Alumni Weekend in June. We look forward to seeing you!!

FROM THE EDITOR'S DESK

Dwight Baldwin

As he composes this short note, your editor feels far removed from the academic world of Oxford. The view before me reveals palm trees and mountains in the near distance, and temperatures outside have reached the triple-digit level each day this week. In case you haven't guessed, this brief note has been written in Tucson, Arizona, where yours truly spent a sabbatical semester this spring. Thus, the details concerning highlights that have occurred within the Department this past year should best be left to Maryellen Cameron to summarize.

From the distant perspective of your editor, however, one of the highlights is the possibility of an early publication date for this newsletter. Thanks to the diligent efforts of Melissa Morgenson (who joined the department last July), *The Shibboleth* went to press approximately one month earlier than last year, so it's quite probable that the date you receive this edition will break some previous records.

In closing, I wish to thank all those who have provided news concerning their "comings and goings". To those who have not been in touch recently, please do fill out the news card enclosed herein, and return it to us as soon as possible (before you forget). And please don't prejudge your news as not current enough, as *all* news is welcome; your former classmates and faculty really enjoy knowing what you are doing!

DEPARTMENTAL ACTIVITIES

Maryellen Cameron

Activities within the Geology Department during the 1988-89 academic year focussed on program evaluation and strategic planning for the next five years.

Program Evaluation & Strategic Planning

Program evaluation was based in part on results of the questionnaire mailed last year to alumni of the Department. We received responses from 235 alumni who had graduated over the last 60-65 years with bachelors, masters, or doctoral degrees. Job titles and positions of the respondents varied widely, and their comments indicated a high level of professional and personal accomplishment. Included were an academic vice-president, dean, professors, engineers, consultants or managers/presidents of companies, petroleum geologists and geophysicists, mining geologists, research associates, school teachers and numerous employees of government agencies. Approximately 20% of the respondents were in careers with no geoscientific requirement (for additional information, see the following table).

Comments on the questionnaires were largely positive and often very insightful. The respondents praised the broad educational background they obtained as students, the camaraderie and collegiality of the department, and the strength of certain courses such as field geology and mineralogy. Many also commented on deficiencies in advising or informing students regarding career options in geology after graduation and in providing information on the "real life" work environment that they faced in their jobs. Highest among their specific recommendations (from a list of 75-80 suggestions) for educating geologists for the 21st century are acquisition of expertise in computer science (including modelling and mapping), hydrogeology/environmental geology,

cognate sciences (math, chemistry, and physics), communication skills (writing, oral presentations), geophysics, geochemistry, and field/lab experience.

**EMPLOYER CATEGORIES FOR ALL RESPONDENTS
TO THE 1988 ALUMNI QUESTIONNAIRE**

<i>Employment Area</i>	<i># Responding</i>	<i>Percent of Total</i>
Academia	28	11.9
Government	20	8.5
Oil & Gas	43	18.3
Mining/Minerals Industry	5	2.1
Engineering/Consulting ¹	23	9.8
Environmental/Hydrogeology	19	8.1
Other Careers with Geoscientific Requirement ²	22	9.4
Careers with No Geoscientific Requirement	51	21.7
Not Employed	4	1.7
Retired	20	8.5
TOTAL RESPONDENTS	235	

¹Excludes petroleum consulting.

²May include some geoscientists in other categories, such as oil & gas, consulting, or environmental geology.

Program evaluation was also based in part upon analysis of employment information on *recent* graduate students. We examined employment categories for students who had worked with *current* faculty and had received advanced degrees in geology at Miami since 1981. Among this group of graduates, approximately 45% (all with masters degrees) were employed with environmental protection agencies or environmental/hydrologic consulting firms; 6% (all with masters degrees) with the oil and gas industry; 13% (all with masters degrees) with state agencies or other companies; 14% are currently in doctoral programs; 12% had completed doctoral programs and were employed mostly in academia or research labs; 4% (all with masters degrees) were employed in fields other than geology; and 6% were unemployed. This analysis also revealed that those students employed with environmental protection agencies or other environmental or consulting firms had done masters research in a wide variety of disciplines --- including paleontology, structural geology, hydrology, and both "hard-rock" and "soft-rock" geology. These students had breadth in their coursework, however, commonly including hydrology or environmental courses, but their thesis research typically did not focus specifically on environmental or hydrologic problems.

Careful examination of numerous reports and articles on employment opportunities for geologists, responses of our alumni questionnaire, and current strengths of the department in terms of personnel and equipment have provided a focus for new faculty appointments over the next five years. We have identified two additional areas, environmental/aqueous geochemistry and geophysics/tectonophysics, that should have high priority as additional faculty appointments become available. Our hope is to obtain funding for these positions through programs such as the Ohio Board of Regents Academic Challenge or through the establishment of a Named or Chaired Professorship supported by external gifts. Within the field of environmental/aqueous geochemistry, we have targeted a specialty in geochemistry of contaminated ground

Robert L. Detterman (A.B. '41)
 Kimberly S. Ehret (A.B. '80)
 David A. Eyer (A.B. '81)
 William H. Fausey (A.B. '73)
 Rene L. Fernandez (B.S. '72)
 Steven & Susan Ferris (Steve, B.S. '81; Susan, A.B. '81)
 David R. Flower (B.S. '73)
 Gene Garrison (A.B. '49, M.S. '54)
 Harry D. Gibbs (A.B. '47)
 Fredric R. Goldstein (M.S. '68)
 James & Linda Gorman (Jim, M.U. '72; Linda, B.S. '66, M.Ed. '70)
 Jeffery L. Goshorn (A.B. '76)
 C. Earl Harris, Jr. (M.S. '58)
 Ann Harris-Noel (M.S. '58)
 Mark A. Heisler (A.B. '81)
 Claudette & Frank Herbert (Frank, A.B. '52, M.S. '58)
 Kenneth Herr (M.U. '72)
 Michael E. Holmes (B.S. '70, M.S. '74)
 Beverly & John Horrigan (Bev, M.U. '55; John, A.B. '54)
 Elizabeth Johnson-Mauch (A.B. '81)
 Lisa & Richard Kenter (Lisa, A.B. '80, M.S. '82; Dick, M.S. '85)
 John J. Kohler (A.B. '87)
 Kenneth R. Krivanek (B.S. '72)
 Harry B. Kuder (A.B. '55, M.S. '64)
 Richard W. Lemon (B.A. '61)
 Elizabeth Daugherty Lengyel (A.B. '66)
 Karl & Louise Limper (Karl, Professor *Emeritus*)
 Robert F. Lindner (A.B. '51, M.S. '52)
 Herbert L. Magley (B.S. '70)
 Thomas M. Maher (M.S. '81)
 Joseph Mauch (A.B. '80)
 Ralph L. McDonald (M.S. '53)
 Julie Gordon Moore (A.B. '83)
 Taki Negas (M.S. '53)
 William B. North (A.B. '62)
 William C. Peters (A.B. '42)
 Belinda & Richard Riordan (Belinda, M.U. '51; Dick, A.B. '51)
 Edward N. Roberts (A.B. '39)
 Edmund L. Russell (B.S. '48)
 Thomas A. Schack (A.B. '68)
 David C. Schuster (A.B. '74)
 Mark A. Schwall (A.B. '87)
 Peter B. Selover (A.B. '55)
 John F. Slack (M.S. '72)
 Edgar M. Smith (M.S. '71)
 Robert C. Stephenson (A.B. '38)
 David & Nelle Stewart (Perry, Professor *Emeritus*)
 Bev & Craig Stichtenoth (Bev, M.U. '77; Craig, A.B. '75)
 Dennis G. Stump (A.B. '79)
 Carol & Eral Sutton (Carol, M.U. '55; Eral, A.B. '53, M.S. '54)
 George D. Vandersluis (A.B. '63; M.S. '65)
 Robert Wahl (A.B. '80)
 James F. Walsh, III (A.B. '82)
 Betty & Lawrence Warner (A.B. '37)

Watson, Becky A. (A.B. '78) - After two years as a geophysical technical aide, Becky writes that she is working as a geologist again at ARCO Alaska. She is working the west end of Prudhoe Bay where three drilling rigs are currently operating.

White, Todd K. (A.B., '88) - Todd sent us a postcard from Boulder, CO, where he spent last summer with the USGS. His two options for the fall included continued work for the USGS or pursuing his masters degree at the University of Colorado-Boulder. Let us know which route you chose, Todd!

Williams, Jeffrey R. (M.S. '79) - Jeff is still working for the Department of Energy in Washington, D.C., on the Yucca Mountain Repository Project. Sounds like pretty hot stuff!

Wright, Frank M. (M.S. '70) - Following his assignment to Mobil North Sea Ltd. in London, Frank has returned to work at Mobil Exploration in Midland, Texas.

Yang, Jing-zhi (M.A. '48) - Jing-zhi continues as a professor at the Nanjing Institute of Geology & Paleontology. In the past year, he attended a meeting of the Mid-Carboniferous Boundary Working Group in Kiev, USSR, and co-authored and published a paper on *Bryozoans* of central Hunan, China.

As a postscript, we are all very concerned for the safety of our geology alumni and friends posted in China and other tumultuous parts of the world.

CONTRIBUTIONS BY ALUMNI AND FRIENDS TO GEOLOGY DEPARTMENT FUNDS (July 1, 1988 through June 30, 1989)

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

Bruce & Gale Baker (Bruce, A.B. '57, M.S. '63)
Charles M. Balyeat (A.B. '57)
Mr. & Mrs. Karl Becker (Karl, A.B. '39)
Julia & William Bishop (Julia, A.B. '58; Bill, A.B. '54, M.A. '57)
Jeanne & Richard Boone (Jeanne and Rick, A.B. '79)
Gregory W. Brendel (A.B. '80)
Glen A. Brown (A.B. '65)
William C. Burkett (A.B. '67; M.S. '69)
John C. Butler (B.A. '63; M.A. '65; Ph.D. '68)
Robert E. Cain (A.B. '48)
Jessica & Tom Carpenter (Jessie, M.U. '74; Tom, B.A. '74)
James & Virginia Carrico (Ginger, A.B. '55)
Richard R. Church (A.B. '49; M.A. '50)
James & Leslie Coyle (Jim, M.U. '77; Leslie, A.B. '77)
Barbara & John Curtis (John, A.B. '70, M.S. '72)
Michael & Sarah Dalton (Mike, A.B. '74; Sarah, B.S. '72)
Michael & Rae Debrock (Mike, A.B. '79; Rae, M.U. '79)
David M. Delo (A.B. '26)

water. We intend to seek an individual who has expertise to do computer modelling of groundwater flow and contaminant transport around landfills, areas mined for mineral resources, or toxic or radioactive waste-disposal sites. The second position is largely undefined.

Professional Activities

Among regular activities, the Geology faculty published 8 journal articles and 26 abstracts of talks or posters presented at conferences during 1988. Graduate students were co-authors on one of the papers and thirteen of the abstracts. Professors Crowley, Mayer, Hart, McWilliams, and Roeske received external grant awards during the 1988-89 academic year. During this year the Department welcomed its newest faculty member, Dr. Marcia Bjørnerud, who arrived in January. We are also pleased to announce that Bill Hart was awarded tenure and promoted to Associate Professor. Professor Mayer spent the Fall Semester at the University of Arizona teaching and conducting research. Professor Baldwin spent the Spring Semester at the University of Arizona developing new research and teaching directions under a Faculty Improvement Grant. During the 1988-89 academic year the Department graduated 9 bachelors students, 9 masters students, and 1 doctoral student. We continue to feel the effect of the decrease in numbers of geology majors that is recognized nationwide. If you know of any qualified students, please ask them to consider Miami's graduate program in Geology.

Physical Facilities and Equipment

Our physical facilities and equipment show steady improvement. The Department has filled its allocated space in Shideler Hall to capacity. But minor renovations to be completed by the end of the summer will provide two computer labs, a small seminar room, and a departmental lounge. Three new, state-of-art equipment facilities are extensively used in support of the research and teaching programs in the Department. These facilities include the single crystal x-ray laboratory in Hughes Hall (co-supervised by Hughes; shared with Chemistry), the DCP analytical lab and the geochemical prep lab (both supervised by Hart and Musselman). This past year is the first full year in which the latter two facilities were completely functional. Additionally, within the last year Crowley has established a fully functioning fission-track geothermometry facility.

The solid source mass spectrometer, which is more than 20 years old, is producing good strontium isotopic data following considerable coaxing and numerous threats from Musselman, Grant, and Hart. In the last few years the department has also been able to replace all three of its 15-passenger field vehicles through the summer field workshops of McWilliams. The Department has approximately 35 microcomputers, and most faculty feel their need for computers for word processing and minor data manipulation are adequately met. We will continue to upgrade the systems in the general student lab --- currently it contains three IBM and two Macintosh computers plus four dot-matrix printers.

Liberal Education Reform

Extensive discussions on liberal education reform continued this year. The Miami Plan, as the reform is now called, received significant support from the new University Senate, a governing body comprised of faculty and student representatives and various administrators. Support for the plan among the faculty at large was modest --- a referendum in April of 1989 to retain the current system of electives (that is, to reject the Miami Plan adopted by the University Senate) was narrowly defeated by a vote of 305 to 297. The Miami Plan will require major changes in the current system of elective courses, will affect all undergraduate students, and will be implemented over the next 4

years. The Department is currently advertising to fill a temporary Visiting Faculty Position that was made available to provide faculty with a reduced teaching load to address some of these new curricular needs. More about curricular reform next year after the department attempts to address the required changes. . .

Acknowledgements

I again wish to thank friends and alumni who continue to support our program. Your gifts enabled us to make equipment purchases such as computer hardware, to maintain our lecture series and to continue development of the Limper Museum. They were also used for faculty travel to visit students doing field work.

Finally, I would like to thank all who returned our alumni questionnaires and those who have contributed news items or stories for *The Shibboleth*. Editor Dwight Baldwin, Bob McWilliams, and Melissa Morgenson deserve special thanks for their work on this year's edition.

FIELD STATION REMINISCENCES

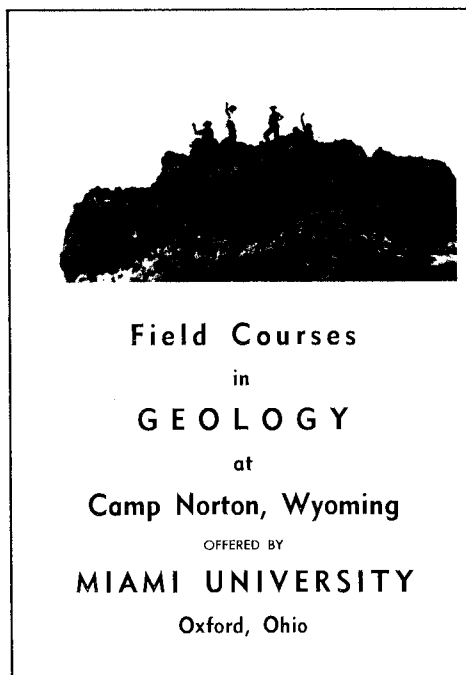
Introduction

Perhaps one of the most successful aspects of the Geology Department has been the operation of the field station near Dubois, Wyoming. Having served over 3700 students at many academic levels since 1947, the station has had an enduring impact on generations of geologists and teachers. Thus, it is appropriate to devote the lead article in this issue to the field station and to the many faculty and staff whose energies have made the program such a success.

The information and pictures that are provided herein were collected from a number of sources including alumni, old advertising brochures and interviews with Miami faculty who are either currently teaching or have taught for an extended period at Timber Line Ranch (Karl Limper, Wayne Martin, Bob McWilliams, Roy Reinhart and Dave Scottford).

History of the Station

The upper portion of the Wind River Basin was first settled in the 1920's. Ben Weeks, Sr. and his wife Jean (a school teacher in Dubois) established a homestead at Timber Line Ranch in 1925. There he began raising horses for the U.S. cavalry, so "there were some mighty nice pieces of horse flesh around the ranch" (K.L.). During



Spinnler, Gerard E. (M.S. '79) - Gerard and his wife, Polly, have another addition to the family, Allison Elizabeth, born December 13, 1988. The family is still living in Houston, where Gerard continues his work with Shell Development.

Stearns, Donald L. (B.A. '56; M.S. '57) - Don is Vice President of Digital Technology, located in Dayton, Ohio. He tells us that daughter Lisa graduated from Miami in 1985, and daughter Alison will enter her junior year at Miami this fall.

Stewart, Robert H. (B.A. '43) - Bob continues his research on the volcanoes of Panama. In 1988, he co-authored and published a paper on this subject in the *Journal of South American Earth Sciences*. He tells us it's lots of fun and there is still much to do.

Stichtenoth, Craig W. (M.S. '77) - Craig writes that after 4½ years in Denver, Texaco transferred him to the East Region in New Orleans, where he is assigned to the Offshore Exploration Division. Other Miamians in his new office are Mark Sunwall (M.S. '76), Jeff Ratliff (M.S. '82), Kevin Paxon (A.B. '78, M.S. '85), and Gale Jenkins (M.S. '77). Such a gathering must seem like a *daily* reunion!

Tanksley, David A. (A.B. '52; M.S. '53) - In 1985, Dave retired from Conoco, after 31 years of service. Since then, he has been exploration consultant for Global Natural Resources, a small international oil company. The birth of a grandson in December 1986, marked yet another milestone in Dave's life.

Thompson, Dale R. (M.S. '63) - Dick expects to retire from the Pennsylvania Department of Environmental Resources and then venture into consulting work. Last August, Joann and he vacationed in Canada and Alaska. In Fairbanks, he had hoped to contact Jack Reiland (M.S. '58), but didn't catch up with him until later. Dick and Joann became grandparents on September 25, 1988, when youngest daughter Sally gave birth to a son, Steven Michael.

Thompson III, John W. (M.S. '80) - Curly writes that he and his wife Julia have a new addition to the family, Karl Andrew, born in May 1988. Karl joins sister Katherine Emily, now 4 years old.

Thomsen, Mark A. (M.S. '80) - Mark is Senior Staff Exploration Geologist with Mobil Oil, Bakersfield, California. He, wife Kathy, and daughter Lindsey (age 3) enjoy life on the west coast.

Tucker, Daniel R. (M.S. '68) - Dan was appointed head of the Department of Geology, University of Southwestern Louisiana in August 1986, where his wife, Melinda, continues to teach part-time. His current research involves study of Sierra Quemada Caldera, Big Bend Park, Texas.

Vandersluis, George D. (A.B. '63; M.S. '65) - 'Sluis' stopped by the department in August 1988, and we were pleased to see him. He currently operates his own consulting business, Geo-Van Associates, which involves much work abroad. Recent projects in southeast Asia involved coal exploration and basic mapping.

Vicarel, David J. (A.B. '81) - Vic and his wife Jennifer enjoy their jobs as staff geologists with Goldberg-Zoine & Associates in Newton, Massachusetts. They love living in New England.

Shaw, Robert A. (A.B. '69) - Bob was married to Jeri Smith on July 24, 1988. They are living in San Antonio, Texas, where they have started a software development/systems analysis firm. He mentioned that they would be marketing their first package in January 1989. Congratulations all around, Bob!

Shelton, Kevin L. (B.A., B.S. '77) - Congratulations to Kevin who writes that he was recently promoted to Associate Professor of Geology at the University of Missouri-Columbia. He will be Chairman of the Technical Program Committee at the GSA meeting in St. Louis, and he hopes to see many Miami friends there. During the coming academic year, he will be on a research leave to concentrate on two separate projects, one involving Franciscan rocks in northern California, and the other on lead-zinc mineralization in southeastern Missouri. The former project involves extensive field work in the Big Sur area, along beach exposures. Sounds like harsh working conditions, Kevin!

Shump, Kenneth W. (A.B. '80) - Ken and his wife Debbie are the proud parents of a son, Kevin. Ken has been employed with CH2M Hill for the past six years, working primarily on hazardous and solid waste projects -- one of which entailed working with Tom Sale (A.B. '80). Ken says he's learning a lot about basalts out there in the Pacific Northwest. He also notes that if anyone with a strong background in groundwater is interested in moving to volcano country, they should give him a call.

Smith, Edgar M. (M.S. '71) - Bud reports that he's been very busy with clean-up of contaminated ground water at various Union Carbide facilities, both domestic and foreign. His wife, Barbara, works as a teller at the Union Carbide credit union (two incomes sure helps their college-education fund); she plans to develop a professional career, once both children are in college. Their older daughter, Autumn, will attend Auburn University in the fall, majoring in marine biology, while Jenny begins 11th grade.

Smith, James M. (M.S. '49) - Jim and his wife Joan still reside in eastern Indiana, where Jim continues to manage his farms. He tells us that one of his plays was produced in a workshop at Hagerstown, Indiana, last summer. He keeps in touch with the department and manages to attend on-campus seminars from time to time.

Smith, Barry S. (M.S. '82) - Barry and family recently moved to Richmond, Virginia, where he is employed as groundwater specialist for the Mid-Atlantic District of the USGS, Water Resources Division. How does it feel to be out of the Midwest, Barry?

Sorrell, Charles A. (A.B. '57; M.S. '58) - On October 20, 1984, Chuck was married to a fellow Miamian, Marilyn ("Mickie") K. Chapman. Chuck is still with the U.S. Bureau of Mines, while Mickie is a school psychologist with the Montgomery County (Maryland) school system. He caught us up on the doings of his family: Son Carlton manages a plant for Fuller O'Brien in Houston; son Chris received his Ph.D. and teaches ceramic engineering at the University of New South Wales, Australia; daughter Kathy does public relations and legislative work for the Santa Clara Valley Humane Society; son Dan is an archaeology major at the University of Cincinnati; youngest son Andy graduated from high school last year. In summary, Chuck asks, "Please give my affectionate and respectful regards to my former colleagues. I owe them a lot."

Soule, Charles H. (B.A. '72) - Last year, Chuck and his wife, Cathy, moved to Bellevue, Washington, after Chuck completed his M.S. in hydrogeology from Western Michigan University. He is currently a hydrogeologist with Applied Geotechnology, Inc., in Bellevue. Other news: On June 13, 1989, Cathy and Chuck became the proud parents of Elizabeth Alice. Best wishes to the three of you!

these early years, the Weeks family also ran pack trips for hunters and fishermen who wanted access to the unspoiled wilderness of the Wind River Mountains.

Ben did not have his property lines officially surveyed, however, until 1947 when Al Wade and Karl Limper first brought a group of students from Miami to join recruits from Cornell and Knox Colleges and Syracuse University. "That really started it all. Al Wade and I had to go out to the Witness Tree, and carrying the transit that Miami had picked up, we surveyed the property Ben Weeks owned. We went up to Elk Ridge, carrying that transit, then went up the back wooded area, and then across on each side. I think we decided he owned a section -- one-mile square" (K.L.).

It was not long, however, before Syracuse, Knox and Cornell dropped out because of the expense of sending faculty to the Station. Then Mississippi State University sent Ned Phillips to teach for several years; but he, too, was forced to retire when he realized that being paid \$25 per student by Mississippi State amounted to less than his transportation and living expenses! Thus it was that Miami became the sole operator of the Station.

Life at the Ranch

As indicated in a flyer published about 1946 (the cover of which is shown opposite), the field station was first called *Camp Norton*. As described in that early brochure, "the buildings are all of log cabin construction, attractively designed. Five large buildings are devoted to student quarters, and in addition there is a main lodge. The main lodge embraces a spacious, comfortably furnished living room with a huge fireplace and the dining room. Each evening the dining room is converted into a writing room for student use as desired. The meals, consisting of good home cooking, are excellent". Although some might quibble with the adjectives used in this description, most everyone who has attended courses at the station would recognize the place.

It is clear that other aspects of the ranch have changed -- some for the better and some for the worse. For example, the brochure goes on to say that "excellent bathing facilities are present in the river at the ranch as well as Brooks Lake a short drive from the ranch". (Remembering the temperature of this water, however, one can imagine that it must have been a pretty odoriferous group upon completion of the four-week session.) Bath houses, even with limited hot water, are certainly a major improvement. On the other hand, tuition, board and lodging totaled only \$120, with no differentiation in costs between in-state and out-of-state students. This summer, Ohio students paid \$1,057 (out-of-state students \$1,457) for the same four weeks of instruction.

But the close proximity of the Wind River and Brooks Lake had benefits beyond the prospect of an icy bath. Prior to 1959 when Wayne Martin took over as director, it was traditional for the faculty to take the students up to Brooks Lake for a cookout. The faculty would do all the cooking and serving of the food. "That was a lot of work, too, by the time we loaded the wood at the ranch, the grills, the pans, the food and split the wood" (W.M.). "That was [the students'] way of getting even with us" (R.R.).

The Wind River also provided an excellent fishing hole for faculty and students -- particularly right after fish had been dumped into the river from the Wyoming Fish & Game truck. Bob McWilliams recalls one such time when well over 100 fish were caught at the bridge on the ranch and prepared for the students for dinner. But the cleaning of this monstrous *haul* of trout soon became an onerous and tedious chore, and therein lay the crux of the problem. "Some of the fish were never gutted, still had the heads on, and a few of the students were served fish cooked that way. The students who had been here before acted like they would have eaten rocks. So when squeamish students gasped and went 'Oooh, ugh' over these intact fish, the other students said, 'Hey, that's a Timber Line Surprise!' and they'd grab the fish over to their plates and eat them immediately to show how tough they were. They wouldn't put up with sissies!" (B.M.).

And who could forget the many other highlights of in-camp life: the North-South football games, the race to the showers (to be one of the first to get the limited hot water after a long day in the field), attempting to reach the cabins via the narrow, slippery boardwalks without getting soaked by the irrigation sprinklers, and those *mystery-meat* sandwiches for lunch. "If [the students] didn't eat all their hotdogs, they would grind them up and make them into sandwiches! Boy, was *that* good" (R.R.). "One guy said he threw his sandwich on an ant hill, and the ants moved their hill" (D.S.)! "Or if we were by a creek during lunchtime, the students would sail their sandwiches down the stream to see whose sandwich would float the longest" (K.L.). We could never assert that our students were not creative.

Fun in the Sun

One of the places visited by every class, whether it be the "Pebble Pups" (Introductory Geology) or the "Rock Hounds" (the first of two courses on geological field methods), is the Natural Bridge in Lower Warm Spring Canyon. Getting to the Bridge in the early days involved a hike down a steep and precipitous path endearingly called *Sacagawea's Trail*. This descent was certainly not designed for the faint of heart nor those afraid of heights, and many a student had to be coaxed to the bottom. But once at creek level, there were many wonders to behold.

Some of you will remember the old logging flume built to carry logs from the dam upstream to the Wind River Valley below. "We used to go up and down that old log flume, perched on the edge of the cliff above the creek. It seemed reasonably safe, I thought" (R.R.). "There were strange little black spots in the wood [of the flume], and when you stepped on one of those black spots, either your toe or heel went down; and there were cables hanging on the cliff walls used to support the flume. You always wondered how the cables got there in the first place" (K.L.). For some time it was possible to walk the flume into the natural bridge. "Remember, where the flume went through the bridge, there was lots of dripstone. And there was one end of the flume in the bridge where Lucky Strike packs had become calcified and completely encrusted" (D.S.). "One year, we found a fly (someone caught it or something) and we set it where the water was dripping. The next year, we came back and there was a coating over this fly. So, every year we examined the fly, as long as we could come up that far. Finally, we gave up going that far up, but we'd watched that fly becoming fossilized" (K.L.).

Then there were the trips to Yellowstone. One year a group of students from Mississippi State grew beards and dressed in black suits and hats. They gathered around Old Faithful Geyser and "acted like they were praying or something like that. One of them carried a black box with a handle on it, resembling a dynamite detonation device, and held a book that looked like the Bible. They slowly circled the geyser quietly mumbling to themselves, waited until it was about to erupt and at that moment depressed the box handle. The tourists fell back in awe" (D.S.). Such creativity, logistical planning and forethought are rare things indeed!

Many other nonacademic pursuits could be recounted, but time and space do not allow. It will have to be left to the reader to recall those summers when the U.S. Forest Service conscripted students to help fight forest fires up in the National Forest, or the cave high on the cliffs of Warm Spring Canyon (in the Death Canyon Formation) where the Yeti would "come out if the sun hit it just right" (K.L.), or . . . Of such tales are legends made!

Ott, William B. (A.B. '75) - We hear, through the grapevine, that Bill is the owner of the Spanish & Pueblo Door Company located in Santa Fe. Word is that his final products are masterpieces; in fact, one set of his residential doors is currently installed on a home here in Oxford!

Paxton, Stanley T. (M.S. '80) - Stan is busy "commuting" between Houston and Denver, studying future exploration in and around the Rockies and high plains. This is also his third year of heavy involvement in Exxon's campus recruiting and coordination. His wife, Mary Lou is now in her second year as a Language Arts Specialist, teaching three hours a day in kindergarten, and first and second grades. She and Stan are enjoying their roles as parents of their active, enthusiastic three-year old, Sarah.

Prest, Donald F. (A.B. '53) - Donald is currently working as a Plant Safety Engineer for General Motors in their Bay City, Michigan, plant. He happily reports that he has four grandchildren (two girls, two boys) and plans to retire in two years to his "new home on Roan Mountain, Tennessee." There's nothing like counting down to contentment!

Pritchard, George (M.S. '80) - George still works at Texaco's Denver office. It's been reported to us that he married Connie Fletcher in November 1988. Congratulations to you both!

Ratliff, Jeffrey A. (M.S. '83) - Jeff says he's looking forward to Miami's next football game against LSU (scheduled for 1990). He's currently living in Metairie, Louisiana, and will no doubt have a front-row seat!

Rawnsley, Christopher M. (A.B. '85) - Chris has moved to Manchester, New Hampshire, and continues work on his Ph.D.

Ritzma, Howard R. (A.B. '47) - Howard is a consulting geologist in Salt Lake City.

Roberson, John C. (A.B. '79) - Clay reports that he is still single, living in Charlotte, North Carolina, and working toward his B.S. in Mechanical Engineering. Quote: "Have made Chancellor's List two semesters in a row (there are those who will find *that* difficult to believe)!" He managed to make it back to Miami for his 10th reunion this June.

Rothman, Edward M. (M.S. '78) - Ed still works for Columbia Natural Resources in Charleston, West Virginia. He served as General Chairman for the 1988 Eastern Section AAPG meeting and says Bill Rike (A.B. '69; M.S. '73) served as President at that same meeting. Yeah for Miami!

Saines, Marvin (M.S. '66) - Nick is still working as a senior hydrogeologist with Donohue & Associates of Chicago. His son, Rick, is currently a sophomore at Miami.

Scott, Nancy (Fischer) (B.A. '77) - Nancy and her husband, Ben, are the proud parents of a son, Kenneth Steven. She tells us that the responsibilities of parenthood have made them feel like "the oldest couple on the block." Nancy is still working at Arco, while Ben continues his work at Rockwell.

Shafer, Roger L. (B.A. '57) - Roger has spent the past 11 years in the Sultanate of Oman, where he is executive director of Zawawi Trading Company. Wife Suzanne works as an education advisor for the U.S. Information Service at the American Embassy. Must be a fascinating life!

Mignery, Thomas J. (A.B. '85) - Tom finished his M.S. degree at Kent State in December 1987 and is presently working on the City of Oxford's Seven Mile Creek well field expansion. Quote: "Funny and ironic how life takes you back in time to Ole Oxford!"

Miller, David D. (A.B. '79) - David is currently working for Fisher Scientific as a laboratory products sales rep, after leaving the petroleum industry in 1984. He and his wife Kathy have two boys, Bradley (age 4) and Benjamin (age 2) and, he writes, "we are expecting a girl in January of 1989." Isn't it grand to know in advance!

Miller, Krista D. (A.B. '78) - Krista and her husband Jack are living in Denver, where she is employed with Texaco. Her assignment is offshore California and she enjoys her trips to the coast. Krista says she misses the *beautiful* autumns at Miami.

Mitchell, Jeremy (M.S. '89) - Jeremy completed his Master's this May and will enter the Ph.D. program at the University of Wyoming in the fall. He and Melissa Brown (A.B. '86) now live in Laramie and will be married later this year.

Morrow, David L. (A.B. '48; M.S. '49) - Dave calls himself a "qualified private investor," in cahoots with Glenden Johnson (A.B. '48). He enjoys hunting on his lease in Texas, in Montana, and on safari in Africa. Folks who say "Life begins at 50" really know what they are talking about.

Murchison, David K. (M.S. '80) - Jeff Williams tells us that Dave is quitting the Department of Energy to ride a bicycle across country to California. He plans to settle there, when his travels end. Good luck, Dave!

Negas, Taki (Ph.D. '66) - Tyke is vice president of Engineering at Trans-Tech, a manufacturer of ceramics for electronic devices. He and his wife Claire have a daughter, Kristina. After checking out the photos in the last issue of *The Shibboleth*, Tyke comments that "time has been very kind to the Department Staff." Compliments like that are few and far between these days!

North, William B. (A.B. '62) - Bill is still with the State Department, now assigned to the U.S. Mission to the United Nations. He returned from his assignment in Sydney, Australia, in July 1987, and currently lives in New York City.

O'Halloran, Linda (Zurbrick) (A.B. '83) - Linda was married on March 11, 1989, to John O'Halloran, a robotic systems engineer originally from Dublin, Ireland. Linda writes that they plan a delayed honeymoon trip to Ireland in July. She still works as a Ceramic Coatings Specialist at General Electric in Cincinnati, "coaxing a robot to apply coatings to engine hardware. In fact, it was a robot named *Rambo* who introduced me to my husband." An *electrifying* experience, we're sure!

Opalka, Richard B. (M.S. '80) - We were fortunate to be included on the Opalka Christmas Card List again this year. Dick and Kathy are kept quite busy between their jobs and the extra-curricular activities of their four children. Dick is planning a career change and hopes to enter Oklahoma State University in their hydrogeology program.

Orndorff, Harold A. (M.S. '80) - Hank was promoted to Division Geological Engineer with Shell Western E&P, which means he is now more involved with the business aspects of the oil industry. He and his wife, Cheryl, have one daughter, Julie Ann, born December 10, 1987. The family is enjoying life in California, where Hank says groundwater opportunities are "more enormous" than ever.

Harrowing Field Experiences

Given the ruggedness of the terrain and the hazardous conditions of many of the dirt roads over which the Station's vehicles had to travel, some exciting and nearly calamitous experiences have occurred over the more than forty years of field-station operation. Some of the more notable dealt with getting the trucks up and down the Dunior Valley and Spring Mountain roads. "When we used to go up Dunior Valley, we'd pray that it wouldn't rain before we'd come down out of there. The dirt roads could get really bad. When it would get wet, we'd walk the students alongside the truck, to keep it on the road; otherwise, it would slide off. Two or three students could push the truck easily across the greasy road, and they saved our necks many times. Several times we came off of Spring Mountain keeping the wheels in the ditch on the uphill side of the road. One time, going up the mountain, John Thoms walked ahead of me to throw rocks out of the ditch so that I could keep the wheels in it" (W.M.). "There would usually be afternoon thunderstorms, then the sun would come out. So, if you could wait long enough, things would get a bit drier" (K.L.). "One memorable experience was with the International on Spring Mountain road. We got down to one point where the front wheel was less than a foot from the edge of the bank. So, we blocked it up and walked out" (W.M.).

Trips up or off of Warm Spring Mountain provided equally frightening stories. Dave Scotford recounts the following tale: "In the rain one afternoon, I was coming down, approaching a hairpin curve. The truck started to go sideways, but I finally got it stopped before it went over the edge. I looked around and there was no one in the cab with me. I got out and looked, but there wasn't anyone in the back either. They had all bailed out" (D.S.).

Even on a dry day, there was a sense of unease and tension when making the long, slow ascent up this tortuous mountain road. The Forest Service sold timber rights back in the high country, and no one could predict when you might meet a huge logging truck coming down 'hell bent for election' at the next switchback. Fortunately, many of these hazards have been eliminated with improvement of these back-country roads.

Nightlife in the Country

But life at camp was not all work, and there were several establishments on the road to and in Dubois which provided R&R for our students. Most will remember the Rustic Pine with some fondness -- its long lodgepole-pine bar to the right, booths on the left and, most of all, the heads of moose, buffalo and elk adorning the walls. It served many functions: as a bar, community center, a bank and even a church on Sunday mornings. "Remember how the Rustic Pine used to be the bank. If ever we wanted any money, we'd go to the Rustic Pine (we called it *The Rusty Pine*). And on Sunday afternoon, they would have cowboy-and-Indian films; we'd stay away because if the local ranchers and Indians came, the Indians would get mad because of the movie and there would be a big fight" (R.R.). "The townspeople thought of the Rustic Pine as the community center. They'd come in on Saturday night and sit around and play poker or the slots. All the slot machines would be hauled away now and then because the county sheriff had announced that he would be coming through the area to inspect things. So none of these gambling places were around when he'd show" (K.L.).

Mable's was located near the top of Mile-Long Hill, where classes from time immemorial have collected fossilized plant leaves, and was a second *watering hole* which developed quite a reputation before it burned down. "It was only on weekends that you could go all the way to the Rusty Pine, but on weeknights, after lecture, you could make it down to Mable's." (K.L.) Mable, for those who knew her well, was a very *friendly* Illinois woman who had moved out there as a widow and bought this place. She

was an entrepreneur who employed "nieces" to come in every once in a while and entertain lovelorn customers. Mable's had a big fire-place, lounging furniture, etc., and the students enjoyed sitting around the fireplace. "But her cleverest piece was the bar which was not fashioned from a complete piece of wood; it had an opening where the two planks did not abut and which was large enough so that even a silver dollar could fall through the gap. When Mable would give you change, she would slide it across the bar, and any change that happened to hit that slot would disappear. She would just say, 'Don't worry, we'll take care of it later'. But it was *our* money that was going down the hole, not hers" (K.L.)!

Many of those who attended more recent sessions at Timber Line will recall evenings at the K.O.A.. The proprietor of this operation ran a gas station, campground, livery stable and laundromat across the river from the ranch -- but the most lucrative of his operations had to be the bar. Many were the nights when students from the station relaxed and refreshed themselves at that bar after a long dry day in the field. The *graduation ceremony* at the close of each session and weekend football games in the backyard were occasions not soon forgotten.

Closing

These are but a very few of the recollections recounted by those who have spent time at Timber Line Ranch, either as students or as faculty. Lack of space and some editorial prerogatives have not allowed all to be included. But if these tales awaken other memories in those who read this copy, your editor would be most pleased to receive them.

Over the years the facilities and curriculum have changed -- hopefully for the better. In the following section, Bob McWilliams delightfully highlights the permutations which have occurred since 1970.



Timber Line Ranch, 1967

proud to announce the arrival of a son, Adam Richard, born February 11, 1988. The family is currently living in Maineville, Ohio, where Lisa does marketing for Westinghouse Environmental, alongside fellow geology grads, Joanne Mitock and Richard Boone (both A.B. '79). Rick is currently working as a project geologist for Zorn Engineering.

Kilburn, Richard F. (B.A. '64) - Dick reports that he is an still Air Force colonel on active duty, currently Director of Intelligence Assessments at SAC headquarters in Omaha. This June, he enjoyed returning to Miami for his 25th reunion accompanied by his daughter, who may become a member of the 1990 freshman class! Dick was happy to meet up with Roy and Betty Reinhart at the reception dinner, and he writes: "Roy's looking great; must be the ease he had in dealing with us *outstanding* students!" No doubt about it!

Knecht, Matthew D. (B.S. '88) - Matt is currently in transition: he will soon leaving Florida and head north, returning to Ohio. He has accepted a position as Vice President of H₂W Engineering, Inc., located in Mentor. This year, he will spend time editing his thesis work (with the assistance of co-author, Dave Scotford) in an attempt to get it published. Matt and his wife, Barbara, are expecting their first child in December 1989. Our best wishes for a healthy, happy baby!

Kowalczyk, Frank J. (M.S. '74) - Frank moved from oil exploration to teaching and consulting. He currently divides his time between teaching earth & space science and operating his mapping consulting business. He recently co-authored *A Geological Walking Tour of State College* and also a paper on wave-tank experiments.

Krivanek, Kenneth R. (B.S. '72) - Kenneth is still working for Westinghouse as a staff environmental engineer, where he is involved in all aspects of pollution control.

Lepak, Robert (M.S. '83) - Bob, wife Nancy, and daughter Sarah are pleased with their recent move to the Adirondacks, where Bob is a science teacher at Lake Placid Central School. He says they miss their Miami friends and invite all to come visit.

Lindner, Robert F. (B.A. '51; M.S. '52) - Bob is now head of the Chicago office of Chancellor Capital Management, which manages investments for pension funds and corporations. He and his wife Nancy recently purchased a house on the shores of Lake Michigan, in Kenilworth, Illinois.

Maynard, J. Stephen (A.B. '79) - Steve plans to attend Naval Post Graduate School in Monterey, California, in 1989 to work toward a degree in mechanical engineering.

McAloon, Anthony J. (B.A. '78) - Tony was transferred to London in March 1988, where he will spend two or three years as Marketing Supervisor with ExLog in Oilfield Geological Services. On June 10, 1989, he married Marian Hanley in Bournemouth, and the two planned to take a honeymoon trip to India. As Tony says, "I'm enjoying all that Europe has to offer!"

McCartney, Richard F. - Last September, Rick wrote that he was searching for a new position in the San Francisco or Los Angeles areas. While working in Los Angeles, he has been able to socialize with a few Miami grads: Dave Daugherty (A.B. '83, M.S. '86), Cliff Schmitt (M.S. '87), Matt Eaton (M.S. '86), to name a few. It's a small world, after all!

Mennecke, Brian E. (M.A. '88) - Brian is employed as senior geologist with STS Consultants in Milwaukee.

declares, "What a joy it is to have and care for our first child!" He also urges Miami grads to apply at Envirofact where there are many positions available because the company is growing so rapidly. Thanks for the tip, Tim!

Hanlon, Kerry M. (M.A. '89) - Kerry began work with Department of Natural Resources in Cincinnati this summer, following graduation. He and his wife, Carolyn, became the proud parents of a son, Patrick Michael, on August 23, 1988.

Harris-Noel, Ann G. (M.S. '58) - Ann has been busy as an editor, working on the 4th edition of *Geology of National Parks* and *GAGA*, the publication of the Association for Women Geoscientists. She has also presented papers at society meetings. She is currently Vice President of the Geology Section of the Ohio Academy of Science.

Harris, Frank W. (M.S. '77) - Frank is still working for Chevron's Western Region, exploring the Great Basin area of Nevada.

Hefner, John H. (A.B. '51) - John was honored by the Houston Geological Society receiving their Distinguished Service Award in June 1988 for his extensive involvement in the HGS computer system (including programming and instruction). Congratulations, John!

Helman-Barr, Kristine A. (A.B. '81) - Krissie writes that she has only been using her geology degree as a hobby. She is currently Sales & Promotions Manager/Trust Officer at Central Trust in Cincinnati. She and her husband, Dan, have a son, Andrew, who is now two years old.

Holland, G. William (A.B. '80) - Bill, employed at Fishel Technologies in Columbus, Ohio, wrote that he would be moving on to a new project at the end of last summer, but there has been no word yet as to where that might be.

Homan, John T. (A.B. '80) - John is midwest regional sales manager for Century Products, Inc., a manufacturer of swimming pool equipment. He and his wife, Mary Jo, recently visited Hong Kong and while there, they met a Scottish geologist set John straight on the geomorphology of Lantau Island!

Hudson, Michael - Michael is busy putting the finishing touches on his dissertation. Still, he and Teresa Cooper found time to get married in August 1988. They moved into an older home in Ashland, Ohio, which they plan to remodel, as time permits. Michael was recently promoted to Associate Professor of Geology at Ashland College.

Johnson, Kathleen E. (A.B. '82) - Kathleen is currently working on her Ph.D. at Northwestern University. Her new dissertation topic is mantle geochemistry. In January 1990, she will be moving to Bristol, England, to do research at the British Geological Survey.

Kamman, Gregory R. (M.S. '89) - In August, Greg will begin work at ENVIRON, Inc., in their Princeton, New Jersey, office.

Kearns, Wynn H. (A.B. '86) - On May 14, 1989, Wynn received his M.S. from Southern Illinois University. Although he hasn't yet found employment, he has been kept busy lecturing elementary school children on dinosaurs, rocks, and other geology subjects. Quote: "Say hi to Goist and Casper."

Kenter, Lisa (Dickhaut) & Richard J. (Lisa, A.B. '80; Rick, A.B. '81) - Lisa and Rick were

CHANGES IN THE FIELD COURSE/FIELD STATION SINCE 1970

Robert G. McWilliams

THE BIG GREEN TRUCK IS DEAD -- It lies in an unmarked grave with a huge stake driven through its carburetor. Students now travel in the air-conditioned luxury of 15-passenger vans driven by polite and sensitive drivers. Students marvel at the durability of the vans and the skill of the drivers as they maneuver what are considered to be steep and rough roads. The past whispers to earlier, sturdier generations.

CECIL B. DEMILLE NEED NOT APPLY -- Huge classes of 60 or 70 students are ancient history. Last year's class had 15 students; this year's class will have fewer than 20.

CALIFORNIA CHEFS PREPARE WHOLESOME, NUTRITIOUS MEALS TO SUIT EVERY TASTE -- (Just kidding!) The lunches and other meals have remained unchanged since the beginning of the Cenozoic when the shortage of dinosaurs forced students to eat baloney. However, students now make their own sandwiches and can blame only themselves if they get a cardboard replica.

TEN-GALLON HATS RIDE OFF INTO THE SUNSET -- Student safety has always been a major concern, but today there is much more emphasis on the formal aspects of safety. Students are now required to wear hard hats when working on steep slopes. Climbing ropes are used on certain routes, and our vehicles carry extra water for emergency purposes. Classes no longer walk on the flume in Warm Spring Canyon, and we visit the natural bridge by the longer and safer route from the east side of the canyon. Only the ghost of Ferdinand Hayden still climbs the treacherous "Indian Trail" on the west side of the canyon.

THE LONG REPORT HAS BEEN DISCONTINUED -- Students are now required to turn in their final reports no more than three weeks after classes are over. This change requires that students rely on their own field observations and interpretations rather than those in previously published (and unpublished) sources. Therefore, the 18-year record for a tardy report is likely to remain unchallenged. The least ingenious excuse for no report: "My dog ate it." The best trade-in: "Someone stole my car (and my report)", substantiated by a newspaper clipping of the police blotter.

WYOMING HIGHWAY DEPARTMENT RECLAIMS STONEY POINT -- The first day's introduction to surveying with the Brunton compass at Stoney Point has been discontinued. Most students now learn how to use a Brunton in structural geology class. Today, there is more emphasis on geologic mapping and on interpretation of map-scale structures. Students now spend two days mapping the Warm Spring Mountain Quadrangle and one-half day of sketch mapping metamorphic rock relationships in Torrey Canyon. The air photo map area on Spring Mountain has been expanded to include extrusive rocks. Beginning this year, a full day will be spent mapping and interpreting volcanic rocks and volcanic-derived sedimentary rocks in the Absaroka Mountains.

THE PAST BECOMES THE PRESENT -- If a student of the 1960s were suddenly brought back to the Field Station, he or she would understand and approve of what we are doing. Only small changes have been implemented to update the excellent course developed by Karl Limper, Herb Hendricks, and Wayne Martin.

FACULTY AND STAFF NEWS

Dwight Baldwin: This was a year of great excitement and a time of growth in the Baldwin family. After a rather routine Fall Semester, Barbara and Dwight packed only those essentials that would fit into a Volkswagen camper and headed west for Tucson to spend a semester away from campus under the auspices of a Faculty Teaching Enrichment Award. Dwight spent the semester in the Department of Hydrology and Water Resources at the University of Arizona, where he attended classes and developed several research proposals for work to be done in Ohio upon his return. Barbara, on the other hand, kept herself busy and out of trouble by enrolling in the second semester of introductory Chinese.

The four-month stay was not, however, all work. At least one day of almost every weekend was spent seeing the widely varying geology and cultural sights and sites around the State. These trips took them to the extremes of the true Sonoran Desert in Organ Pipe National Monument, where temperatures rose to over 103°, to the South Rim of the Grand Canyon, where snow still lay on the ground.

But, as birds fly north with the arrival of Spring, the Baldwins packed up and headed north in early May to return to Oxford a week before the wedding of their older son, Art. This was indeed a joyous occasion -- that long wait for a daughter is *finally* over! It has indeed been a rewarding and exciting year.

Mark Boardman: Mark returned from his annual field trip to the Bahamas last year and went straight to Michigan to cool off. Unfortunately, Michigan was experiencing an incredibly hot, dry period during his stay there. Nonetheless, he soaked himself in cold, fresh American waters for a change. Why Michigan? Well, why not?

This past year, Mark and his graduate students presented seven talks at national meetings during the fall and spring semesters, and they made their debut in Ohio with two presentations at the Ohio Academy of Science on the origin of nodules in the local carbonate section. Also this year, three master's students and one Ph.D. student successfully defended their research. This just about clears the slate for Mark, leaving only three master's students to start the 1989-90 school year (the lowest number ever for him). He and his students contributed two papers to national journals (*Journal of Coastal Research* and *Journal of Sedimentary Geology*), a third has been accepted for publication (look for it in the September issue of *Journal of Sedimentary Petrology*), and a fourth is proceeding through the mill at *Geology*. Mark's workshop in the Bahamas has now been split into two workshops. The enrollment has increased enough (over 25 for the past two years) to warrant two sections. All in all, it has been a busy professional year for him.

On the homefront, his children (Jessica is 4 and Jeremy is 6) are now discovering that four quarters make a dollar, and that the gum machine gives the same amount for a dime as for a penny. Jeremy is "counting by twos" (up to 100), and both have just had the chicken pox. Meanwhile, Mark's wife, Treva, has capped her piano teaching at two days a week.

Marcia Bjørnerud: Our newest faculty member (an ex-Minnesotan) arrived in Oxford shortly after the winter solstice and waited in vain for snow to accumulate! She tells us the grey Ohio winter was brightened by the warmth and patience shown her by department faculty, staff, and students during her first semester at Miami. Her first structural geology class proved to be a friendly, inquisitive group, willing to believe in polydeformed metamorphic rocks even while flat-lying cratonic carbonates stretch as far as the eye can see.

Ehret, Kimberly S. (A.B. '80) - Kimberly recently moved back to Ohio. She's employed as a hydrogeologist for Environmental Management at Wright-Patterson Air Force Base. She says she's looking forward to visiting Miami again and hopes to catch up with other MU grads who have returned to Ohio.

Einerson, Wendy (Michalek) (A.B. '71) - Wendy says she has retired from geology and currently works for the Petersburg (Alaska) school district during the winter. She also spends time doing commercial fishing with her husband and two daughters. She says, "Petersburg is a small fishing & logging community without much employment opportunity for geologists!" Sounds idyllic, just the same.

Faithful, Peg (Svenson) (B.S. '71) - Peg is still a senior programmer for the National Bank of Alaska. Her free time is spent singing with the Anchorage Opera chorus and dancing as a member of Dancing Bears. Husband Bob keeps very busy as a lawyer, banjo player, dancer, and caller of traditional dances. Anchorage must be a swingin' place.

Feiler, James A. (A.B. '81) - Jim and his wife, Maureen, have their own company, JIMCO, a geological service company located in Corbin, Kentucky. Maureen does the accounting, while Jim undertakes field work. Jim notes: "If anyone needs work done in the Appalachian Basin, please let us know." Their fourth child is due in early July 1989.

Ferris, Steven & Susan (Retz) (A.B. '81) - Steve is now a senior geologist with Conoco Oil in Lafayette, Louisiana. On May 10, 1989, he and Susan happily announced the arrival of a daughter, Morgan Lee. Susan is currently staying home to care for this new addition to the family.

Fleischmann, Karl H. (M.S. '85) - Prior to heading south for Bogota, Colombia, Karl called in to report he recently accepted a faculty position at the Earth Science & Research Institute, University of South Carolina.

Foley, Jeffrey A. (B.S. '83) - Jeff had a frightening experience when he suffered a cerebral hemorrhage in February 1988. Fortunately, with a strong constitution and the support of his wife, Laura, he has made a nearly complete recovery. Jeff tells us his new daughter, Laura Elizabeth, born August 23, 1988, "looks like her Dad but without the beard and glasses." We're all glad to hear you are doing well again, Jeff.

Fraleigh, Peter A. (M.S. '88) - Peter is working on his law degree (expected in 1991). He's employed with Jaqua, Wheatley, Gallagher & Holland in Eugene, Oregon. Two "jobs" must be keeping you busy, Peter!

Goldstein, Frederic R. (M.S. '68) - Fred is Chairman of the Geoscience Department at Trenton State College in New Jersey. Other activities include being project director at the North American Geological Alliance and participating in "Project Pride" in New Jersey.

Gorman, Linda A. (Bell) (B.S. '66; M. Ed. '70) - Linda writes that her vacation was spent hiking in the Georgia, South Carolina, and North Carolina mountains, "educating the kids on those rocks." She says they also tried whitewater rafting on the Nantahala, which was a little calmer than going down the Wind River at field camp! She still enjoys her job as a teacher in Orange Park, Florida.

Gustafson, Timothy J. (A.B. '83) - Tim has been project manager at Enviropact, Inc., for the past three years, and enjoys the environmental consulting business. He and his wife, Julie, became parents on June 4, 1988, with the birth of Timothy Evan. The new Dad

Chapman, Curtis R. (M.S. '79) - Curtis is currently a geologist for North Central Oil in Houston, Texas.

Chimney, Peter J. (M.S. '77) - Pete was recently transferred to Chevron Overseas Petroleum and will be exploration geologist in such exotic locales as China and Vietnam. He reports that he has worked with both Greg Hatch (A.B. '55; M.S. '56) and George Distler (M.S. '67; Ph.D. '72) on a recent project. Pete also reports that he misses the great fossil collecting around Oxford. As a petroleum geologist, he gets few chances for rock-gazing and tries to stop at outcrops while traveling, to "keep the mind a bit sharper." He now lives in Livermore, California.

Chow, Minchen M. (M.S. '48) - Ming continues to keep quite busy as Member and Research Professor of the Chinese Academy of Sciences and Director of the Beijing Natural History Museum. He is also Vice President of the International Paleontological Association and plans to attend the 28th International Geological Congress in August 1989. He enclosed a dapper photograph of himself, taken in the Gobi of the Tyungaria Basin, North Sinkiang, while hunting dinosaur bones in 1986.

Colby, Norman D. (M.S. '89) - Norm recently graduated and is working in Costa Mesa, California. He is thrilled with the weather and the beach, and tells us that "Miami graduates should have no trouble getting jobs -- if they take groundwater classes." Thanks for the advice, Norm!

Coyle, Leslie Parkerson (A.B. '77) - Leslie continues her work as environmental educator at Northwest Park Interpretive Nature Center in Connecticut. She's looking forward to developing a rock and mineral program for 5th and 6th graders; "any suggestions cheerfully accepted!"

Crawford, C. Mark (B.S. '74; M.S. '77) - Mark is still a consultant with T.A. Manhart. Although he's drilling many dry holes and marginal wells, he says "Someone has to do it." He occasionally sees Renee Davis (M.S. '75) and Mik Chester (B.A. '77) at the "Miami Corner" of the Oklahoma Well Log Library.

DePaulis, Paul A. (B.A. '55) - After doing coal exploration all over eastern Ohio, Paul is currently working for R & F Coal Company, as a foreman at a coal reparation plant.

Distler, George E. (M.S. '67, Ph.D. '72) - The Distlers are currently living in Shekou, China, where George works for the ACT Operators Group.

Duerr, John C. (A.B. '36) - John is now retired from a lifetime of teaching. He still collects rocks and says his yard is full of them: "My tumbler goes 52 weeks a year." Sounds like quite a racket, John!

Earl, Forrest C. (A.B. '80) - Forrest is Manager of Environmental Services for Empire Soils, Groton, New York. He and Sara bought a new house with more land "because it has a spring and a kame!" They'd love to entertain visitors who find their way to central New York. It sounds like a lovely spot.

Earl, Sara (Deutscher) (A.B. '80) - Sara is still working on her masters degree in Elementary Education. Currently, she is taking a few years off from early childhood teaching to spend time with new son, Elijah Clay, who arrived September 4, 1988. Frankly, we think spending time at home with Elijah should also be considered "early childhood teaching!"

Marcia also found some time to think and write about strain gradients in mylonites. She looks forward to seeing mylonites in their natural habitats again this summer, when she returns to Spitsbergen (arctic Norway) as a member of a group which will include Norwegian, Japanese, and Polish geologists.

Kevin Crowley: Kevin reports that his first year in the department was unusually productive. He completed two National Science Foundation-sponsored projects: the first addresses the thermal history of the Michigan Basin and the second involves the annealing of radiation damage (uranium fission damage) in the mineral apatite. The results of the apatite work were presented by Kevin and collaborators, Maryellen Cameron and John Hughes, in Besançon, France, last September. There are several new projects in the works. Perhaps the most notable of these involves the reconstruction of the thermal history of volcanic rocks at Yucca Mountain Nevada (located at the Nevada Test Site). This project has environmental significance, as Yucca Mountain is the probable future site of the U.S. Department of Energy's high-level nuclear waste repository. This past June, Kevin traveled to Los Alamos National Laboratory in New Mexico to visit with scientists working at Yucca Mountain, to formalize a plan for the collection and analysis of samples.

Norman Grant: This year has seen the continuation of work in the Adirondacks where students Yingping Yang, Michael Hudson, and Kendall Hauer are pursuing doctoral dissertations. Yingping and Michael are working on the geochronology of mylonitic fault zones. The aim of both dissertations is to date the times of major fault movement during the Grenville orogeny and relate this movement to the timing of igneous emplacement and high-grade metamorphism. Yingping's work is receiving support from the State Geological Survey of New York. Kendall's work, on the other hand, will attempt to break new ground in seeing through high-grade metamorphism to the depositional and diagenetic features of the original limestones. If the work is successful, it will also bear on the controversial question of how the marbles should be correlated with each other.

Norman had two papers published this year, one with a large group from Michigan Technological University and the USGS on the age of Keweenawan copper mineralization in upper Michigan, and another with Peter Mazzone ('85) whose M.S. thesis has led to two striking publications. This last paper concerned the discovery that the plagioclase phenocrysts and the ground mass of the lava are not in isotopic equilibrium with each other, showing that in a strict sense, the plagioclase crystals are xenocrysts.

Norman and Christopher Chalokwu ('85) have also found a second example of isotopic disequilibrium among different mineral phases in gabbros and troctolites in the Duluth complex in Minnesota. This evidence that igneous rock may consist of crystals mechanically mixed with magma (rather than crystallized from it, as is usually assumed) leads to important changes in how we understand the petrogenesis of the rocks. Norman plans to present the Duluth work at the Fall GSA meeting in St. Louis.

Bill Hart: It's been another busy and productive year for Bill. In May 1988, he spent three weeks in Washington, DC, at the Carnegie Institution conducting isotopic analyses on western U.S. and Ethiopian volcanic materials. Then during June and July, Bill and his wife, Judi, traveled to many of the National Parks in the Rocky Mountains for both class preparation and respite. Bill then continued on to Arizona and New Mexico to do additional field work with his Ph.D. student, Jeanne Cooper-Chatfield. The remaining dash of summer was spent working on manuscripts and in the geochemistry labs.

This academic year has been filled with teaching and advising duties, as well as travel. First order of duty was attending the Annual GSA meeting in Denver, where Bill had five papers presented (three were collaborations with his M.S. students, Kevin Mallin, Barry Cupp and his Ph.D. student, Jeanne Cooper-Chatfield). In January, Bill and Judi headed for the snows of Colorado, where they spent a week skiing in Summit County. Immediately following Spring finals, Bill attended the combined Cordilleran/Rocky Mountain GSA meeting in Spokane, where he presented two papers and organized and convened a symposium on Neogene magmatism in the western Cordillera. Also this year, three of Bill's M.S. students successfully defended their theses (Paul Legge, Jeremy Mitchell, and Stephanie Mosher); and Bill and his colleague, Rick Carlson, published a review paper dealing with volcanism in the northwestern U.S. in a book entitled, *Continental Flood Basalts*.

In May 1989, Bill was off to the field again, where he continued his NSF-supported work on the northwestern U.S. Bill looks forward to another profitable year during which he expects two more of his M.S. students to complete their theses, and he hopes to complete two or three manuscripts dealing with aspects of his work in the U.S. and Ethiopia. Last but not least, Bill was welcomed into the *Tenured Ranks* in May when he was promoted to Associate Professor. Congratulations, Bill, on a job well done!

John Hughes: This past year, John has been burning the midnight single-crystal diffractometer with apatite structures, and many surprising results are forthcoming. He published a paper with Melissa Brown (A.B. '86) on the crystal structure of $Cu_2V_2O_7$ -beta, and he has other papers in press or review with: (1) Yongshan Dai, a current Ph.D. student, (2) Maryellen Cameron and Kevin Crowley, and (3) Howard Evans of the USGS. In September 1988, John reports, "I had the onerous task of presenting some of the results of the apatite structure work at a meeting in Besançon, France. It's a tough job, but someone has to do it!" He reported some of the same results at the AGU meeting in Baltimore.

Joe Marak: Joe reports that this past year was a good one for him, the department, and the museum. The Limper Museum Saturday Lecture series was particularly successful this year. Among the guest speakers were Bill Hart who discussed his work in the Ethiopian Rift and Afar, Bill Green, from Western College, who spoke about his work in Antarctica, and Kevin Crowley who delivered a timely lecture on nuclear waste disposal. Additionally, the museum took part in an Alumni Weekend Program which featured lunar rocks and thin sections borrowed from NASA. The petrologic expertise of Maryellen Cameron, Kevin Crowley, John Hughes, Kevin Mallin, and Allison Nassau made the occasion interesting to young and old alike.

This year, Joe was assisted in his museum duties by Greg Kamman. The two labored long and hard to re-label the fossils in the Local Formations displays. Toward the end of the year, with fossils swimming (crawling? floating?) before their eyes, they decided that fossils at species level are all the same and that paleontologists have played a cruel joke on us all! They did, however, complete that project and then turned their efforts to working on labels for a display to be included in the Cincinnati Gem and Mineral Show.

Visitors to the museum were in greater numbers this year. It may be a coincidence, but Joe wondered if local advertising for the Limper Museum Lectures and the improved displays were a drawing point. This year, with the completion of the expanded anthropology and zoology museums in renovated Upham Hall, there are plans for all three museums to cooperate in a few joint weekend events.

Joe was happy to see some familiar faces visiting the Museum this past year, including Bob Fry ('83), Jim and Billie Maynard ('52), Dick Rieke ('58), Jeff Floyd ('80),

Biehl, J. William (A.B. '80) - It was good to see Bill when he stopped by Shideler Hall in early May 1989 -- although he had trouble scaring up *familiar* faces! He reports that he is still division geologist for Ramco Energy Corporation and is now located in Belpre, Ohio. He and his wife, Rose Marie, are new parents for the second time: Jordan Christian (born August 8, 1988) joins his 4-year old brother, Adam James.

Bishop, William F. (A.B. '54; M.S. '57) - Bill is a consulting geologist, located in Houston, Texas. Congratulations, Bill, on the article, "Petroleum geology of east-central Tunisia," published in the *AAPG Bulletin*. We know it represents many years of effort.

Blackhall, Raymond N. (M.S. '74) - Ray is still running Subsurface Resources, Inc., in Houston, which is actively exploring two wells, with three others scheduled to "spud". He and Sally are still at the same address and enjoying life with their two-year old son, Colin.

Boies, Robert B. (M.S. '49) - Bob's note was brief: "Yo hablo español in Mexico, S.A.; mucho structure." He's currently living in McAllen, Texas.

Boone, Rick & Jeanne (Elliott) (A.B. '79; A.B. '79) - Rick and Jeanne wrote to announce that their second son, Scott, arrived on March 16, 1989. Older brother, Mark, is now 4 years old. Jeanne keeps very active at home with the kids, while Rick is a hydrogeologist and project manager for Westinghouse Environmental Engineering in Cincinnati.

Brendel, Gregory W. (A.B. '80) - Wally and his wife, Roxanne, recently moved to McLean, Virginia. He works for Environmental Remedial Action Sales (chemical waste management) and she is Regional Marketing Director for the Psychiatric Institutes of America. They became first-time parents on April 4, 1989, with the arrival of Matthew Frederick. Congratulations!

Bretz, Marty L. (B.A. '78) - Marty and Doreen are the proud parents of a daughter, Bailey Gene, born January 12, 1988. In October 1988, Marty was hit by the oil patch layoff; he is currently working for a financial services firm, Kimberly Co., in Dayton, Ohio, while Doreen is still working in law. Marty reports: "Clay Roberson is living and has returned to school in North Carolina."

Brinker, W. F. (A.B. '42) - At 71, Bill continues to find oil -- "without Karl Limper's 'piercing point'." But he chastized us: "Please be advised the *Brice Hall Breeze* was started by Prof. J. J. Wolford, and I was the erratic old soul's lab assistant." Thanks for setting us straight, Bill.

Browne, Michael C. (B.S. '84) - Mike is now General Foreman in charge of quarry operations at Aggregates Corp. in northern Indianapolis. He and his wife are the parents of a daughter, Gretchen, born in March 1988.

Bruewer, Dean B. (B.S. '79) - Dean reports that he recently gave up a position with Toyota to work as a process engineer for Ford Motor Company. Although it must have been difficult to give up those business trips to Japan, working for an American firm has its very real benefits. He's enjoyed several fossil-hunting trips with son Aaron's cub scout pack.

Butler, John C. (B.A. '63; M.A. '65) - John had only one comment to make: "Looks like you all are doing a fine job in building a faculty. Good job!" Thanks, John.

ALUMNI NEWS

Many thanks to everyone who responded to our last request for highlights of your 1988-89 year. The following information was gleaned from the postcards you sent us and the notations you made on the alumni questionnaires sent out last July. As we've said before, if you'd like the current address of an old friend, please get in touch with us. We would be pleased to provide the most current information on file in the Department.

Adilman, David J. (A.B. '81) - Dave stopped by the office in mid-May of this year to let us know he and his wife, Lisa Walters, have returned to "The Lower 48" and currently reside in Andover, Massachusetts.

Allwine, David A. (A.B. '84) - Dave is currently working with Westinghouse Environmental Services in Cary, North Carolina. His wife, Anne Marie, received her Masters of Social Work at UNC in May 1989. Dave was recently awarded a P.G. license from North Carolina. He and Anne Marie are kept busy trying to take in all the sights in their new location.

Andersen, C. Brannon & Carol (Gerber) (Brannon, M.S. '88; Carol, A.B. '86) - Brannon recently entered the Ph.D. program at Syracuse University, while Carol started master's degree work at SUNY College of Environmental Science & Forestry. On May 20, 1989, Brannon and Carol were married. Yet another happy match *etched in stone!*

Apostoluk, Peter - Pete reports that he has spent the past five years working in liquid packaging, that is "bulk-bag-in-a-box." His work has extended to a project in packaging bulk hazardous and non-hazardous waste for disposal. He and his wife, Kelly, live in West Monroe, Louisiana, with their three children -- "all girls!"

Baker, Chester E. (A.B. '47) - Chet has been acting as West Coast representative for Petroconsultants, working out of Houston and Geneva, Switzerland. He is semi-retired, and enjoys golf and bridge on the side. "If any Miami geologists are in the neighborhood, give us a call."

Balyeat, Charles M. (A.B. '57) - Charlie wrote to us in December to say he was currently living in Panama City where "the geology looks all too interesting to just let pass by." With the escalating problems in Panama these days, we hope you are surviving, Charlie! He says that, due to the political situation, museums and libraries are closed; for any alumni with a wealth of knowledge from which to draw, Charlie writes that he would greatly appreciate any articles on the geology of Panama sent to him: *Charles M. Balyeat, PSC Box 1724, APO Miami 34004.*

Bersticker, Albert C. (A.B. '56, M.S. '58) - Al and Fran moved to Hunting Valley, Ohio, last year. He is still President and Chief Operating Officer of Ferro Corporation and happily reports that Ferro hit \$1,000,000,000 in sales in 1988. Congratulations on helping Ferro reach this milestone, Al!

Bertram, Margaret Ann (B.A. '85) - Margaret is currently enrolled in her third (and last) year of law school at the University of Cincinnati.

Kathleen Johnson ('82), Tom Kallio ('76), Jim Smith ('49), and Jim Feiler ('81). As always, Joe extends an invitation to all who visit Miami to stop in and see the "New and Improved" Limper Museum!

Larry Mayer: In June 1988, Larry went on a six-month personal leave from Miami and moved to Tucson, Arizona. During his stint there, he conducted research on the rates of silt accumulation in desert soils and how those accumulations may be affected by playa geography. In addition, he served as a visiting associate professor at the University of Arizona where he taught Bill Bull's geomorphology class while Bill was on sabbatical in New Zealand.

While at Arizona, Larry helped set up a large Macintosh computer lab which was used extensively in geomorphology. He and Clem Chase (University of Arizona) submitted a proposal to NASA to study the role fractals may have in describing topographic evolution and their relation to landsculpting models. And still, Larry managed to complete a lab manual for geomorphology entitled, *An Introduction to Quantitative Geomorphology -- An Exercise Manual*, currently in press and being published by Prentice-Hall.

Larry also mentions that one of his advisees, Mary Beth Fielman, is currently writing her master's thesis on the tectonic geomorphology of the Klamath Falls area and her contribution should be quite important. In addition, Larry and several University of Arizona graduate students presented an interesting poster detailing methods for teaching systems analysis to geology students. Larry returned to Oxford in January, and found himself back in the swing of things here. His Spring Semester was busy with teaching and research back at Miami. It has been a *very* productive year for him!

Bob McWilliams: Bob and Phil Stoffer taught Field Geology for Teachers to 58 students during the second and third terms last summer. To date, 160 teachers from approximately 15 states have completed this successful course. Last summer was the hottest and driest Wyoming summer Bob has experienced since arriving at the Field Station in 1970. One group of teachers visited the park during the peak of the Yellowstone fires, while the next class got to see the aftermath. He reports that the much-beloved KOA (now known as *The Rawhide Ranch*) was closed last summer; his group adapted quickly, however, and after a couple of months they hardly missed the place. For those of you who might be concerned by this development, we are told The Rawhide Ranch Saloon reopened last October and is expected to be open this summer.

During the summer of 1989, there will be one session of Geology 311, taught by Miami alums Peter Worcester (M.S. '67) and Greg Kamman (A.B. '85, M.S. '89), plus two sessions of Field Geology for Teachers, taught by Bob, Miami alum Dave Hacker (A.B. '82; M.S. '85), and four master teachers who completed the Teachers course in previous years. Classes will be in session this summer from June 18th to August 11th. Bob passes along the following invitation: "I wish to remind all alumni traveling or working in the Yellowstone-Grand Teton area that they are welcome to visit and join us for dinner at Timberline."

Karl Mertz: Karl's research efforts this past year focused on a multi-year project on Miocene-age rocks exposed along the northern California margin. A master's student, Greg Kamman, carved his thesis out of the project (clay diagenesis in marine shales) and successfully defended his work this past April. Greg has accepted an offer with an environmental consulting firm in Princeton, New Jersey. Last October, another of Karl's master's students, Peter Fraley, successfully completed his thesis on alluvial deposits of Triassic age in Nova Scotia. Peter is currently enrolled in law school at the

University of Oregon. Karl continues his research on lacustrine rocks in Nova Scotia (Fundy Basin) and is preparing to leave for an Ocean Drilling Project cruise to the Japan Sea this summer -- a very exciting prospect!

Tom Musselman: Tom's spent a busy year in our labs, helping students prepare samples for instrumental analysis by either our DC plasma or mass spectrometers. The DCP lab has barely had a free moment, being used by students and faculty, acquiring data on elemental abundances in their samples. Thanks to Tom's efforts, the department now boasts an automatic sample manager and software developed solely within the department!

The mass spectrometer, on the other hand, was not productive for most of the year due to several setbacks. It is, after all, older (and more temperamental) than many of our students! However, it is currently back in action, producing data at an alarming rate, and Tom extends his thanks to several faculty and students for their efforts in alleviating the tedium!

Alice Pego: We have to include a short paragraph on Alice who left the department in January to take on new responsibilities at the Brill Science Library. Alice had been with us for 28 years, and she played a vital role in the smooth-running of the department during her tenure here. In the months since her departure, we have struggled to maintain operations -- but suffice it to say she is greatly missed! We wish her all the best in her new position. If any of you are touring Miami's Oxford campus, Alice hopes you will drop in at the Brill Library to say hello.

John Pope: Travel continues to be the Popes' escape from routine. Early last summer, Gracia and John returned to Harvard for their 35th reunion and the college's 352nd commencement. The festive atmosphere and the ceremony, unchanged for so many decades, produced a stimulating and re-energizing occasion. In August, after completing summer teaching duties, they headed west to visit John's sister, Frances, in Salem, Oregon, as well as to escape the intolerable drought and heatwave that consumed the Midwest. While in Oregon, they took short trips to the beautiful gardens of Victoria, British Columbia, with its decidedly British ambience, and to colorful, bustling Seattle. The year ended with a sailing trip through the Florida Keys with Dave and Melba Scotford.

This past May, Gracia and John took a three-week tour of England with the Scotfords. Their trip included a few days spent in London, seeing plays and visiting many of the more notable tourist attractions. From London, they rented a car and did some "white-knuckle, through-the-looking-glass" driving through the Cotswold Hills, Devon, and Cornwall and to such coastal places as Hartland Quay, Boscastle, Land's End, Mousehole, Penzance, and Lyme Regis. Their last week was spent with the Scotfords on a leisurely canalboat trip northeast of Birmingham.

John reports that their son, Jonathan, just completed his first year at Northwestern Medical School, while their daughter, Susan, has joined a business consulting firm in Cambridge, Massachusetts. Susan's husband, Marco Iansiti, has joined the faculty of the Harvard Business School -- quite a departure for a physicist!

Sarah Roeske: Sarah's year was filled with a mixture of teaching and research. She taught one section of Introductory Geology during the Fall semester and "learned something about hydrology and soils, having never taken either as an undergraduate!"

EMPLOYMENT INFORMATION

If any of you are seeking new employment situations, the department has recently initiated a "Job Bank" program. Those of you interested in employment opportunities should drop us a note indicating what sort of position or subspecialty you desire and a general location area you would find suitable (i.e., northwest, southeast, midwest, etc.). Our *bank* consists mainly of the names of corporate contact people to whom you are welcome to submit resumes, and we will be happy to provide you with this information.

On the flip side, we would also appreciate help from our alumni who know of positions for qualified geologists within their own companies. If you can provide us with employment information, it will be greatly appreciated; we will then pass it on to our current students and interested alumni.

IN MEMORIAM

Dr. William H. Shideler, Jr., died in mid-May of this year at the age of 74 in Honolulu, Hawaii, following a long illness. The son of Katherine and William H. Shideler (the founder and first chairman of the Geology Department), Bill attended McGuffey High School prior to earning his Bachelor's and Master's degrees in Geography from the University of Cincinnati. He then went on to earn the Ph.D. in Geography at Ohio State University where he taught for some years. He later served as a geographer with the U.S. Army and lived in Japan before moving to Hawaii. He served on the staff at Fort Shafter Military Reservation prior to his retirement.

* * * * *

Dr. Bennett T. Sandefur died on January 12, 1989, in East Lansing, Michigan. "B.T.", as he was known around Shideler Hall, was a mineralogist who taught at Miami from 1930 to 1946. From 1945-1946, he also served as director of Miami's navy training program.

From Miami, B.T. went on to Michigan State University where he served as professor in the Geology Department and Assistant Dean in the College of Arts & Science until his retirement in 1976. His fondness and respect for Miami, however, continued long after his departure from Oxford, as evidenced by the important role he played in the hiring of Karl Limper and Perry Stewart. Both learned of faculty openings at Miami from B.T., and he is quoted as having said, "People like it so well at Miami that they will teach there for nothing."

In his youth, he left work in the coal mines near Henderson, Kentucky, to earn money for college by touring the country with a vaudeville band. He became an accomplished musician and, in his later years, played banjo and guitar in a Dixieland band called *The Geriatric Six+One*. He is survived by his wife and son.

Some of our 1988 Resident Graduate Students (L-R): (Front) Yongshan Dai, Kevin Mallin, and Yingping Yang; (Back) Paul Bergstrand, Kerry Hanlon, Mary Lou Hodnett, Greg Slone, Kendall Hauer, and Jeanne Cooper Chatfield.

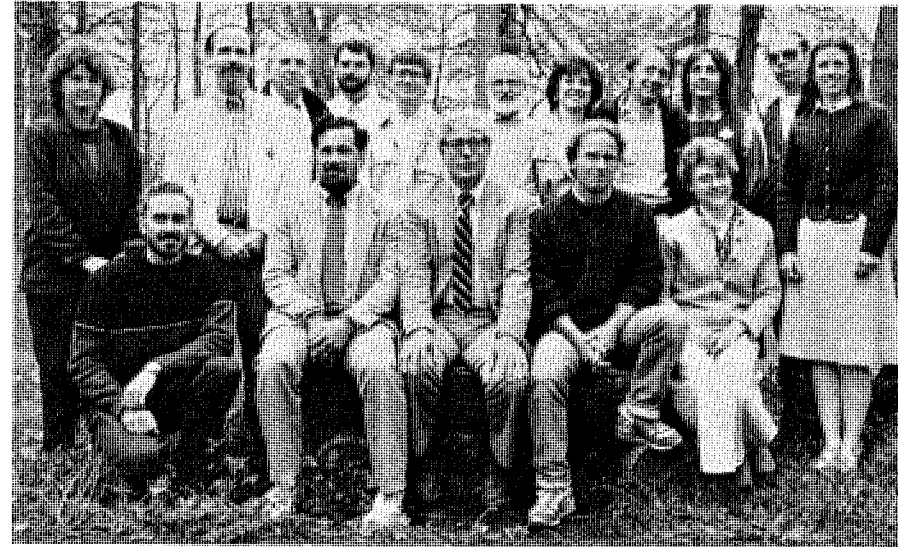


Some of our 1988 Undergraduates (L-R): (Front) Laura Morris, Tracy Love, Jodi Junta, Kathy Zimmerman; (Back) Tim Murphy, Bob Pittenger, John Schoger, Chris Simpson, Mike Wagner, and Scott Lodge.



The rest of her year was spent following up on field work begun in Alaska last summer, making oriented thin sections and determining the metamorphic phases of the samples collected.

Sarah also received funding for two projects in Alaska this summer, one in the eastern and one in the central parts of the state. These projects focus on the timing of the emplacement of batholiths and the movement of major faults in each area. Thus, work will involve a combination of geochronology and metamorphic petrology. Both projects require camping in remote places, and she is hoping that her past luck with good weather in Alaska will continue.



Faculty and Staff, left to right: (Front) Kevin Crowley, Mark Boardman, Bob McWilliams, Karl Mertz, Marcia Bjørnerud; (Back) Debbie Bundy, Bill Hart, John Pope, John Hughes, Tom Musselman, Dave Scotford (Emeritus), Maryellen Cameron, Norman Grant, Melissa Morgenson, Joe Marak, and Sarah Roeske; Absent - Dwight Baldwin, Larry Mayer.

EMERITI UPDATE: RETIREMENT – THE FINAL FRONTIER

Jim Bever: According to Jim, retirement does *not* mean that there is finally time to catch up on all of the things that have been put aside through the years. Retirement simply means you have to prioritize a bit more thoroughly than before! Following each winter (which Jim and Anne spend in San Diego), Jim's first duties have been attending

to the clean-up, paint-up, and fix-up work that seems to have accumulated at home during their absence, followed closely by his continuing work at the Oxford Crisis Center. Last October, the Bevers spent nearly a month in England, and this summer Jim found time to do some field work in Colorado with a couple of USGS-type geologists. Jim tells us that he and Anne are quite open to pursuing whatever else pops up along the way -- another benefit of retirement!

Jim also reports that he's now happily embarking on his 70th year after an enjoyable happy birthday celebration in June with Harriet and Ted Schmitt (A.B. '47). We all hope you have many more exciting years on your agenda, Jim.

Karl Limper: Karl has been seen in Shideler Hall occasionally, working in his office, where he claims to be "cleaning out old debris." Only Joe Marak can attest to Karl's progress, however, for Joe has been the recipient of contributions of rocks, minerals, fossils, and writings during this time.

Karl and Louise traveled from Oxford during the past year on several trips. They first ventured on board a ship in New York, travelling up the east coast and into the St. Lawrence valley as far as Montreal. Following that trip, they spent time in Sarasota, Florida, during what was supposed to be the *real* winter in Oxford. Wanderlust then stimulated the Limpers to fly to Antigua, boarding a ship there and sailing up the Lesser Antilles as far as St. Maartens. The pool at home is now open, so the Limpers remain in Oxford until September, at which time they will take a Canadian train trip from Calgary to the west coast, through the Canadian Rockies.

Wayne Martin: During the winter, Wayne and Bob McWilliams worked on a manuscript on the Burnt Gulch Formation. This rock unit is a tectonic arkose fanglomerate occurring in major valleys along the north-eastern flank of the Wind River Mountains.

In April, Wayne participated in a field trip with Karl Mertz, Mark Boardman, and several students to southeastern Ohio and northeastern Kentucky. Wayne and his wife, Helen, attended the AAPG-SEPM convention in San Antonio in April. They were pleased to have the opportunity to visit with several alumni (and some spouses) during the meeting. They first met up with Walt (M.S. '68; Ph.D. '74) and Roberta Coppinger; Walt was the program chairman for the convention. The Martins also visited with Ray Blackhall (M.S. '74), Steve Brown (M.S. '74), John Currie (B.A. & M.S. '49), Steve Farber (A.B. '66; M.S. '68), Gerry (M.S. '74) and Vicki Lee, Bob (A.B. '68; M.S. '74) and Sandra Maurer, Gary Pagan, Paul Rotondi (M.S. '82), and Dirk (M.S. '67) and Darlene Van Hart. Wayne also met up with many alumni of the field course who had attended schools other than Miami. On the return trip from Texas, traveling through the Ouachita Mountains, a few outcrop stops were made to search for trace fossils. Wayne and Helen also attended the GSK-AIPG meeting in Lexington in May.

This summer, Helen and Wayne will go to Dubois, Wyoming, for field work, fishing, and other kinds of R&R. On the return trip, they will spend a few days in Denver attending a USS *Maryland* sailors' reunion.

Roy Reinhart: The Reinharts' activities have remained fairly simple -- Sanibel Island, Florida, in the fall, and north to their cabin on a lake in Canada in the summer. Their last visit to Sanibel was very exciting when one evening the TV announcer stated that Sanibel would be receiving 25 MPH winds due to a heavy storm which was hitting Tampa, 150 miles to the north. Before all electricity failed that evening, the announcer advised viewers that the storm center was a bit further south -- and, in fact, Sanibel experienced 85 MPH winds! The Causeway was closed, so there was no escape route;

BACHELOR'S and MASTER'S DEGREES

August 1988 - May 1989

Bachelor Recipients

Andersen, James A., May 1989
Carlton, Edmond G., May 1989
Cole, Andrew G., December 1988
Junta, Jodi L., May 1989
Lodge, Scott L., May 1989

Love, Tracy A., May 1989
Murphy, Timothy, May 1989
Truax, Andrew T., August 1988
White, Eric A., August 1988

Master of Science Recipients

Andersen, C. Brannon, August 1988, *Sedimentary gradients and depositional evolution of a high-energy lagoon, Snow Bay, San Salvador, Bahamas.* (Thesis advisor, Mark R. Boardman)

Colby, Norman D., May 1989, *Depositional evolution of a windward, high-energy lagoon, Graham's Harbor, San Salvador, Bahamas.* (Thesis advisor, Mark R. Boardman)

Fraley, Peter A., December 1988, *Alluvial sedimentology and cyclicity of the Wolfville Formation (Middle to Upper Triassic), North Shore of the Minas Basin, Nova Scotia.* (Thesis advisor, Karl A. Mertz)

Kamman, Gregory R., May 1989, *Clay diagenesis of the Monterey Formation and relationship to burial history: Point Arena and Salinas Basins, California.* (Thesis Advisor, Karl A. Mertz)

Legge, Paul W., December 1988, *The bimodal basalt-rhyolite association west of and adjacent to the Pueblo Mountains, southeastern Oregon.* (Thesis advisor, William K. Hart)

Mitchell, Jeremy N., May 1989, *A mineralogical and chemical study of alpine peridotites from the southwest Pacific.* (Thesis advisor, William K. Hart)

Mosher, Stephanie A., May 1989, *Geochemistry of the Pueblo Mountains basalts, southeastern Oregon: relationship to Steens Mountain and regional tectonic development.* (Thesis advisor, William K. Hart)

Winningham, Bruce R., December 1988, *Speciation and fate of heavy metals in a Xenia silt loam amended with milorganite (sewage sludge) in southwestern Ohio.* (Thesis advisor, A. Dwight Baldwin)

Master of Arts Recipient

Hanlon, Kerry M., May 1989

Doctor of Philosophy Recipient

Cortellini, Edmund A., May 1989, *Phase relations in the lead-bismuth sulfide, selenide, and telluride systems.* (Thesis advisor, L. L. Y. Chang)

M.U.G.S. NEWS

The Miami University Geology Society had a busy year. There were several social gatherings, including attendance at a Reds' baseball game and hosting a departmental picnic, at the end of the year, at Hueston Woods. The MUGS broomball team, *Black Death*, fared well during fall semester competition by reaching the first round finals. The team that beat MUGS (by only three points) went on to win the championship. Formation of a broomball team helped unite the MUGS members and increase morale within the group.

MUGS members spent a good portion of the year raising funds for a field trip to Missouri. The group worked by cleaning up the Goggin Ice Arena, following varsity hockey games. Adequate funds were raised, and the group (including some members of SGE) enjoyed a "spring break" in the Ozarks. Activities included caving (and learning much about bats), canoeing (with some *spontaneous* swimming), and mineral collecting. The group also examined "an extremely interesting geologic feature in St. Louis -- The Arch!" All in all, the trip was a big success, and MUGS hopes to organize another field trip next year.

At the last meeting of spring semester, new officers were elected for the coming year:

<i>President:</i>	Kathy Zimmerman
<i>Vice President:</i>	John Schoger
<i>Treasurer:</i>	Laura Morris
<i>Secretary:</i>	Debbie O'Brien

SIGMA GAMMA EPSILON NEWS

The Alpha Theta Chapter organized two activities this year. The first was a tutoring service for students enrolled in introductory geology courses. Because this service is offered at no charge, it is expected that it will grow in popularity. SGE then helped organize a spring field trip to Missouri with Miami University Geology Society.

Each year, SGE presents the W.A. Tarr Award to an undergraduate earth science student based on the criteria of academic performance, leadership, and social skills. This year's award went to Kevin Bartol, a senior who will be entering the U.S. Navy after attending the field course this summer. Congratulations from all in the department, Kevin; may you have calm waters and smooth sailing!

This spring, Mary Lou Hodnett was elected President for the 1989-90 academic year. All other positions will be filled in the fall.

when waves began hitting their cottage, Roy prepared life-rafts from a large food container and an empty suitcase. When dawn finally arrived, the storm had abated, but destruction was evident everywhere: shredded vegetation, roofs blown off, cottages smashed by the waves, and four feet of sand on roads located well away from shore! Hindsight indicated that the Reinharts had been in the eye of the storm.

The Reinharts then enjoyed attending Roy's 57th reunion of his 8th grade class in Cincinnati. Roy was two years younger than the rest of his class, and says that "at this stage of life, it's nice to be the youngster of the group!" Later in the year, Roy and Betty opened camp in Canada when the ice broke. Their biggest excitement came when an airborne partridge shattered a window on their glassed-in porch. Being out in the boondocks and lacking some of the finer amenities of life, a resourceful neighbor cut a big window out of what appeared to be the windshield of a truck, repairing the porch glass. This new *truck* window "will withstand an eagle hitting it at 100 MPH," so the Reinharts are all set.

Throughout the year, the Reinharts have been able to extend their love of museums by providing philanthropic support to Miami's Zoology and Art Museums, the Florida State Museum, the Kansas State Museum, and the Warren County Museum in Lebanon, Ohio.

One additional note: earlier this year, the Reinharts presented Miami University with land which adjoins the Bachelor Nature Preserve, thus extending the property. With this donation, the Reinharts became members of the Prodesse Society of Miami University. Our congratulations and thanks to both of them!

Dave Scotford: Dave tells us that the problem with retirement is that so much time is spent doing *fun* things that there isn't time for anything else! In August, he went back into the Gros Ventres to get some more data on the bent chert tubes for a publication, in the company of his then-girlfriend (soon-to-be-wife) Melba. They horse-packed into the Six Lakes area for three days. They had intended to backpack out, but after five miles of that, Melba decided that riding would be much nicer; they encountered some cowboys who took them out to the trail head on horses they had with them.

Following a trip to Hanover, New Hampshire, for a Dartmouth reunion, Dave and Melba spent November in Mexico enrolled in a program called "Experiment in International Living," which entailed living with a Mexican family for a week. The family they stayed with included ten children and was not a *typical* Mexican family but a well-to-do one, living in Mexico City and owner of six bakeries. The Americans were made to feel part of the family and treated lavishly to concerts, family picnics, sight-seeing and boat trips -- a very interesting and enjoyable experience. The remaining time was spent in two other Mexican cities, attending lectures and going on field trips which targeted all aspects of Mexican history, politics, and culture.

On December 23, 1988, Dave and Melba were married "in front of my fireplace," with only their children and the minister present. The ceremony was followed by a reception (held in two parts) for all the friends they could accommodate. After Christmas, John and Gracia Pope accompanied Dave and Melba on their honeymoon trip through the Florida Keys aboard the Scotford boat.

In January, accompanied by more Oxford friends, Dave left Florida for the Virgin Islands. Melba was to join Dave in the Bahamas later. After about a week, while sailing in the Exuma Chain of the Bahamas, the boat hit a coral reef one evening just before dark. As Dave puts it, "What happened next was exciting and terrifying but never life-threatening." Briefly, they hit a reef because of poor light and a newly-installed (and confusing) bouy. The boat pounded on the reef in four-foot seas for five hours, sounding as if it would come apart at any moment. It didn't, and with the help of some locals, the boat was freed at high tide. Rather than continue with a wounded vessel, the group returned to Nassau where they discovered that the damage was minimal. There,

the original crew left and were replaced by Melba, Dave's brother, Bill Owsley (Architecture Department), and his son. The next five weeks were spent cruising down the Exumas to Georgetown and back, leaving the boat in Nassau and returning to Oxford in March. In April, Dave brought the boat back to Ft. Lauderdale, from whence he and Melba will depart for the Abacos in June.

In May, Dave and Melba joined John and Gracia Pope again for another trip -- this one to England (by jet, not boat!). Their trip included one week aboard a chartered canal boat and a visit to Aberystwyth, Wales, to see Joan Buehler Maltman (A.B. '69), her husband, Alex, who teaches at The University College of Wales, and their two children. (Incidentally, Joan and Alex invite all their Miami friends visiting Britain to stop by and see them!) Finally, Dave finishes his report with the note: "Melba and I will *actually* be home the month of July but off to Alaska in August!" This must prove that a rolling *geologist* gathers no moss.

Perry Stewart: It was so hot and dry in the Midwest during the summer of 1988 that the Stewarts stayed pretty close to home. They attended a few Reds' games, spent a day with the family at the Cincinnati Zoo, and took an overnight trip to Bardstown, Kentucky, to see *The Stephen Foster Story*. In late October, Perry and Nelle went to visit their daughter, Debbie, in northeastern Pennsylvania. From there, accompanied by Debbie and her daughter Laura, they continued northeast to Burlington, Vermont, to visit old friends and tour beautiful Lake Champlain, the Green Mountains, the Stowe Valley, Smuggler's Notch, etc.

In September 1988, Nelle spent an exciting two weeks in England, Scotland and Wales. She was with a tour group that traveled north up the west coast to Inverness and then returned to London via the east coast. From January through March 1989, the Stewarts were in Treasure Island, Florida, where they attended several baseball games (The Grapefruit League) in St. Petersburg (The Cardinals) and in Clearwater (The Phillies). Florida was quite hot and dry this winter.

Finally, in terms of geology, Perry has just reviewed a paper for *Quaternary Research* concerning the analysis of radiocarbon dates from a site near Cincinnati.

DEPARTMENTAL STUDENT HONOR 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.

ERICH S. BORING
(*Photograph not available*)

The Karl E. Limper Award: presented to a junior, senior, or graduate student working in geology with a grade point average of 3.0 or better and based on merit, not need.

JODI L. JUNTA



The department heartily congratulates these winners for this recognition, reflecting the effort and dedication each of the above has contributed to his or her studies and to the department.