

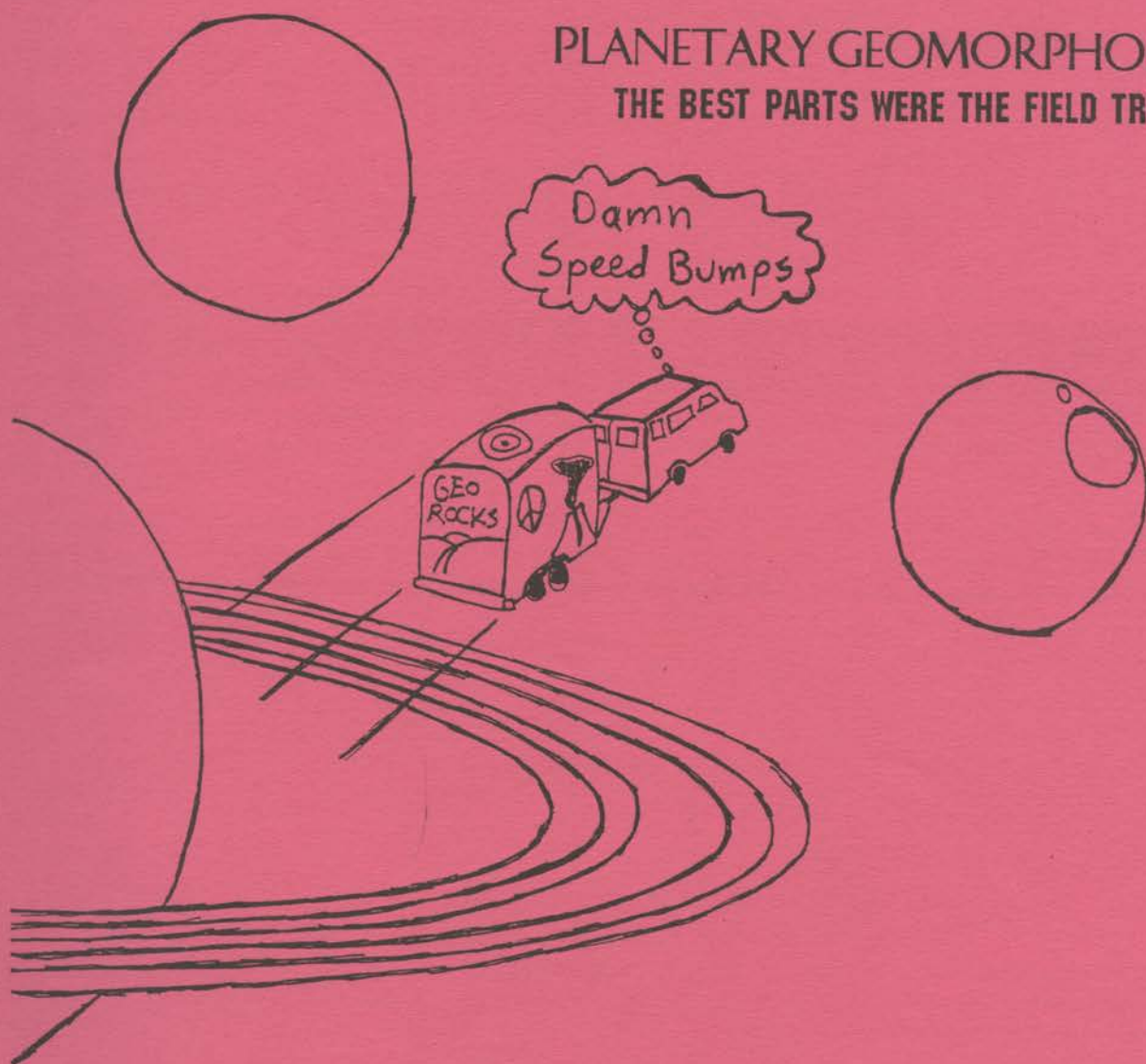
# *Carleton Geology Newsletter*

Volume XVIII

1993

## PLANETARY GEOMORPHOLOGY

THE BEST PARTS WERE THE FIELD TRIPS!



Published By  
The Department of Geology  
Carleton College  
Northfield, MN 55057  
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The cover design is from a t-shirt produced by students taking Advanced Geomorphology this year. Advanced Geomorphology is an upper level course taught by Mary Savina which concentrates on a different topic each year, and this year's theme was planetary geomorphology.

The Carleton Geology Newsletter is edited by Timothy Vick. The alumni list computer programs are by Susan Campbell LaCroix '78.

If you have a change of address or other correction to our address list please notify:

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# Department of Geology

Carleton College  
Northfield, Minnesota 55057

June 22, 1993

Dear Geology Alums,

Eighteen senior geology majors (and several more geology "wannabes") graduated last Saturday. At the department reception the day before commencement, I was struck by the strength of the ties we have developed with these students and their families over the last four years. We knew these seniors not just as students in classes, but as partners in research, field trip participants and as leaders in department activities. We have also had several previous contacts with their parents, most notably through our successful Parents' Weekend open houses (this year about 50 people attended). Parents also have attended comps talks and in some cases, given talks themselves on previous visits. Several parents spoke to me about how important the community in the Geology Department has been for their children. We are committed to maintaining that community of students, faculty, staff, parents and alums.

This year we had several visitors from outside the department give us their positive impressions about our goals and how we work. Most important were three fall term visitors, Benedict Distinguished Visiting Professor George Davis, Clint Cowan '83, and Chesley Lecturer Clyde Wahrhaftig. (You can read about their visits later in the newsletter). We also heard from the campus' new Learning and Teaching Center and from the Academic Support Services office about the important effects of our strong department community. Two faculty from the English Department attended a comps talk session and were greatly impressed with the quality of the four projects and presentations. Keith Harrison wrote "I can hardly remember a more pleasant nor a more instructive 90 minutes in my whole time at Carleton." I've appreciated these comments, which affirm our approach toward educating students.

We are all delighted that Dave Bice was granted tenure by the Board of Trustees at their winter meeting and promoted to Associate Professor this spring. He promptly left for Italy, where he will run a geology off-campus seminar in the fall. I was promoted to full professor this spring.

I'd like to pay special tribute to three members of our department community. Betty Bray is responsible for the success of many department events, like the Parents' Weekend open house. Her cheerful presence and tireless work help us accomplish all the projects we take on. We are all pleased that Cathy Manduca, now a Research Associate in the department, continues to work closely with faculty and students, while working on research and raising her children. Cathy's most recent paper was published in the June *GSA Bulletin*. Clem Shearer, although busy with his "second job" as Dean of Budget and Planning, continues to teach Hydrology and to contribute guest lectures in other courses. Betty, Cathy, and Clem are important members of our community. My thanks to all three of them!

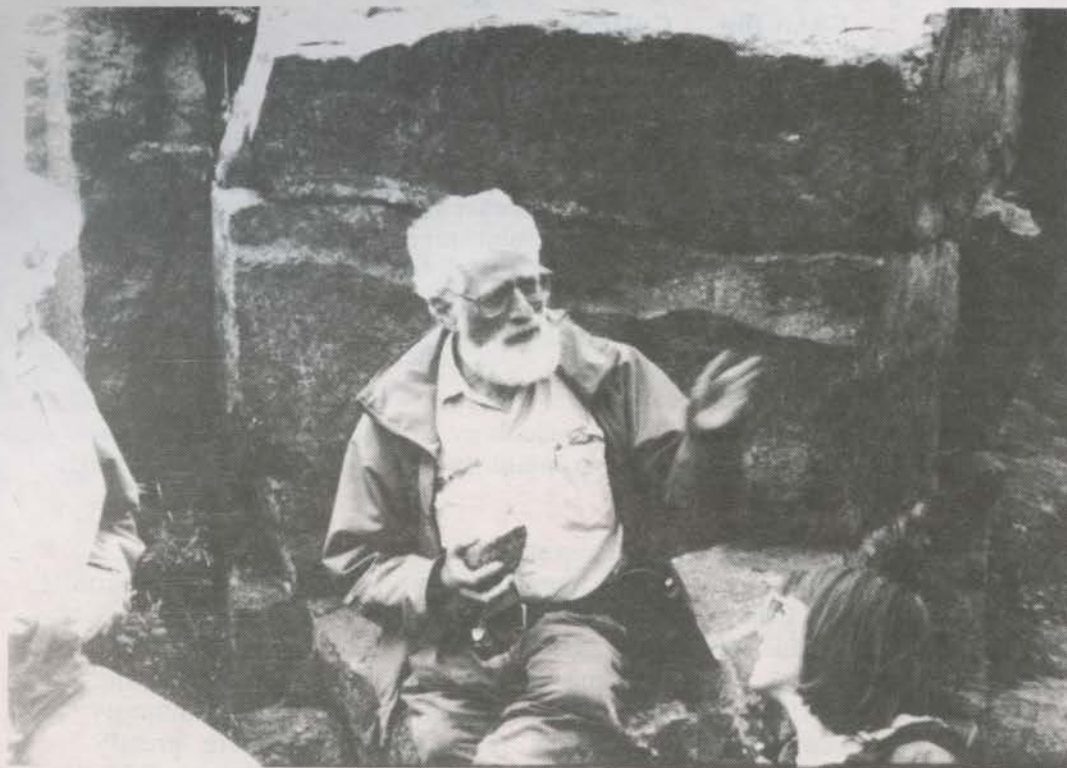
Finally, I would like to ask a favor. We've had some fun times at Geolunch reminiscing about past field trips (Remember the time the frozen peas spilled over the road after the trailer flipped? Or the time someone hitched back to camp after being left at the drug store? Or the time. . .) Betty and I thought it would be fun to compile a booklet of "Great Field Trip Stories." So, write down your favorites and send them along to me or to Betty and we will publish a supplement to next year's newsletter. (My E-mail address is [MSAVINA@CARLETON.EDU](mailto:MSAVINA@CARLETON.EDU) if that's easier.) Because we think a lot of these stories might involve Tim Vick, we thought we'd keep our booklet a secret. So, don't tell Tim!

Thanks to all of you for your contributions to the department and to this newsletter. Please stop in and visit, if you get a chance.

Best Wishes,

*Mary E. Savina*  
Mary E. Savina





*Chesley  
Lecturer Clyde  
Wahrhaftig  
explored  
Northern  
Minnesota with  
us on the fall  
field trip.  
Here he  
discusses an  
outcrop of the  
Duluth Gabbro.*

*Karen  
Swanberg '94  
reports her  
group's  
observations  
on the  
sedimentology  
of Cambrian  
sands and  
conglomerates  
in Parfreys  
Glen, near  
Baraboo, Wis.,  
on the spring  
field trip.*





# DEPARTMENTAL NEWS

## *Carleton Receives Gift of Largest Mineral Collection of Its Kind in the Nation*

[Carleton College News Bureau]

Fred C. Kennedy of Rochester, Minn., has given Carleton College what is believed to be the most extensive mineral collection of its kind in the United States: 3,593 specimens, representing 96 percent of all known minerals on Earth.

The minerals were presented to Carleton by Kennedy after more than a half-century spent building the collection. Kennedy began his relationship with Carleton in the 1950s when Duncan Stewart, then Chair of the Geology Department, taught courses in minerals and rocks to Kennedy and other interested Rochester residents.

"According to the company that did the appraisal, the collection is the most complete in the United States and perhaps the most complete in the world," said Shelby Boardman, Carleton Professor of Geology. "The number of mineral species surpasses the collections of Harvard University and The Smithsonian Institution. It consists mostly of extremely rare specimens--in some instances there may be only two or three other samples of a particular mineral in the world."

Though large in terms of the number of minerals represented, the collection takes up a surprisingly small amount of space. Four metal cabinets, each about the size of a double-drawer file cabinet, house the collection, which will be stored in Carleton's Mudd Hall of Science. The largest specimens are no more than an inch or two in diameter and many are microscopic in size, Boardman said.

"To the naked eye, most specimens look like nothing," Boardman noted. "But others are quite spectacular, even without the help of a microscope." To help organize the collection, the

donor also has provided Carleton with a computerized data base which lists, among other things, each mineral's name, place of origin and replacement value.

Of the more than 3,625 mineral species identified and approved by the International Mineralogical Association (IMA), only a few hundred are at all common, according to Boardman. Assembling a complete collection of every known



*President Stephen Lewis conducted a brief ceremony to formally accept the mineral collection given to Carleton by Fred Kennedy.*

mineral is for all intents impossible, he said, because dozens of new minerals are discovered annually.

"In many instances discovering a new mineral is quite serendipitous," Boardman said. "What will happen is that a researcher may be working on a known mineral, they test it, and find that it also contains a mineral they can't identify--a new mineral, perhaps. The IMA is then asked to decide if it truly is a new mineral. The researcher must document the chemistry and crystal structure of the proposed new mineral and submit the results to the IMA for approval."

Carleton will continue to add to its new mineral collection. While Kennedy has given over the bulk





*George Davis helped us envision structural geology with "hands on modeling." Members of the modeling team are (from left) Dave Bice, Clint Cowan, George Davis, Shelby Boardman and Mary Savina (in wool hat).*

of his collection to the College, he is still acquiring new samples that periodically will be turned over to Carleton.

Because of the small size of its samples, the collection will probably not be widely used for teaching purposes in Carleton geology classes, according to Boardman. However, students will have access to the collection for study. Boardman also hopes to open the collection to researchers from other universities who will be able to study, photograph and perform nondestructive tests on individual specimens.

"We have to decide on the ground rules, but one of the things I would like to do is let mineralogists and crystallographers examine the collection and perhaps, under special circumstances, be allowed to 'check out' some of the materials. There may be a substantial number of people who are interested in having access to a resource such as this."

### ***George Davis Is Benedict Distinguished Professor***

Any of you who took structural geology in the last few years, think back to the geophysics of computer cards and pepperoni pizzas...

Surely one of the most exciting and interesting events of this year lasted all of fall term: a visit by Dr. George H. Davis, author of the most widely used structural geology text (The Structural Geology of

Rocks and Regions), as Benedict Distinguished Visiting Professor.

George taught Structural Geology and teamed with Shelby in teaching a section of Introductory Geology. In addition George gave two talks and suffered the snow with us as we toured Northern Minnesota on our week-long fall field trip. He had never seen the volcanics, intrusives and metamorphic rocks of Northern Minnesota before the fall field trip, and he bubbled with an interest that couldn't help but be contagious.

His talks were entitled "The geologic and plate tectonic setting of Machu Picchu, Inca Sanctuary in the central Andes" and "Relation of thrusting to mid-Tertiary

magmatism, Bryce Canyon region, Utah."

One measure of the impact of George's engaging personality and his ability to generate interest among students is the attendance at his talks. Tim Vick usually guesses quite closely how many people will attend a talk (thus how many cookies to buy), but he underestimated the interest in George's first talk so badly that he had to quietly sneak out of the talk to buy more food when almost twice the number he had guessed showed up.

George is a long-time friend of Carleton and the Geology Department. He was an invited panelist for our 50th Anniversary Symposium in 1983 and spent a week here in 1988 as a Bernstein Distinguished Scholar. Several years ago he supervised two Carleton students (Cliff Wright '78 and Dave Rodgers '81) doing comps in the mountains near his hometown of Tucson, Arizona.

George taught geology and later served as Vice Provost and Interim Vice President of the University of Arizona between 1970 and 1990, and he was Professor of Geology and President of the University of Vermont in 1990 and 1991. Now he has rejoined the faculty of the Geosciences Department at the University of Arizona.

We send many thanks to George for the wonderful boost he gave us, and also express sincere thanks to Dean Beth McKinsey for making his visit possible.



## **NSF Awards Renovation Grant For Mudd Hall**

The National Science Foundation Academic Research Infrastructure Program has awarded Carleton a \$465,657 grant for renovations in the Seeley G. Mudd Hall of Science.

Built in 1975, Mudd Hall houses the classrooms, labs, offices and library for the departments of Geology and Chemistry. The renovations will take place in a couple of years following construction of a new building for the Biology Department and renovations of Olin Hall.

The Geology renovations will include expanded workroom and laboratory space in the basement for x-ray fluorescence and diffraction, thin sectioning, and other work. On the ground floor (where the main labs and classrooms are), the geochemistry lab will be remodeled and a computer room will be created from another room. Other spaces will be remodeled into offices and a new map storage room.

The plans for this work are still in preparation, and we will probably be writing more about the renovation in the next year or two. This is the first major renovation program for Mudd Hall since it opened.

## **Clint Cowan Returns To Teach Sedimentology**

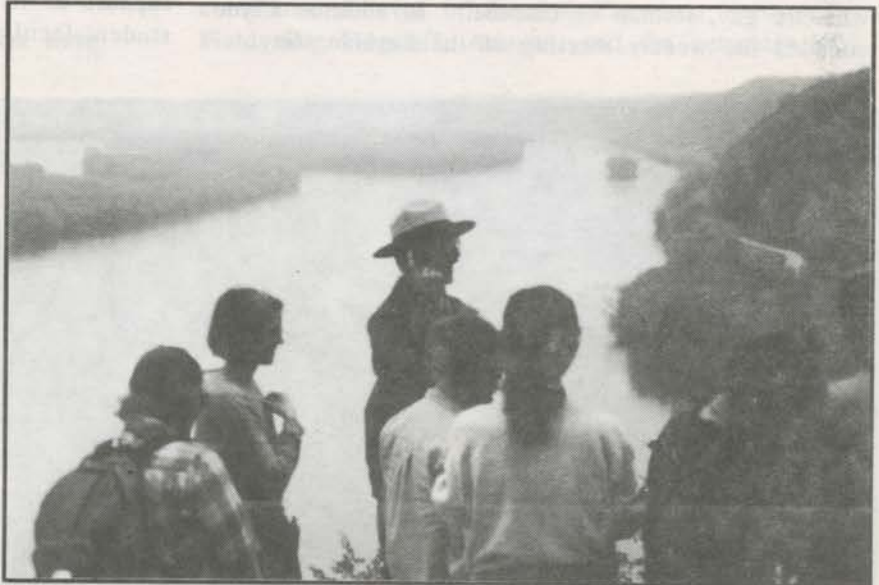
We were extremely pleased to lure Clint Cowan '83 back to campus to teach Sedimentary Geology while Ed Buchwald was on sabbatical fall term. Clint taught an advanced seminar entitled Chaos Theory In Geology as well as the "seds" course and he participated in our fall field trip to Northern Minnesota, so he had a hopping-busy term!

After graduating from Carleton, Clint earned his MS at the University of Michigan at Ann Arbor; his thesis was entitled "Banded fluorite rhythmites of the Cave-in-Rock District, Illinois: evidence for hydrothermal spelean mineralization." His PhD was at Queen's University, Canada, with the thesis being "Facies and stratigraphic analysis of an ancient carbonate platform, Upper Cambrian, western Newfoundland."

From Carleton Clint moved on to join Shell International Petroleum Co. (U.K.). His starting

assignment is at Shell Research in The Hague, Netherlands.

Clint did a marvelous job on both of his courses and he generated lots of enthusiasm among students and staff alike. One deliciously dubious measure of Clint's success was the students' decision to use



*A ranger tour of the archaeological sites on the bluffs above the Mississippi River at Effigy Mounds National Monument in Iowa was one of the highlights of the spring field trip.*

his photograph with his face painted and beans in his nose (taken on the fall field trip when all of the passengers in one van painted their faces), on the back of this year's departmental t-shirt. Thanks, Clint, and best wishes in your new career at Shell!

## **Clyde Wahrhaftig Visits As Chesley Lecturer**

Dr. Clyde Wahrhaftig, Emeritus Professor of Geology at the University of California at Berkeley and one of the foremost geomorphologists of our day, visited Carleton for two weeks during fall term as the seventh outstanding scientist on the annual Frank G. and Jean M. Chesley Lectureship.

Clyde spent a week in Mudd giving talks, attending classes and talking to students, and then trekked with us to Northern Minnesota to study continental glaciation first hand (it snowed...) on the fall field trip. He joined George Davis and Clint Cowan in the marvelous excitement of world-class geologists seeing a classic geologic area for the first time, thereby making the trip one of the most interesting within memory.

Clyde's public talks were entitled "Reconstruction of the Late Pleistocene ice sheet of



Yosemite National Park," "Some environmental issues from the Earth's point of view," and "Minor structures in granitic rocks of the Sierra Nevada." He also gave talks in Geomorphology and Structural Geology classes and presented a special program on "Life as a gay man in geology" which was open to everyone but of special interest to science students who are gay, lesbian or bisexual. In addition Clyde attended the weekly meeting of the Lesbian, Gay,



*A retired iron miner conducted an excellent tour of the underground workings at the Soudan Mine, now a state park, near Tower, Minnesota, on the fall departmental field trip.*

Bisexual Community student organization.

Clyde has had a long and varied career with the U.S. Geological Survey and the University of California, Berkeley and is presently retired but still working on the glacial and igneous geology in the Sierra Nevada Mountains. He was Mary Savina's thesis advisor when she earned her PhD at Berkeley.

Clyde's visit was a huge success and helped make our year interesting and intellectually stimulating. We thank him for giving of himself, and we also thank the Chesleys warmly for the generosity which made it all work.

### **Minnesota Ground Water Assn. Helps Fund Field Trips**

The Minnesota Ground Water Association donated \$300 to help offset the cost of students' field trips last fall. We applied the money against the departmental field trips to help reduce the trip fee. Thank you, MGWA...we appreciate the assistance!

## **Keck Research Consortium Grant Renewed**

[Carleton College News Bureau]

The Keck Consortium for Geology, which includes Carleton College, has received a \$400,000 grant from the W. M. Keck Foundation for continued support of its programs to foster cooperative student-faculty research projects.

This grant for the 1993-1994 academic year is the fourth Keck Foundation grant awarded to the Consortium since it was founded in 1987. The Consortium is composed of 12 of the nation's top liberal arts geology departments, including Carleton, Beloit, Amherst, Colorado College, Franklin and Marshall, Pomona, Smith, Trinity University, Washington and Lee University, Whitman, Williams and College of Wooster. The consortium is directed by Dr. Henry Woodard of Beloit.

A major goal of the Consortium is to bridge the course/research gap for undergraduate geology students. Each year, it sponsors a series of student-faculty research projects.

"The Consortium has helped to improve communication between the geology faculty of the Keck colleges in addition to the wonderful

research opportunities it has created for students," said Shelby Boardman, Charles L. Denison Professor of Geology at Carleton.

Funding by the W. M. Keck Foundation enables the Consortium to sponsor field work opportunities in the summer, followed by laboratory and library work during the school year. The projects culminate in a symposium during the spring at which results are presented as talks and poster sessions.

One of the projects scheduled for this summer, an archaeological geology project in Greece, will be co-directed by Professor Mary Savina of Carleton, and Prof. Rob Sternberg from Franklin and Marshall. A study of the geophysics and structure of the Central Appalachians in Virginia, and a study of glacial geomorphology in Vermont also will be undertaken. Other offered programs are an investigation of the petrogenesis of some granite and gabbro rocks on Mount Desert Island, Maine; a study of the petrology and structure of archaic rocks in the Quetico Wilderness of Ontario; and an



analysis of the structure and metamorphic history of Archean rocks in the Tobacco Root Mountains of Montana.

[Participants from Carleton this summer include Chris Poulsen in the Montana project, Liz Symchych and Naomi Lubick in the Maine project, and Julie Williams and Julia Daly in Mary's project in Greece.]

Shelby said the Consortium's programs have been "highly visible and highly successful for the colleges."

Students have the opportunity to do meaningful research and come in contact with students and faculty from other schools, which "gives them a feel for geology and their geology education in a broader context."

Faculty members also have benefited from the opportunities to share ideas and collaborate on research, he added.

The W. M. Keck Foundation, one of the nation's largest educational grant-making foundations, was established in 1954 by the late William M. Keck, founder of the Superior Oil Company. The foundation's primary focus is on grants to universities and colleges throughout the U.S., with particular emphasis in the fields of earth sciences, astronomy, engineering, and medical research.

### **William Wise Visits As 11th Bernstein Geologist-In- Residence**

Dr. William S. Wise, Professor of Geology at the University of California, Santa Barbara, visited the Geology Department this May as our eleventh Geologist-In-Residence on the Bernstein Development Foundation Geology Endowment.

Dr. Wise's research and teaching have involved both mineralogy and petrology, and so he was a particularly welcomed visitor to the petrology class, where he gave a lecture entitled "Skarns-Origin and Relation to Replacement Ore Bodies." In addition he gave two public talks on Hawaiian volcanism, entitled "The Origin and Development of the Hawaiian Islands" and "The Evolution of Mauna Kea Volcano, Hawaii."

His mineralogical research has involved the compositions, thermodynamic properties and

conditions of origins of zeolites. His petrological research has focused on the evolution of magmatic systems through the study of volcanic systems. Most recently he has completed work on the postshield stage of Mauna Kea in Hawaii. Currently in progress is work on the petrology and geochemistry of the primary basalts and contaminated lavas of the San Francisco Volcanic Field near Flagstaff, Arizona, and the petrology of



*Kate Jesdale '95, Joan Ramage '93, Maria Panfil '93 and Myong Sun Kong '94 (left to right) study the Ordovician Prairie du Chien Formation limestone at a stop near McGregor, Iowa, on the spring departmental trip.*

the late Miocene and Pliocene lavas of the north Lake Tahoe region in California and Nevada.

Bill is a graduate of Stanford University and earned his doctorate at Johns Hopkins University. He is a Fellow of the Geological Society of America, a member of the Mineralogical Society of Great Britain, the Mineralogical Association of Canada and the American Geophysical Union.

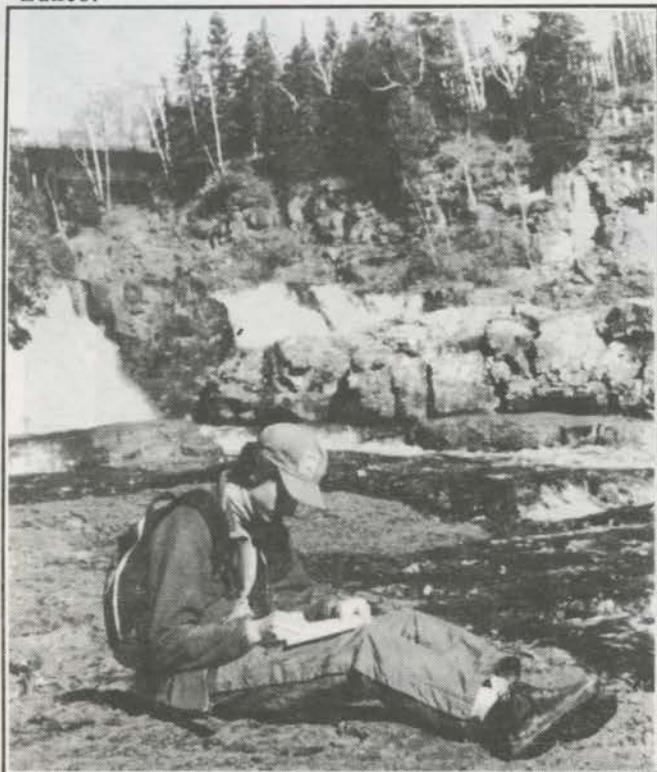
### **Students Receive Bernstein Support**

Several students have been awarded a total of more than four thousand dollars in financial support in support of well conceived independent research proposals, in most cases field work for their integrative exercise projects. The students are Starr Johnson, Reed Krider, Miranda Lescaze, Derek Murrow, Jessamyn Tuttle, Rob Wertheimer, Ruth Trzynka, Beth Pratt and Aron Clymer.



## Lyman Lakes Management Plan Approved

Recent meetings between Carleton College representatives Mark McKone, Associate Professor of Biology and Arboretum Director Dennis Easley, Superintendent of Grounds, and a limnologist from the Minnesota Department of Natural Resources have produced a new management plan for Lyman Lakes.



*Derek Murrow '95 takes notes on the Keweenaw lava flows at Gooseberry Falls State Park during the Northern Minnesota fall field trip.*

There is agreement that dredging Upper Lyman will not improve water quality or prevent the possibility of severe algae growth in some years. As an alternative, the DNR has suggested management of the upper lake as a shallow lake ecosystem. This will consist of approximately equal areas of open water and of shallower water with emergent aquatic plants such as cattails and sedges. Given the questionable benefit of dredging and the substantial expense involved, the college has agreed to shallow lake management for a trial period of at least three years.

Establishment of the shallow lake system requires draining the upper lake for a period of one year. The drawdown period, which began this spring, will allow lake-bottom sediments to consolidate and will promote the germination and

establishment of aquatic plants. Next spring the lake will be partially refilled, and the water level will be restored to full depth in the spring of 1995. The estimated life span of this treatment is seven to ten years, at which point the drawdown process may need to be repeated.

It is the opinion of the DNR that the shallow lake system will improve water quality in both lakes by filtering sediment and nutrients. It will also substantially increase the biodiversity of both plants and animals in Lyman Lakes. In addition to the direct benefit to wildlife, a more diverse ecosystem will be of greater educational value and interest to the campus and community.

Lower Lyman can be successfully managed as a deep lake. Dredging probably will be done in conjunction with the construction of a new residence hall on the northeast corner of the lake.

## Alums Help Out (Again...) In Many Ways

A number of alums contributed poster displays and their own presence this year to help students learn to present their work and themselves in the world of professional geology.

Four poster sessions were displayed during the year. These displays are extremely helpful in keeping those of us who do not make it to professional meetings up to date on our science, and they provide examples of well-presented work for students to emulate.

Posters we displayed this year included: "High temperature metamorphism and rapid cooling related to Gondwana Rifting, Marie Byrd Land, West Antarctica" by Christine Smith '84; "The ion microprobe for trace element analysis in carbonates: diagenesis in the upper Devonian Nisky Formation, Western Canada Sedimentary Basin" by Lee Riciputi '85 et al; "Beyond rocks in boxes: an introductory geology lab course organized around themes of earth systems" by Marcia Bjornerud '83; and "Mitigation of high groundwater problems using a hydraulic optimization model of San Bernadino County, California" by Wes Danskin '78.

### More Posters Needed

We currently are seeking posters to be displayed this fall; if you have one we might be able to borrow for a month or two please contact Tim Vick c/o the Geology Department or [tvick@carleton.edu](mailto:tvick@carleton.edu).

### Visiting Lecturers In Classes

Thanks to Dr. Jan Tullis '65 for agreeing at the last minute to piggyback a trip to Northfield onto her previously arranged trip for a talk at the



University of Minnesota last fall. Jan spoke on deformational processes to the Structural Geology class taught by George Davis.

Also, we appreciate the talk given by Butch Dooley '91 in May on marine tetrapods (mammals and reptiles including whales, manatees, seals, sea lions etc.).

#### **Thanks To Sonja For Her Visit**

We'd like to thank Sonja Wolter '89 for sharing her experiences as a consulting environmental geologist with current students in a question-and-answer session in April. There was significant interest among the 19 students who attended her session.

Sonja has experience with two consulting firms in the Twin Cities, Geraghty & Miller and Barr Engineering. Thanks for your contribution, Sonja!

#### **Field Work With Alums**

Thanks also to Robb Jacobson '79 and Glen Carleton '85 for their assistance to students in lining up field opportunities with the USGS. Robb assisted Maria Panfil '93 last summer, Geoff Redmond '95 last December and Rob Wertheimer '94 this summer so they could find projects with the USGS's Ozark Stream Geomorphology Project.

Glen has been extremely helpful to Myong Sun Kong '94 in lining up an internship with the USGS this summer working on water contamination problems.

#### **Bob Tipping Supplies Well Data**

We'd like to thank Bob Tipping '81 for his visit to Mudd last fall to provide us with new computer disks containing water well log data from the Minnesota Geological Survey. Bob not only supplied the data, he gave us a retrieval program and showed us how to use it. Thanks, Bob!

#### **Dan Klemme Donates Interesting Books**

We'd like to warmly thank Dan Klemme '40 for his donation of several very interesting books to Carleton and the Geology Department. The donation included a copy of Georgius Agricola's *De Re Metallica* in translation, *The Priotechnia of Vannoccio Biringuccio* (translated and published by the Seeley W. Mudd Memorial Fund, no less (our building is named after Seeley G. Mudd)), and a five-volume set of books of photographs, mostly of President Sukarno's collection of Indonesian art.

### **Robertson '65 Named Wisconsin State Geologist**

Dr. James (Jamie) M. Robertson '65 recently was named Director and State Geologist of the Wisconsin Geological and Natural History Survey.

Jamie's tenure in Wisconsin follows 18 years as an economic geologist at the New Mexico Bureau of Mines and Mineral Resources. His previous experience includes a PhD from the University of Michigan, for which he did a thesis on copper sulfide deposits in the Upper Peninsula of Michigan.

Other experiences in his background include a short stint of teaching at Michigan Technological University at Houghton, and geologic map verification in northern Ontario for Hudson Bay Oil and Gas Co.

While at the New Mexico Bureau of Mines, he rose to the rank of Associate Director.

Jamie's comment on his Newsletter response card was that he is "learning to cope with real winter all over again!" Congratulations and best wishes!

### **Robert Ruhe '42 Dies**

We note with sadness the death of the noted geomorphologist Robert V. Ruhe '42. Dr. Ruhe was a retired professor of geology and former director of the Indiana University Water Resources Research Center. He died Feb. 10, 1993 in Bloomington, IN.

After graduating from Carleton and war service in the Marines, Dr. Ruhe earned a masters in geology from Iowa State University in 1948 and his doctorate at the University of Iowa in 1950. His teaching career included work at Iowa State University, Cornell University, and Johns Hopkins University as well as Indiana. Other research positions included work for NRC, the Economic Cooperative Administration soil mission to the Belgian Congo, the US Department of Agriculture Soil Conservation Service and the Water Resources Research Center at Indiana University.

He was the author of two textbooks and over 100 professional publications and articles. He was one of the most prominent American geomorphologists of the twentieth century, and was recognized many times by organizations including the Geological Society of America, the American Association for



the Advancement of Science in addition to numerous other national and regional organizations.

### ***Network For Gay, Lesbian And Bisexual Geology And Natural History Alums***

There is a network of lesbian, gay and bisexual alumni and students in the fields of geology and



*We had a wet spring in the Midwest this year, and saw flooding in Northfield as well as on the spring field trip. Here Alex Steele '95 and Naomi Lubick '94 test a picnic table for buoyancy in Devil's Lake, Wisconsin.*

natural history to help with career information and other items of interest. The network is in its fourth year and has 17 members around the country. The importance of the network may be even greater now than when it was formed: while significant gains in the rights and freedom of lesbian, gay and bisexual people have been made in many localities, reports of hate crimes against them also have increased hundreds of percent in recent years.

The network consists of a confidential list of names and addresses kept by Dan Spencer '79 and Marilyn Yohe '88, and is circulated only to members of the network. The network has the twin objectives of helping reduce isolation among alums and helping to provide a more open, accepting and informative environment for geology and natural history students on campus. To join the network or for further information, contact Dan, Marilyn or Tim Vick.

### ***Old Books Welcomed In Zimbabwe***

Each year it seems like we have to toss out a pile of books which are too old or for some other reason not very useful to us, including many introductory texts received as free samples from publishers. This year we decided to see if we couldn't find some better use for the books than just filling our local landfill, so Tim asked around and found that the Carleton Library sometimes receives requests for books from schools in developing countries.

He then packed a box of some of the more readable and attractive castaway books and sent it to a school in Zimbabwe which had submitted a request, prompting this response:

"Beloved Friend or Dear Tim, I am writing this note to inform that a nicely packed box of books reached us safely, and in good condition. I would like to thank you a million times for your contribution."

If you find yourself in possession of extra books you might check your libraries to see if they have received similar requests from needy countries.

### ***Kari Cooper, Erik Stokstad Earn Plaudits***

Congratulations to Kari Cooper '91 for winning a National Science Foundation graduate fellowship! Kari is beginning her graduate program in geology at the University of Washington.

Also, we are pleased to note that Erik Stokstad '92 was awarded an NAGT/USGS internship for this summer on the basis of his work last year at the Indiana University field camp program. Erik will be doing his field work for the USGS this summer, and in the fall he plans to begin graduate studies at the University of California-Riverside.

Good work, folks!!

### ***Stewart Fellows For '93-'94***

Two juniors, Beth Pratt and Julie Williams, have been named Duncan Stewart Fellows for the next school year by the Geology Department.

The fellowship was established in 1976 by Daniel Gainey ('49) in honor of Duncan Stewart, professor of geology at Carleton for nearly 25 years. The principal criteria for selection are



excellence in scholarship, a high level of intellectual curiosity, potential for scientific growth, a demonstrated ability to work independently, and involvement in departmental activities.

Beth and Julie will extend the number of Stewart Fellows to 49.

### ***Alums Awarded GSA Research Grants***

Several Carleton alums were awarded research assistance by the Geological Society of America last fall. The average award, according to the GSA newsletter, was \$1273. Winners included Bill Dinklage '89 who was awarded the John T. Dillon Alaska Research Award; Pete Reiners '91, the Harold T. Stearns Fellowship Award; Jeff Strasser '87, outstanding mention; and Eric Baer '91 and Christine Smith '84.

### ***Two Geology Majors Awarded Richter Fellowships***

Aron Clymer and Beth Pratt, both class of '94, have been awarded Richter fellowships to conduct summer research in Europe this summer. Congratulations to each of them!

Richter fellowships provide funds for independent studies; they are provided by grants to the college from the Paul K. Richter Memorial Fund and the Evelyn Elizabeth Cook Richter Trust.

Each fellowship winner receives funds for use on a project which does not carry academic credit. The fellowship is designed to expand the options for Carleton students in pursuit of intellectual and creative interests as opposed to course work or academic exercises.

Aron will be in Slovenia with Dave Bice and geologists from the Slovenian Geological Survey working on paleomagnetic studies of Mesozoic and Cenozoic aged rocks. They will try to place the Slovenian terranes in some sort of geological context with respect to Mediterranean plate tectonics.

Beth, also under Dave Bice's supervision, will be in Italy this summer doing geologic mapping in the Tuscan Nappe thrust belt in the northern Apennines. Beth's project will be two-fold: she will map the structure in a 5 to 10 square kilometer field area, and then create a geologic map for the visitors center at Parco Naturale Di Orechiella, a natural preserve in the Tuscan Nappe region.

We are proud of these students and their very interesting projects, and look forward to seeing the results of their work.

### ***Other Student Awards***

#### **Mortar Board**

Alison Atkins  
Chris Poulsen

#### **Phi Beta Kappa**

Maria Panfil

#### **Distinction in Comps**

Kevin Blake  
Anu Gupta  
Britta Gustavson

Anita Ho

Eric Jensen

Sarah Laxson

David Lund

Maria Panfil

Joan Ramage

Ben Surpless

**Laurence M. Gould Prize** for achievement in science and humanities:

Anita Ho

#### **Sigma Xi, Associate Membership**

Kevin Blake

Lance Dockter

Anu Gupta

Anita Ho

Eric Jensen

Sarah Laxson

David Lund

Maria Panfil

Joan Ramage

Ben Surpless

Joyce Wilson

**Full membership in Sigma Xi** was awarded to an illustrious alum, Clint Cowan '83.

#### **Matteson Service Internships**

Aron Clymer

Bryan Foster

#### **Honors in Music Performance**

Anita Ho

### ***This Year's Senior Geology Majors***

This year's seniors, their hometowns and titles of integrative comprehensive exercise projects:

**Kevin Blake**, Northeast Atlanta, GA "The recent glacial history of Grøndalen and its implications for Preboreal ice activity"

**Anngel Delaney**, Rochester, MN "The impact of paradigms: A philosophical perspective of scientific theories"

**Lance Dockter**, Blaine, MN "Analysis of the present trophic status of inland freshwater lakes,



and the degree of impact of their various sources of phosphorus (P) using case study: Circle Lake, MN"  
**Anupma Gupta**, New Hope, MN "Petrology of early Proterozoic komatiites from the Salida-Ouray area, south-central Colorado"

**Britta Gustavson**, Stillwater, MN "Trace element chemistry of the fine-grained granitic member of the Pikes Peak Batholith, Colorado, as a key to identifying the batholith's tectonic history and source rock composition"

**Christopher Hagerman**, Littleton, CO "Shocked Quartz in the Late Eocene"

**Anita Ho**, Minot, ND "Water concentrations in melt inclusions from the Kilauea Iki Lava Lake, Kilauea, Hawaii"

**Eric Jensen**, Green Bay, WI "Holocene periglacial activity in the San Juan Mountains near Creede, Colorado"

**Beth Lambert**, Bethesda, MD "Stratigraphy and depositional history at sites near Ekalaka, southeastern Montana"

**Michelle Lang**, Grand Marais, MN "Petrology of ultramafic rocks from Long's Gulch, Salida, Colorado: A study of metamorphic relationships with Proterozoic terranes"

**Sarah Laxson**, Honolulu, HI "The petrographic and geochemical categorization of Neolithic pottery sherds from three archaeological sites in the Nomos of Grevena, Greece"

**David Lund**, White Bear Lake, MN "Barium across a marine Triassic/Jurassic boundary section of Portovenere, Italy: Possible evidence for multiple mass dying events"

**Chris Orth**, Billings, MT "Pryor Gap gravel: little pieces of a larger puzzle"

**Todd Osmundson**, Rochester, MN "The middle Pilo deposit; northern Ecuador: Magma chamber evolution during a Plinian eruptive event"

**Maria Panfil**, Arlington, VA "Late Pleistocene history of the Santa Maria Canyon, San Juan Mountains, Colorado"

**Joan Ramage**, Ithaca, NY "Petrographic analysis of Urartian vessel sherds from Ayanis, Van, Turkey"

**Benjamin Surpless**, Eagle River, WI "A chronological, petrological, and geochemical study of Pliocene and Quaternary volcanics near Mt. McLoughlin, south-central Oregon"

**Joyce Wilson**, Nashville, TN "A comparative study of two headwater lakes in the Boundary Waters Canoe Area Wilderness, northeast Minnesota."

## Class of '94

Aron Clymer	El Paso, TX
Geoffrey Collins	Hudson, WI
Julia Daly	Wellesley, MA
Emily Darby	Golden, CO
Starr Johnson	Alpharetta, GA
Richard Kay	New Orleans, LA
Brett Kessler	Port Washington, NY
Myong Sun Kong	Westwood, NJ
Reed Krider	Tucson, AZ
Miranda Lescaze	Washington, D.C.
Naomi Lubick	Ventura, CA
Christopher Poulsen	Helena, MT
Beth Pratt	East Lansing, MI
Karen Swanberg	Great Falls, MT
Elizabeth Symchych	Andover, MA
Ruth Trzynka	Dickinson, ND
Jessamyn Tuttle	Peshastin, WA
Robert Wertheimer	Upper Arlington, OH

## Class of '95

Cynthia Alm	Houston, TX
Emmett Bishop	Savannah, GA
David Boardman	Northfield, MN
Liz Butler	Washington, D.C.
Daniel Fehler	Jordan, MN
Trish Gillespie	Walla Walla, WA
Christopher Gutmann	Middletown, CT
Kate Jesdale	Groton, MA
Rowan Littell	Albuquerque, NM
Roy Luck	Oberlin, OH
Tony Moore	Faribault, MN
Derek Murrow	Marlboro, VT
Ofori Pearson	Mbabane, Swaziland
Bryn Perkins	Los Angeles, CA
Douglas Plumer	Wilton, CA
Michael Ramage	Ithaca, NY
Geoff Redmond	Doylestown, PA
Matt Reuer	Rochester, MN
Frankie Ridolfi	West Bend, WI
Alex Steele	Williamstown, MA
Jay Stetzel	Indianapolis, IN
Stephen Surbaugh	Anderson, IN
Daniel Turner	Portland, OR
Michael Unger	Franklin, MI
Blake Vaughan	University City, MO
Ian Wallace	Unionville, KY





Summertime is field research time in the Geology Department, and although there are some good times, the livin' is anything but easy. These three people represent some of the work which went on last summer. Clockwise from upper left: Roy Luck '95 taking a sight with his Brunton during the petrology research trip in Colorado led by Shelby Boardman. At upper right, Joan Ramage '93 is surrounded by pot sherds she is classifying during her excavation in Turkey which was funded by a Class of 1963 Fellowship. At right, Joyce Wilson '93 retrieves a water sample from a lake in the Boundary Waters Canoe Area Wilderness on an expedition led by Ed Buchwald.





# CARLETON GEOLOGY DEPARTMENT FACULTY AND STAFF

'32 '34 '36 '38 '40 '42 '44 '46 '48 '50 '52 '54 '56 '58 '60 '62 '64 '66 '68 '70 '72 '74 '76 '78 '80 '82 '84 '86 '88 '90 '92

George R. Gibson

Laurence M. Gould

President of Carleton College

Duncan Stewart VII

Leonard S. Wilson

Eiler L. Hennickson '43

Carl E. Buchwald

Shelby J. Boardman

Betty Bray, Secretary

Timothy D. Vick, Technical Director

Mary Savina '72

David Bice '81

Clement F. Shearer

## TEMPORARY APPOINTMENTS

William F. Friedler	1941-44	Fletcher Driscoll '55	1975-76
Trevor Lloyd	1941-43	Lynn Tennyson	1977-79
Edward Koons	1942	Joe Hartman	1978-79
Mildred Babcock	1942	Nansi Price, Secretary	1979
Kazys Pakstas	1943-44	Ken Collier '76	1980-81, 82-83
Nancy Hudson	1943-44	Eugene Cameron	1982
Hans W. Weichert	1944-45	Mark Hempton	1982-84
Kirtley F. Mather	1946-47	Virginia Gilmerman '75	1985-87
Arthur S. Radtke '58	1961-62	Audrey Massa	1987-90
George A. Thiel	1962-63	Heyo Van Ilen '81	1988-89, 90-91
Peter D. Rowley '64	1969-70	Cathryn Manduca	1989-92
Henry Lepp	1970-71	Mark Gonzalez '83	1989-90
Carol Chandler, Secretary	1972-73	Lisanne Pearcy Scott '82	1992
Constance J. Sansome '69	1974-75	Clinton Cowan '83	1992
		George Davis	1992



## News From Alums

1933. We got a nice card from **Lyman Dennis**, who sends greetings and sent compliments on the Newsletter. Thanks!

1939. **Doris Repke Matoush** writes that she has passed her 75th birthday and is "still enjoying lots of activities. I volunteer at local schools several times weekly. My only use of my geology experience nowadays is collecting rocks and minerals for my grandchildren! But I fondly remember being a lab assistant under Dr. Larry Gould, who often served us tea and cookies." Neat memories! **Shirley Shale Palmer** had a nice spring, enjoying her yard and garden trees this year, and wrote of her son and daughter-in-law who built a new fireplace entirely of jasper conglomerate boulders collected around the North Channel of Lake Huron, Canada, in their Sanford Lake, MI, home. Best wishes to **Henry Philip Constans** who writes he's "been out of things for three years with knee problems. I'm now in a nursing home until June; we'll see how things go then." **Jane Scholl** has done some fantastic traveling in the last year, including a tour of the northern route of the Old Silk Road last October. She saw the "splendid Dunhuang Caves with their wonderful Buddhist wall paintings and sculptures, and the fascinating geology of the Taklamakan and Gobi deserts." And in May she visited Athens, Delphi and the Peloponnese (Epidaurus, Mycenae, Corinth) followed by a cruise to the Greek Islands of Rhodes, Crete, Santorini, Delos and several places in Turkey.

1940. **Rudder Kielsing** sends a hello, and is "still kicking along in good health." **David Schacht** writes that they are still active in assisting Native American students and new foreign students at Oregon State University. He added, "I survived lung cancer surgery last October, either because I have never smoked or in spite of the fact that I have never smoked."

1941. For **Lloyd Pray** this year was "a satisfying blend of family time and travel and geologic fun with carbonate dikes in Permian Reefs of the Southwest, attending the Calgary AAPG and Cincinnati GSA annual meetings and the Miocene Sedimentary Geology Conference in Spain. Early in '93 I served on a geology panel for the National Park Service toward protection of the newly appreciated world-class Lechuguilla Cavern in the Guadalupe Mts. of New Mexico, which may be endangered by gas exploration drilling in adjacent non-Park land."

1942. Thanks to **Dode Wonson** for her address update.

1943. **Frank Sullivan** is still doing real estate work, but he has moved down to Arizona, leaving the North Dakota and Minnesota work to his sons. He reports finding lots of rocks and cacti down there! He also notes that his kids are getting more education and graduate degrees, which seems to be the trend everywhere.

1945. **Charles Repenning** is very active as an emeritus, having retired last October after 43 years in the USGS. Since he "retired" he has had four publications: Bull. 2036 on Arctic Ocean Climate change; Bull. 2037 on microtine rodent allopathomys (hope I managed to copy that correctly!) and biochronologic sensitivity to 5 million years; a publication in Germany on hemisphere dispersal; and participation in a multiple-author piece on climate change in Southern Colorado published in the journal *Paleogeography, Paleoclimatology and Paleoecology*.

1947. **Georganna Dean Dickson** writes that they "continue to delight in our eight grandchildren, the oldest of which will start college at Hobart next fall, and gardening, plus whatever travel we can manage to get in."

1949. **Bobbie Dixon** has now been retired three years or so, and writes that she has done some traveling, home repair work and volunteer work. She says, "Spent the better part of a year preparing a video tape of my mother's life in honor of her 100th birthday- a fascinating project." **Ed Rudolph** is "retired for the fourth time- I'll try again!" **Bill Roth** writes that he's had three petroleum wells drilled so far this year, two in the Denver Basin and one in Western Pennsylvania. He also notes that he sees **Alex Boardman** quite frequently.

1950. **Paul Fossum** now has no less than seven grandchildren, the most recent being Sean born last October and Mariah born in April. He says, "We are enjoying growing our own business after the corporate life." He reports excellent health and energy, and the possibility of retirement after the turn of the century.

1951. **Phyllis Rudstrom Brenner** writes that her volunteer work at the Smithsonian Institution has changed somewhat. She says, "I am now an artist painting the casts of rare fossils. The teeth and jaw of a Brontotherium were sent to South Dakota. I am now working with a 10 foot-long Dimetrodon that will be sent to Texas. The casts will be used in museums and for research." Our



visiting paleontologist (visiting his girl friend) Butch Dooley tells me a Brontotherium is a Miocene "big, dumb mammal which is related to horses," and a Dimetrodon is a Permian reptile with a sail-like fin on its back. Phyllis, Butch sends a special hello to you. Also, we thank Phyllis for helping Mike Helgerud '94 with his National Air and Space Museum internship last December. These field experiences are invaluable for students!

**1953. Jim Mancuso** took early retirement last year from Chevron, where he was president of the Minerals Business Unit, and started a new company, Intercontinental Resources Inc. He reports contracts signed or pending for exploration in Chile, Bolivia, Peru, El Salvador, Mexico and Alaska. He said his work is "based on LANDSAT TM processing and follow-up, and we acquire equity interests on most properties." **Mary McFarlane Faville** writes she's "Finally found my calling: I'm into B&D- books and dogs. I train labrador retrievers and run them in field trials all over the country. I have two field champions, one almost and a young up-and-coming. We also have a third grandchild." **Pat Bickford** has stepped down as chair of the Department of Earth Sciences of Syracuse University and plans to be on leave next year doing research, reading and writing. After that, his plans are to return to teaching half time and then gradually work into being a full-time research professor. "Betsy '54 and I will enjoy a more relaxed style of life, with time for travel, grandchildren and the Syracuse Symphony!"

**1955. Joe Mancuso** has been busy doing research on iron formations, including papers given at GSA in Cincinnati and at the Institute on Lake Superior Geology meeting in Eveleth, Minnesota. He writes he's starting to get involved in computer mapping of pollution potential using a program called DRASTIC if I read his card properly. This work has included presentation of a paper at the ESRI meeting in Palm Springs, California.

**1956. Don Kohls** is now president of Kohls Exploration Ltd. in Lakewood, CO. **Richard Buchheit** writes that he's secretary, treasurer and director of the Minnesota Exploration Assn. He's also director of Northern Resources Alliance of Minnesota, "a coalition of local business, governments and individuals opposing environmental extremists, elitists and mercenaries whose agenda is at the expense of the people and economy of Northern Minnesota." He added he's also involved in the debate over registration of geologists in Minnesota, being promoted by environmental consultants.

**1958. William Hollweg** retired from Mobil last year, and is now "on my own and enjoying it," he says. Reporting on his kids, Bill is a Second Class Signalman on the USS Kittyhawk ("Remember the Persian Gulf!"); Kim is a school teacher in Portland, TX; and Bob is a junior at North Texas State in Denton, TX.

**1959.** Thanks to **Ed Husted** for your address update.

**1960.** Thanks to **Michael McLanahan** for his address correction.

**1961.** Here's a note from **Andy Larsen**: "Life continues favorably--work at the Riveredge Nature Center is consuming with co-ordination of invertebrates and prairie plant interrelationships--I am still chasing bugs!! In my less occupied hours I continue to write a weekly newspaper column. But all is not work: Judy and I have more time together and went cross-country skiing in Yellowstone last winter. Eric, our son, graduates from St. Olaf this spring and is on his way to Alaska with the Fish and Wildlife Service. We are envious. Looking forward to leading a trip to the Galapagos next fall and paying off kids college loans then it's hit the road.....hi to all."

**1965. James (Jamie) M. Robertson** has been named Director and State Geologist of the Wisconsin Geological and Natural History Survey (see Departmental News section). **Jan Tullis** was on sabbatical this year and she wrote that she enjoyed being able to work on her lab experiments. She also chaired the GSA Division of Structural Geology and Tectonics, and helped organize and run the Women In Science and Engineering program at Brown University.

**1966. Beth Schwarzman** spent three weeks hiking in Patagonia and Tierra del Fuego in January. She found "spectacular country- saw the Patagonian Ice Cap and Mt. Fitzroy due to unusually clear weather, but the wind- wow!" They plan to launch a new sailboat in June and head out for Maine or Newfoundland, depending on what the schedule permits. Bon voyage!

**1967.** We got a card from **Mark McBride** last summer saying he was still working on groundwater contamination problems with Dames and Moore in Maryland. He said, "One interesting thing has been a project involving some very advanced 3D geological imaging software. It's very valuable to be able to do contouring in 3D, then rotate the visual model on the screen as though it were a real object. It's the world's greatest video game for a geologist."

**1968. Ron Nordquist** is working on a project in British Columbia as part of his oil and gas exploration for Marathon Oil.



**1969. Candace Phelps Kohl** plans to spend six weeks this summer on the Greenland ice cap obtaining ice cores at GISP2 for studies of cosmic-ray produced radioactivity in the Earth's atmosphere. Her plans also include a trip to Antarctica next winter to search for meteorites. Thanks to **Alan Hartley** for your address update.

**1971.** Head of the Department of Geological Sciences at the University of Oregon **Mark Reed** says that "Even though I've already spent quite a few years in them, I am still immersed in boiling, acidic, hydrothermal waters, numerically immersed that is. Otherwise, my wife, Karen Williams '72 and I are enthralled daily by our children aged 11 and 14 and we're working on growing herb and vegetable gardens and a small chestnut orchard."

**Jane Willard's** company, EnPro Assessment Corp., has moved and expanded its offices. "We just reached our fifth anniversary and celebrated with record sales," she wrote. Jane also was recently asked to join the University of Kansas geology alumni advisory board for a five year term. Good work Jane--it's neat to see your company doing so well! **Ed Swain** is chairing a state task force looking for ways to reduce mercury pollution of lakes. "Mercury enters lakes via air pollution, so we're looking to reduce air emissions and mercury use in general," says Ed. **Dick Pautsch** writes that he's looking forward to his 20th reunion at Carleton in June. Along the way he plans to drive to North Dakota to ascend the high point, which will be his 40th state high point. "I still love field trips!" he says. **Royston Kruse's** current project is helping plan a satellite extension of a Billy Graham crusade from Tokyo to nine other countries in January, 1994.

**1972. Mark Taylor** has returned to Corning's research labs after a tour of duty in the business group. "Our group is responsible for glass and glass-ceramic research for Corning," he says. Also, he and his wife, Georgie, have finished restoring their 1835 farm house.

**1973. George-Ann Davis Maxson** says "I finally visited the Grand Canyon, the ultimate geology experience! One could sit in the same spot all day, watching the constantly changing colors and moods." She's working this summer on vegetation surveys on the Chippewa National Forest, and we hope to see her at her 20th Carleton reunion next week.

**1974.** Phil Brown '74 is chairing the department of Geology and Geophysics at the University of Wisconsin at Madison for the next three years--congratulations, Phil! He comments, "I have just been funded by NSF to continue to work on

Western Australian gold deposits and will have a post-doc for the next two years trying to keep my lab alive while I am pushing paper."

**1975. Ginna Gillerman** writes, "I've got a new puppy, Pitchblende, who is teaching me a few things. Work is going well, I've been learning some hydrogeology and expect to spend the summer looking at basalts and water tables in southern Idaho. I hope the pup starts to like driving more!" Ginna is a Research Geologist for the Idaho Geological Survey. **Emily Wrubel**, when she wrote, was trying to find a new job to escape "a mediocre school and a demagogue principal. If I don't get a job I may have to start buying lottery tickets--my job has been unbearable this year." Good luck Emily, hopefully you've heard some positive results by now. **Larry Meinert** reports "A good year. I was promoted to full professor and spent June '93 in Indonesia (Irian Jaya) working on the world's largest, highest grade and most profitable copper-gold deposit. Lots of skarn and cannibals!" **Alan Cutler** recently completed a post-doc at the University of Chicago and is now searching for the next step. "Unfortunately," he notes, "the academic job scene in paleo has been pretty grim the last few years," a fact echoed by other alums in paleo as well. Good luck, Alan, hope something comes up for you! We'd like to welcome **David Rogers** to the geo mailing list. David was a physics major at Carleton, but he's since earned a masters in geophysics and is now working on a PhD at UC-Santa Cruz. His thesis project is on the groundwater around Mono Lake, California. "In particular," he says, "lake level decline in recent years has caused big dust storms from the exposed lakebed. I'm trying to foretell the future of this process."

**1976.** A birth announcement from **Liese Davidson Munter**: young Scott joined sisters Lynn, 6, and Katie, 3, last August 6th. Says Liese, "He was 11 lb. 2.5 oz., and we're not having any more, thank you." Welcome, Scott! **Jim Evans**, teaching at Bowling Green State University in Ohio, sounds a little discouraged with recent events. "After working several summers on projects in the Badlands and Cascades, now I am deluged with students who want to do their research in Ohio (!?) on environmental problems, such as Lake Erie coastal erosion. This year I will get to teach our field camp near Durango, so at least there is one escape." Last year Jim and Penny announced the birth of their second daughter, Emily, on July 2, noting that "Big sister Heidi, 4, is a great help so far." **Will Maze** is "on assignment in Malaysia for most of 1993, working on thermal modeling of the



Malay Basin and the critical concentration of chilies in a bowl of tomyam." He promises to list the publication of the latter work in his resume when it comes out. **Karen Kimball** has a new son, Will, born April 17. Congratulations, Karen! Big brother Jeff, now reaching five years old, is doing hockey and little league while Karen slugs it out as an attorney in Albany. **Bill Matlack** writes he continues to explore for gold "in the great gold trends of north-central Nevada. In the last five years [his employer] Santa Fe Pacific Mining has grown from a fledgling exploration group into a world-class gold producer. It has been a busy, exciting, eventful period. In my spare time I have been teaching in night school and coaching high school cross country." **Heather Macdonald** has bought her first house and "stepped onto the 'golden treadmill of home ownership' (to quote a friend)." Ah yes, we know the feeling. Heather was honored this year with the GSA Biggs Earth Science Teaching Award. The coming years promises excitement as well, since she will be Acting Dean of Undergraduate Studies in the School of Arts and Sciences at William and Mary. "It's not what I ever thought I'd do, but I'm excited about it," she says. **Jamie Foster** has become a radio personality! He says, "Another ex-council member and I host a local call-in political talk show called the 'Skeptic Tank.' And I also do a show called the 'Gem And Jewelry Line' for our store." Sounds like a blast, Jamie! **Barb Wonson-Liukkonen** is covering a lot of territory (42 counties) in her position as Water Resources Education Coordinator for Northern Minnesota for the Board of Water and Soil Resources (BWSR, affectionately known as "Bowser" by the locals). Her duties appear to center on developing educational material promoting what BWSR calls "Best Management Practices" (conservation and water quality measures). She's also on the board of directors for the Sugarloaf Interpretive Center for the North Shore of Lake Superior. **Marge Hulbert** is celebrating "five years of being in business, which makes us a statistical aberration in the software industry," but of course she was too modest to say the reason, which is that she does a darn good job! She did add, however, "I'm finishing my fifth year as a Girl Scout leader, which is equally rewarding. Our ten-year old daughter, Kristin, has gotten us all involved with the community theater- she acts, Art does lights, and I work the box office. Fun!" **Ken Collier** is an editor and writer in Minneapolis for *Family Handyman*, a high quality nationally distributed magazine for people interested in home building and repair projects. If you like to work on

your house, or you're restoring a house, it's got lots of great ideas and tips, all very clearly explained and illustrated. Lucky Ken got to spend several days this summer visiting the *Wooden Boat* magazine and boat building school in preparation for doing an article for his own magazine on building a boat. Ken's son Cyrus, 9, has become a serious clarinetist and enjoys going to concerts whenever he can; other son Frank, 2, is an aspiring athlete. Nancy is a day care teacher.

**1977. Lisa Galblum** plans to be married this August to (and Lisa, I hope I'm spelling this correctly) Jon Gessow, a friend from secondary school days. She reports she's still teaching blind kids to navigate the city and doing lots of white water rafting and kayaking. Congratulations, Lisa, and good luck! From **Camille Parrish**: "Kirk and I continue to be busy keeping up with our growing, active children and our environmental and educational jobs. Notwithstanding that, we've been working on our house, bicycling near and far (Seattle last summer), and making new friends in Maine. Presently we're fighting off the black flies in pursuit of planting a vegetable garden." **Mark Filipi** has been "heavily embroiled in the midst of studies for siting a new major airport which might replace the Minneapolis-St. Paul International Airport." He also added that his daughter Jennifer started kindergarten this year. **Eric Simonson** writes of "another year of mountain guiding and expeditions including trips to Russia's Caucasus Mts., Mt. McKinley in Alaska, Kilimanjaro in Africa, volcanoes in Mexico, and most recently a successful expedition to Shishapangma (8046 meters) in Tibet." He planned to guide on Mt. Rainier this summer. **Bruce K. Nelson** is "getting close to the frantic stage in preparations for leaving on a year-long sabbatical to the University of Montpellier, France. The academic excuse is to go and split time between writing and starting fresh research using a new ion-microprobe (analyzing Pb isotopes in sulfides from mid-ocean ridges). The social reason is to spend a year enjoying life in southern France not far from my wife's family and relatives. There are a lot of Carleton geology alums at UW now; I won't try to list them but GSA Seattle (94) would be a good place to catch up on them all." **Stu Naegle** sent the following note: "Although there is no certainty that it will continue, I have been the staff assistant for the Program in Applied Math at the Univ. of Colorado since January. The job is concerned with all aspects of keeping the program running smoothly: supervising other staff, assisting the faculty in administrative details, overseeing all



accounts and maintaining the budget, keeping the director in line, etc. It's wonderful to be back in the academic environment, and I am very much appreciated here, particularly so since the position essentially consumed my two predecessors. Unfortunately, The University (and Colorado in general) is mired in bureaucracy to an appalling degree. A significant proportion of my time is spent slogging through the mire. I expect Carleton functions much more efficiently by comparison. On the other hand, it's good to be distancing myself from AIDS work. Working with a life-threatening illness takes a terrible toll as, over the years, I have watched scores of friends and acquaintances become increasingly ill and die. My partner, however, remains quite well. Last year we won the City of Boulder Landscaping Award in the residential division. I must admit, the garden was magnificent. Dazzle them with dahlias, I always say, even if I must grudgingly attribute part of that resplendence to the cool wet summer many ascribe to the aftermath of the Mt. Pinatubo eruption. In other news, we just got back from a five day trip to Canyonlands that provided adventure, rest and renewal, not to mention geologic splendor par excellence." Best wishes, Stu; we all wish you both good health and happiness.

**1978.** A card from **Meryl Rosenfeld Haber**, Family Personnel Coordinator and Chief Lunch Box Content Engineer, notes how her ten year old "is heading off to geology camp this summer with a hard rock hammer that was left by the tooth fairy, and my 7 year old who is a terrific hiker, is planning her summer assault on Mt. Bachelor in July." This past year Meryl chaired the research committee for the Mazamas, and she says "we gave away lots of grant money." In the coming year she plans to work for Battelle NW labs on energy conservation. **Tracy Giefer** has been laid off since April and is hunting for a new job. "Guess that gives me plenty of time to walk my dogs and enjoy the nice weather for a while, too. Can't make the reunion in June, so I look forward to seeing everyone and the campus in '98!" Good luck with the job search, Tracy. **Alison Krafft Rempel** is now working four days a week, and comments "my job is wonderful. Hewlett Packard is a terrific place to work and after years of consulting, I love being the client." Alison's title is Environmental Program Manager. She also said her daughter Sarah's almost two years old, and still cute as a button.

**Laura Nadelhoffer** and **Vlad** are still in Chicago. Laura is working at Citibank Cash Management

Services, and they are expecting a second child in September. Best wishes for the new baby, Laura! I'm sorry to have missed **Sarah Mills Ervin** and **Lona Sepessy** when they visited campus this spring, but I guess they did see Betty; the rest of us were off on the departmental field trip. Sarah and her husband have grown their business, Heavy Equipment Repair, up to seven employees, and their daughter Alexis is now a year and a half old. Sarah writes, "We have a very nice life, just a little too hectic." I didn't get to see them, but a note from Lona last summer said she's been doing some neat projects while teaching fifth grade and she was expecting a baby last September. Got this note from **Craig Banister**: "Spent almost five weeks in South America in January and February. Flew into



*Claire, daughter of Laura Nadelhoffer '78 and Vlad, buzzes around using three languages thanks to her grandmother and babysitter.*

Santiago, Chile, with three friends, then over to Mendoza, Argentina, where we got supplies and permits to climb Aconcagua, the highest mountain in the Western Hemisphere at 23,000 ft. Spent 20 days on the trail and hiked close to 70 miles. Our high camp was at 19,000 ft at the base of the Polish Glacier on the east side where we stayed 8 days. We made the summit! There were high winds and clouds on top so we didn't have a view. Met a lot of interesting people from around the world and I really enjoyed our stay in Mendoza. Argentina seems very cultured- I'd



love to go back!" What a trip! **Steve Ingebritsen** announces the birth of his second daughter, Ellen Jane, born May 26. Welcome, Ellen Jane, and congratulations to the proud and now-busier parents! Steve convened a Penrose Conference on Fluid-Volcano Interactions last October, and plans to work in the Valley of 10,000 Smokes, Alaska, and on Kilauea this summer. **Clifford Wright** says he's been "having fun learning how to be an enginerd at the U. of Wisconsin and drinking beer with the cheese heads in Madtown..." Cliff is a grad student in the Department of Civil and



*Barb and Mark Bach '78 welcomed their new Korean son, Nathaniel Hyun-Jin, home on April 1.*

Environmental Engineering; he also was looking forward to attending his 15th reunion this June. **Sue and Les LaCroix** "are thoroughly entrenched in Carleton. Sue works in Central Records and manages the alumni and development database, from which the alpha and region lists of this newsletter are generated. (Now you know who to complain to.) Just goes to show you that it is never too late to become a computer programmer, like many others. I also play viola in the Cannon Valley Regional Orchestra (another late-blooming activity). Les ('79 Math) works as Systems and Network Manager in the

Computer Center. He is looking forward to moving into the new Math/Computer Science building in late August, but it also means a lot of work. Daughter Bonnie is in 7th grade, plays/sings music and appears to be a budding Carleton math major, class of 2002. Son William is a busy 4 year old, mostly interested in monster trucks and Teenage Mutant Ninja Turtle junk. We enjoy living in cozy Northfield, spending time working in the garden, training the new puppy, and all the various things it takes to keep a family running." Important things are happening with **Barb Okamoto Bach** and family: For starters, 2-year old Camilla is now totally adopted and a US citizen, and a new son, Nathaniel, joined the family from Korea in April. As if that weren't enough, Barb says "We're moving to New Jersey where Mark has a new career at Merck Sharp and Dohme." Congratulations on the whole works, guys! **Zach Wilson** sez: "Have reached a new low (high?) in indebtedness by purchasing a new home. The move was sheer delight. NOT! It was much easier when Cliff Wright and I moved to Denver and all our stuff (mostly stereo equipment) fit in my car. Of course, Cliff had to be tied to the roof..." Good luck on the home ownership trip, Zach. We failed to get into last year's Newsletter that **Bill Witte** and AnneX had a baby in December, 1991: Gabriel Wolf Witte. Congratulations Bill and AnneX- and best wishes to Gabriel!

**1979. From Dave Tolley:** "The quantum leaps in technology of high speed computer graphics workstations are almost impossible to stay on top of, but I'm paid to try. Occasionally it has its perks, like last summer when I spent four months working in our Stavanger, Norway, office. Highlights included glacier climbing, fjord sailing, salmon eating and trips to Berlin, Paris, Copenhagen and Amsterdam." **Woody Hitzman** writes he is expanding his Microbial Technologies company into environmental fields including oil spill clean-ups and bioremediation. "Petroleum exploration and enhanced oil recovery work has taken me to Bolivia, Mexico, Paraguay, Argentina, and Russia in the last year," he said. Woody also presented three poster sessions at AAPG meetings. Welcome to the new baby Alec, son of **JoAnn Murashige Gronberg**! Alec was born Jan. 22. **Diana Fountain Willson** is hoping to finish her masters in nursing informatics by Christmas. Diana, next year could you explain what that means? Thanks. **Steve Nagel** had a nice visit with **Dan Schultz-Ela** at the AAPG meeting in New Orleans; they hadn't seen each other for 9 years. Steve and Monica have bought a 100 year old house

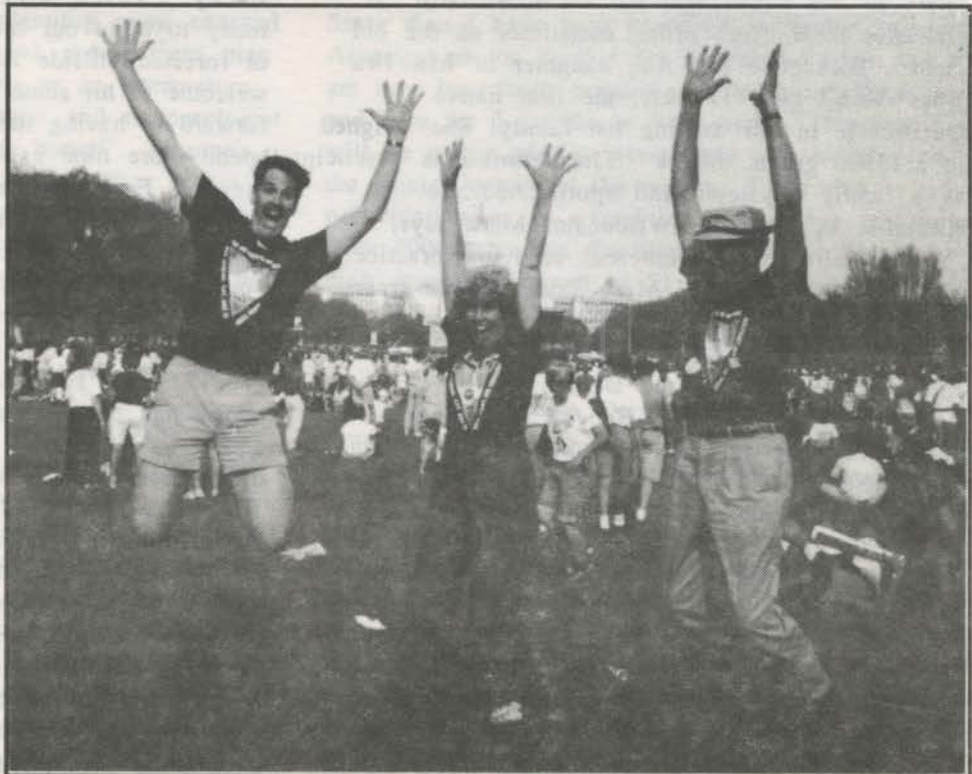


in New Orleans. "We are now creating a New Orleans style garden in the back yard," Steve said. **Dan Maturen** is taking this summer off from the Park Service to take care of the boys while Katrin is a dispatch ranger in Glacier National Park. This fall Dan will be supervising student teacher Maria Panfil '93, in what we hope will be a great experience for both of them! Good luck, Dan. **Jerry McNeish** has moved to the Dallas area and is now helping market his company's (Intera) services. He comments, "Marketing, I didn't learn yet. Not sure I will, either." [Jerry, Heidi Bredenbeck Wells sends you a message: "If you read, this drop a line or call- I kinda miss you, ya know."] **Eric Olson** is nearly finished with his PhD, but is off for one last relatively short field season in Costa Rica. "The question of why insects evolve specialized diets remains unresolved, but I'm at least able to add my little brick to the edifice of our (mis)understanding! I'll miss my family, but the jungle is mesmerizing." OK, folks, here's your chance: **Will McDowell** and his wife, Kim, have specially prepared their guest house, and in four years in Cochabamba, Bolivia, they haven't had a single Carleton guest! They have a beautiful five-acre farm outside town on which Will is experimenting with market gardening, and they now have two sons, Riley, 2, and Dylan, just born this spring in Cochabamba. So let's go!

They say, "Our guest house is available. Come on down!" **Dave Swanson** is still mapping for the Soil Conservation Service in Alaska; he writes he's "looking forward to fieldwork by canoe in the Kobuk River region this summer." [Dave, we still haven't replaced you as lead banjo in the band; anytime you want you're welcomed back. Tim] **Dan Spencer** announces with glee that he has been appointed Assistant Professor of Religion at Drake University, just a little way (4 hours) down I-35 from Northfield! He planned to stay in New York until summer, finish his dissertation, then move to

Iowa. Congratulations, Dan, and good luck with your new job! We hope you can visit Northfield once in a while when you're in the area.

**1980. Libba Huntley** writes she "left Dames and Moore in October, 1992, and started an environmental consulting business. Several clients followed me so the business is going well. Mary Lucas McDonald '81 and I have teamed on several projects, and we are enjoying our freedom from large engineering firms!" Great, Libba- good luck with your business for the future! After surviving, admirably we might add, on the soft-money grant



*Dan Spencer '79 and his parents Ann and Lorin leaped in celebration at the 1993 Lesbian, Gay and Bisexual Equal Rights and Liberation March on Washington this spring. Dan's parents "received such warmth and affection from the other marchers for being supportive of their gay kid!"*

circuit for nearly 6 years, **John Goodge** has corralled a faculty position at SMU starting this fall. Good work, John! He writes, "Now that Vicki has tenure here, it looks like we'll be residing in Tejas for awhile. Young (15 months) Casey is doing exceptionally well--he roped his first cow just the other day!" We would take that with a grain of disbelief if we didn't know that Casey is Vicki's son. From **Mindy Bell**: "After a 6-month stay in western Norway, we're now settled in Logan, Utah, where Darrell is a geology professor. I have a half-time job teaching high school biology and a full-



time job chasing after Lindsey Bell Kaufman who turned one in March. Come for a visit with your mountain bikes or skis depending on the season!" **Bill Hughes** writes of plans to be married to Eileen Lindsay '77 this July 3, producing a combined family of four children. Bill passed the California R.G. (registered geologist?) exam last year. Best wishes on your marriage, Bill! **Reid Fisher** sends greetings; he's been doing "the usual- fiddling some, cross country skiing during the first semi-normal winter since '86," and probably other things more recently between winter and now. Reid hasn't been around Mudd lately to our knowledge, but his music still emanates from Tim's office sometimes on the old tapes... Bienvenue to Julia, daughter of **Martha Buss Bond** born 17 May, the first native Quebecoise in our mailing list family! She weighed in at 3300 grams. **Mark Timmerman** is practicing as a family physician and sports medicine specialist in Madison, Wisconsin. Mark says, "We're feeling quite centered, enjoying practice, our girls and Madison." Mary Savina had a great visit with Mark last November in Minneapolis, which she enjoyed a lot. **Alison Rautman** is now a Research Associate in the Department of Anthropology at Michigan State. She writes, "I've been excavating at a 13th century pueblo site in central New Mexico; Mary Pyott '89 was on the project last summer. I'm able to go back to finish excavating her kiva this summer." Good luck with the project and your new position, Alison. Alison and John announced the birth of their daughter, Ingrid Emily Rauk, last October 4. **Kim Jones** is embarking on an eight month stretch of research spanning this summer and fall. She plans to spend some time in Japan doing field work while David studies music in Indonesia, and then they'll do a little traveling together. Kim's research is on the fascinating sounding question of how Japanese women in positions of authority in nontraditional spheres use directives to their subordinates. They also will be in Michigan part of the fall. Good luck, Kim; your project sounds really neat!

**1981. John Hankins** was among the 20 members of the 1980 cross country running team which visited campus last fall to be inducted into the C-Club Hall Of Fame for winning the 1980 nationals. "We ran against this year's varsity members and placed no one in the top 11," he said. Well, maybe try again next year? Or will it just get worse?? This summer he's looking forward to running the Pikes Peak Marathon in Colorado. **Susan Nourse Mullin** is now a staff geologist at Geraghty and Miller, along with other notables

Cathy O'Dell, Steve Robertson, Rolf Miller, Kelton Barr and Fletcher Driscoll. Sue and Mike bought their first house last summer, and got one with a one-acre lot to satisfy Mike's love of gardening. Mike is teaching 8th grade earth science at Northview Jr. High near Minneapolis. We note with sadness that **Dave Bice** and Carolee are being divorced. **Laurel Hall Maze** "spent the last year expanding my business which sells books, magazines, incense, crystals, stones, jewelry and other odds and ends. I 'expanded' during this time, too. Our second child, Heather, was born March 30." Welcome, Heather, and congratulations, Laurel! **Becky Craven** writes she and Scott are "getting ready to build our house this summer on 10 acres of forested hillside in Idaho. Anyone in the area is welcome to hit some nails." She said she's looking forward to having the house finished so they can spend more time exploring Idaho, and added that they see Eric and Connie Larson, and Chris, Lucy and Betsy Hinze pretty regularly. [Becky and Scott, may I take this opportunity to publicly and humbly apologize for the way the Newsletter had your wedding picture reversed last year. That was inexcusable, but it happened at the printer's after I had left town so I didn't see it until after all the copies had been mailed out. It was a great picture and it was wonderful of you to share it, so you didn't deserve to be treated so badly! Tim] **Gary Walvatne** and Cindy report that they've been busy landscaping and gardening; they plan to remodel their house soon. Some slightly late news: **Mary Lucas McDonald** was married in 1990 and had a son, Derek, in 1991, according to a card I got last summer. Mary said she quit her job at Harding Lawson Associates when Derek was born, but to keep in touch professionally she was chairing the educational committee for the San Francisco Bay Area chapter of the Assn. for Women Geoscientists. She also said she was starting her own consulting business, and had passed the California registration exam.

**1982. Pete Wiegand** is doing lots of soils tests at work lately, "finally getting back to my geology roots." He also reports that this past winter was a phenomenal snow year, and he was looking forward to the mountain bike season. The word from **Cathy O'Dell** is that her "two year-old son is responsible for most of the drama in my life these days... Aside from him, we seem to spend our free time digging at the forest that's growing from the foundation of our new/old home in Minneapolis. The fact that I'm actually enjoying this has once again confirmed my calling as a geologist!" **Heidi Bredenbeck Wells** sez: "Well, I became



president of Book Tech Distributing a month ago... and you guys thought I'd never make good! We've got 54 employees now so I've got some work to do. Brad and I are still trying to procreate... Practice, practice, practice..." Congratulations on the promotion, Heidi! [Heidi also solicits a letter from Jerry McNeish, but that is put up by his entry so there's no way he can avoid reading it.] **Lisanne Percy Scott** writes, "Since last spring (1992) I have taken a position developing interpretive programs for the Newberry National Volcanic Monument (Scott Linneman's PhD thesis area) in Central Oregon. After four months in the field I am now on an interdisciplinary planning team charged with developing a comprehensive management plan for the monument. I am acting as an Interpretive Specialist, as well as hydrologist and meteorologist for the project. I can't say I'm bored!" Lisanne's husband, Toby, is starting up a new office of his company, Cascades Earth Sciences, in the town of Bend, and Lisanne and Toby have just purchased a home on 23 acres with views of the Cascades. Good luck with your new place and all the projects, Lisanne! **Dave Ratner** has finished his Masters in Education and is getting ready to move to a suburb of Tel Aviv this fall. He will take a six-month language course and then look for a teaching job. He said, "We're having lots of fun with Ariel, 19 months old. His vocabulary is growing by leaps and bounds!" Dave, your move to Israel is a monumental change- we all wish you the best and hope things work out well. **Lynn Davies** is a geochemist for PRC Environmental Management in Denver, and says she's working a lot but having fun too. She says, "Despite the 'geo' in my title, I see more paper than rocks these days!" **Lisa Wehmeyer Ryan** is still on a consulting assignment from Berger & Co. in Houston to the Shell Research Center, assisting with the development of a geographic information system. At the time she wrote, Lisa was awaiting the birth of her second child; we all send best wishes to the whole family! And now the news from **Tim Schoonmaker**, who is a special agent with the DEA (Drug Enforcement Agency): "Working my tail off between the rigorous demands of my job and being a new home owner. Blackberry bushes in my back yard are like drug dealers. You get rid of them one place and they reappear somewhere else. Pointed out some pillow basalt I noticed in a rock outcropping to some agents as we drove by chasing a suspect. Now they think I'm a geek. Tell 'em it ain't so, Shelbite!" OK, Tim, whatever you say... In a calmer vein, **Ralph Welliver** writes that he recently attended a course on inspection of in-service bridges sponsored by the Federal Highway

Administration, and that he and his wife, Jennifer, are expecting their first child in July. Best wishes for the delivery, Ralph! **Ben Levy** is happy since he's landed "a brand new job with a really top-notch groundwater firm run by a Carl and ex-USGS vets. Great combination!" For sure. But Ben, I have a little trouble telling whether the new job is with Papadopoulos and Assoc., or is that your old job? And is the Carl Charles Andrews '73? Since the facts seem to line up I'll guess that's the new position. Anyway, congratulations and best wishes in your new post! From **Geoff Seltzer**: "I was glad to see everyone at the GSA in Cincinnati last fall. Since then I have been promoted to Senior Research Associate at the Byrd Polar Research Center and I am now busy with preparing to leave for Ecuador and Peru for 3 months of field work. This year I will be coring glacial lakes again and working on the glacial history of the region. I am also participating in an expedition to retrieve ice cores from 6000 m in the Cordillera Blanca to obtain a high resolution record of El Nino events, the Little Ice Age, and other late-Quaternary climate changes. I hope to have some good stories of high adventure to tell next time I see you. I trust all is well with you and the Geology Department at Carleton." Congratulations on your promotion, Geoff! **Gustave Tolson** writes that he and Gabriela are working on their doctorates in geology. "We are in Germany to take advantage of their high tech equipment and their good beer. Our son David (the Minnesotan) is doing well and swearing in fluent German... Visitors in Mexico or Germany are always welcome." Gabriela's research is on the geochronology and petrogenesis of the Xolapa terrane granitoids and Chubas is working on the structural geology and metamorphic petrology of the Xolapa complex on the Pacific coast of Oaxaca state, Mexico. **Missy Willette** is "really enjoying my third year in the Graduate program in Geography at the University of Minnesota. Have been especially involved in manual and computer cartography this past year, and am now learning 4-D cartography (animation) as we work on a NSF grant to produce educational materials in geography for high-school students. My 'title' is Research Ass't, and I continue to reside at my duplex at 2446 Grand Ave South, Minneapolis, 55405, where I learn Urban & Economic Geography the hard way-- renting out apartments!" **Pete Whiting** says "Our lives keep getting faster and better. I am happy at work--new research projects and a graduate student. Am enjoying "Our Old House"--the stratigraphy of wallpaper and other delights. Our former bonsai grass, since



organically fertilized, is now requiring cutting. I miss the stunted stuff. Cindy is two-thirds done with her pediatric residency--Boy are we going to take a long vacation when she's done!" **Dave Becker**, with help from his 11-month old son Dylan Andrew, made a tad over 55 gallons of maple syrup this spring, and he's looking forward to the haying season which he says "is more interesting than work at times." Dave's work continues to focus on catalytic converter technology and he's reporting excellent success and market acceptance.

**1983.** Hello to **Sharon Anderson**, who with Ernesto visited campus last November. She says, "The Geo labs look unchanged, but new buildings have sprouted up on campus. Here in Michigan, I report no new job, no new home, no new dog, cat, kids, or goldfish, but visitors are welcome at our old farmhouse." We appreciated seeing you, Sharon, and it's OK with us if you go a year or two without completely rearranging your life! Sharon's current research is on how pesticides become sorbed onto soil colloids, especially organic matter, and travel through soil. Casey, son of **Keith Knudsen**, will be 3 this summer and he's excited about becoming a big brother, which will also happen this summer. Keith sez: "Any experienced (or even not so experienced) diaper changers are welcome to visit us any time." Keith is working for an environmental consulting firm in the Bay Area. A baby daughter was born to **Amy Sager Patton** on July 28, 1992, named Katherine Elise.

Katherine was born "one month after I finished my MS thesis and graduated at last. I spent six wonderful months at home with my two kids but am now back at work at a job I love too much to give up (Groundwater Section Mgr., Water Quality Div., Oregon Dept. of Environmental Quality). Having two jobs I love is not a bad thing these days, but tough sometimes..." **Rob Alexander** reports that he and his family are enjoying the land of bayous and Dixieland Jazz, but "we miss topography. The highest point in Louisiana is a bridge! We are expecting our second (and last) child in July and are planning to have a home birth with a midwife." Best wishes with it, Rob! **Lissa Field's** new son, Maxwell Altair Ensley-Field, was born Feb. 8, and is the "new star in our lives," she says.

Congratulations, Lissa, and hello Maxwell! She added that they are still working on wooden boats, too. Speaking of new sons, **Laura Ferguson Jacobson** just had her second one, Karl Anders, born April 1. "My husband Paul graduates from medical school in June and we're heading to Iowa City for a year of research and good family time before he begins residency. Life is good!" **Steve**

**Sutton** had just bought a house when he wrote out his card, and he and Ute were up to here in packing but they sent along a hello to everyone. Here's a note from **Amy Zacheis**: "Got married, and my husband and I are just finishing up a year at Cambridge before returning to Alaska. He got his master's, I'm working on my undergraduate in Russian. Spent some time in Siberia and Moscow. Will be at the University in Alaska to finish the degree and work on a graduate degree in arctic plant ecology." Wow- good luck with it all, Amy! On a card from his brother Gregory, it says that **Chris Foley** and Sue are moving to Buffalo and that Chris has switched into pediatric critical care medicine. Is that right, Chris? I got a nice note from **Jane Woodwell Soper** who's now in California. Jane's husband, Chris, teaches political science at Pepperdine University and they live in a condo on campus with a beautiful view of the ocean. One-year old daughter Katharine Elizabeth helps provide entertainment, as well. Jane comments, "Chris and I agree that being a parent is the most wonderful and joyous experience of our lives. I have been home with her this year and have also been writing a science curriculum for a nearby private elementary school. In September I will be teaching the curriculum part time." Sounds great, Jane--hope your curriculum is a huge success! This note from **Mark Gonzalez** seems to have suffered some in the transmission, but in its more-or-less complete form is: "I'm teaching classes, initiating new research projects, revitalizing a long-neglected lawn, reconstructing a fixer-upper in the company of my 1-yr old girl, Chamacita. Watching Elliot and Sarah Bruhl prepare for parenthood, and biking on occasion with Tim Kruse (84). Hope all is well in Mudd-ville. Old friends and acquaintances should stop by for cold ones and a bbq when passing through the Big Cow Town [Denver]." **Steve Robertson** is a geologist at Geraghty & Miller up in Minneapolis, but he's finding his life is very full with a family including a three-year old daughter. He added that he's looking forward to summer vacation on an island in Puget Sound, and that sounds mighty good. **Mary Savina '72** crashed the Reunion party in the Cave for the class of '83, and brought back the following tidbits (it was very loud in the Cave, so she hopes she got everything right!): **Tom Baring** is working for NOAA in Boulder on atmospheric change research. His plans include a trip to New Zealand in which he will study ozone depletion in Antarctica. He has finished his MS at Colorado. **Don Frost** is working as an environmental lawyer in Washington, DC; **Dave Purkey** is at UC-Davis to work on his PhD in



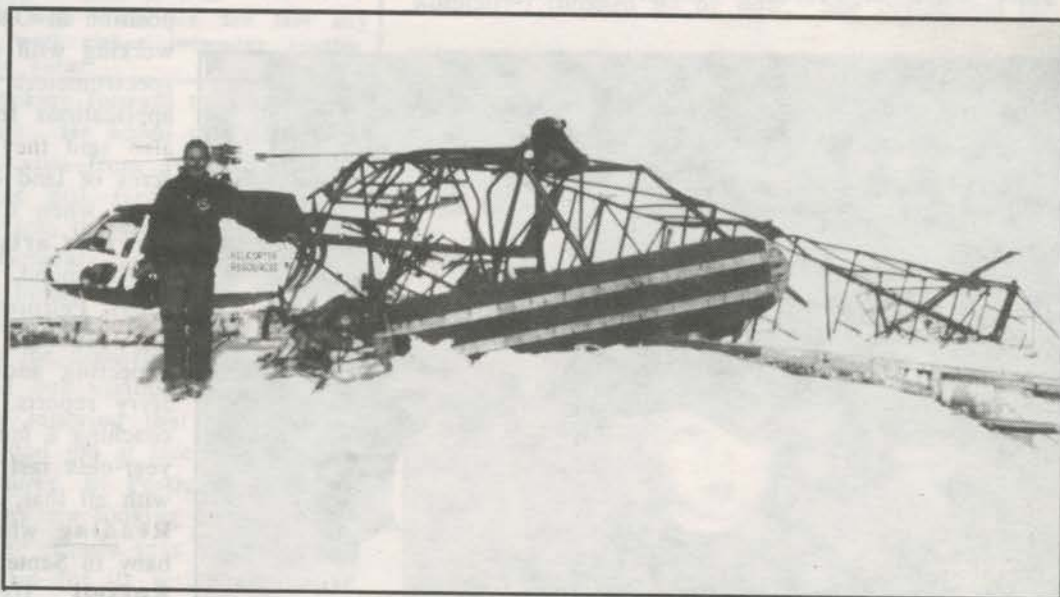
irrigation management; Dave said he'd be glad to speak with anyone who is considering about working in Africa and/or the Peace Corps; and both Dave and Don are fathers of small daughters. **Laura Mathews** is a lab technician in the U of Minnesota Hospital, and she's taking courses in history and philosophy of science. **Brian Leonard** is an attorney in Topeka, Kansas. **Ruth Oppedahl** is working for a land trust for preserving natural areas in Madison, Wisconsin. Others Mary saw at the party included **Brian Kamm, Bruce Pfaff** and **Tim Cowdery**.

**1984. Rudi deZoeten** writes that during the past year the entire UNOCAL International group moved from Los Angeles to Houston, including him and Mary and Erich.

"We're not adjusting, but hey, we have another one in the oven and we will try to survive the summer." **Jack Dunn** has been enjoying getting paid to study and live by the sub-Andean Thrust Belt of Bolivia. "Daryl, 2 year-old Hannah, and I have enjoyed the opportunity to learn Spanish, experience Bolivia, and see some of wild South America" in the past year. They also attended weddings of Jay and Barb and Norm Brown and his bride, Liz. **Jeff**

**Pipes** has finished his second year of law school at Hamline ("Much easier than the first year!") and is a law clerk for Honeywell's environmental law department. Jeff published an article in the *Journal of Public Policy and Law* entitled "Minnesota's first step toward a no-fault alternative to Superfund..." Good job, Jeff! Jeff also wrote that Florence is doing well and keeping busy running her company. **Elliot Bruhl** and Sara "happily announce the birth of our son on June 1, Gustav Jackson Bruhl," and report both he and Sara and doing well. Congratulations Elliot and Sara! Elliot is halfway through med school, and he will be gratified to know that Jean Vick is, as I type, repainting the granary for the first time since

Elliot and Dag did it back in the early 80's. The barn is coming up on needing it, but it may or may not happen this summer (it's not urgent). It's a good thing Elliot's not a professional painter; he does too good a job to get repeat business often enough to stay afloat! Congratulations and best wishes to **Christine Smith**, who has been selected to teach geology at Colorado College, "following in the fine tradition of Eiler, Slinneman, etc." She adds that "This is almost as exciting as the gala event of the season, the wedding of Barb Waugh and Jay Jackson..." [see next paragraph!] Christine is working on her doctorate in tectonics at UC-Santa Barbara and was back in Antarctica last winter. She took time out from geologic field work to locate and



*Christine Smith '84 made a pilgrimage last December to the remains of the Fokker aircraft used by Larry Gould to explore the Rockefeller Mountains as part of the Byrd Antarctic expedition. The plane was wrecked when winds reaching 150 knots in an early winter storm blew it away in March, 1930.*

visit the wreckage of a plane which had flown Larry Gould into the interior of the continent. **Liz Screaton** is working on her PhD, studying fluid flow in the Oregon Accretionary Prism. She went out on Ocean Drilling Program Leg #146 last fall, and wrote that she's looking forward to some dives on the Alvin this fall. Liz, if every Carl who's dived in the Alvin scratched their name in the cockpit, there'd be a fair number of them by now. Of course I'm not advocating it... And, this note from **Mark Gordon**, "Last year my funding ran dry at the end of July. Fortunately, Paul Mann (former colleague of Mark Hempton) came through at the last minute with funding to work on his Cuba proposal. I spent seven weeks in Cuba collecting



fault slip data to analyze the tectonic evolution of western Cuba, an arc/continent collision zone. Upon returning, I found out that my Honduras NSF proposal was finally funded (third submission). I went to Honduras and Guatemala from January to April of this year. Unfortunately, that meant that I missed the event of the year in Houston: Barb Waugh's and Jay Jackson's wedding. I also missed the event of the year outside of Houston: Jay's and Mark Hempton's weekend binge in Vegas. I have heard that Jay has fond memories of that weekend. Well that is already too much, and I have great fears about what it will look like when edited, so I sign off here, Mark." Mark, the danger around here is that something will not be edited! A letter from **Julie Chen** in February brought Greetings from

congratulations and best wishes from the Geo Dept! Barb wrote that she and Jay honeymooned at Lake Louise, Alberta. She also said Jay is still enjoying his work at Exxon a lot, and she is continuing to teach next year.

**1985. Laura Runkle** has a new son, Samuel Anthony Miller, born last August 4. Welcome, Samuel! Laura has been working part time for a local museum doing children's programs in conjunction with area schools. **Tom Hoak** has finished his PhD at UT-Austin. He says he "has a new border collie pup and am entering the booming job market!" Good luck, Tom, and let us know next year where you find yourself. **Lee Riciputi** and **Claudia** had their first child, Shaina Cole, on March 31. Welcome Shaina! Lee now has a full-time staff

position at Oak Ridge National Lab, working with the ion probe and mass spectrometers, developing new applications for geochemistry. Lee also said they have purchased 14 acres of land on which they want to build when Claudia is tenured.

**Jerry Carlson** is being transferred to Richmond, VA, by his employer, Ethyl Petroleum Additives, probably next summer. He and Terri are expecting another baby in December; Jerry reports having great fun coaching a hockey team for 10 and 11 year-olds last winter. Good luck with all that, Jerry! Hi to **Liz**

**Reading** who is expecting her first baby in September. Good luck, Liz!

**Russell Urban-Mead** is busy chairing the Staatsburg Water and Wastewater Advisory Board. He also writes, "Hope to be teaching full time at the community college this fall.

I'm discovering a new hobby, beekeeping, and playing clarinet in an opera orchestra." **Jim Dunlap** happily reports that he finished his PhD at Minnesota last year. Now he's got a post-doc in geochemistry at UCLA and is doing rock deformation dating. "Every now and then I ride my mountain bike down to Venice Beach to get a dose of sun and skin..." **Kris Grady Mitchell** is taking the summer off from work while Dale finishes his PhD in physics and finds a job. Things sound like they're in flux right now, but hopefully good things will shake out soon, right Kris? Good luck from Tim. Having earned her Black Belt in Aikido, **Maria Peterson** has embarked on the quest of her PhD in Geology at Stanford. Her recently accepted research proposal, leaked to *The Newsletter* by her



*Maria Peterson '85 decked a strapping macho opponent last fall in the test for her Aikido black belt.*

West Africa! Julie and Lazhar moved there in January, and Julie was working for Catholic Relief Services in Benin. Lazhar was looking for a job at the time she wrote, but she said moving from the dead of winter to the equatorial heat was a pleasant shock. Good luck Julie- how about a picture of you in your new place? It sounds neat.

**1984/85.** Got a joint card here from a mixed marriage couple, **Barb Waugh** and **Jay Jackson**, so I'll make a special year category for it/them. Barb and Jay were joined in wedlock in March in Houston, before a vast array of Carleton witnesses including John Dunn, Norm Brown, Elliot Bruhl, Laura Day Moore, Beth Hayes Martin, Christine Seeburger Szigeti and one other person who I think might be Tom Riley but I'm not sure. At any rate,



mother, is entitled "Chromium redox and sorption and surface spectroscopy at the magnetite/solution interface." She says she hopes to get out her violin once in a while now. **Bret Berglund** is working on environmental cleanup and restoration projects for the Air Force; "All of the sites I'm involved with are above the Arctic Circle," he writes. "The house is built... no plans to move for the next 20 years, so come visit. Bring furniture!" **Glen Carleton** got a chance to teach introductory geohydrology as an adjunct professor at a local college this spring. "Teaching is great!!," he says, although he noticed that it was lots of work the first time through a course. He's still also working for the USGS, living in Trenton, wind surfing, etc. etc..

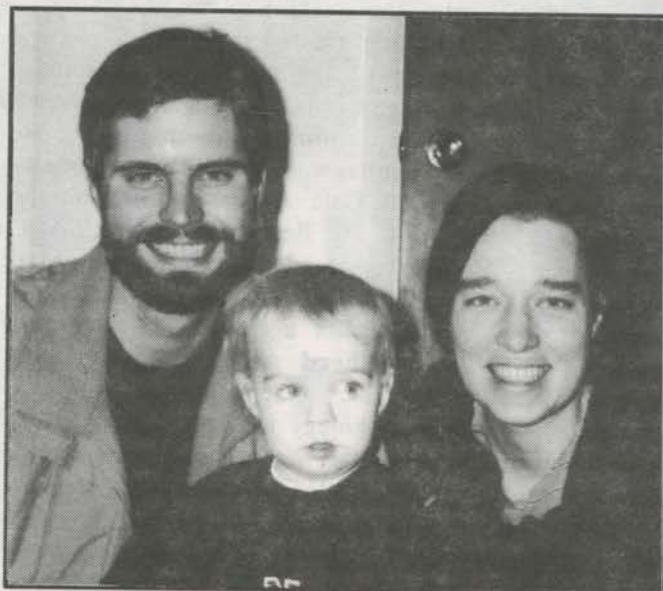
1986. **Sean McKenna**, still at the Colorado

NEWS BREAK June 2, 1993

Shelby just got drenched with water on the last day of Petrology class. He wore amber swimming goggles to class. Old habits die hard!

School of Mines, was looking forward to a summer bike ride across Colorado. He added that he enjoyed a spring break visit from **John Sorlie** and **Pat Field** (English major '86). **Gregory Foley** left his community clinic to join the staff of a huge Boston hospital (Mass General), and has been accepted into a masters program to become a nurse practitioner. "Other than that," he writes, "David and I are doing fine on the domestic scene, tending our victory gardens and our various ani-mules." **Emily Adams** happily reported that **Graham** recently was offered a good job at Intel, the computer chip manufacturer, in Portland, Oregon, starting in the fall! They are looking forward to moving to that nice area. Emily says she's "excited because the area is known for its active alternative healing community- I'm just getting into homeopathy and am very interested to learn more." Young **Alan** is getting big and lean and blond and a blue-eyed charmer... most of the time anyway. Best wishes for the new life out west! **John Sorlie** has finished his last year of law school at Northwestern University in Chicago, spent the winter as a law clerk at the Environmental Protection Agency, and now is looking for a permanent job in environmental law. He says "It's a shock to be back in the Midwest after doing my first two years of law school in Oregon. It's so flat here." Keep in mind, John, that's Illinois you're seeing, not the whole Midwest! From **Craig McCaa**: "My brother and I tried to go to Vietnam last fall. Our plans fell through, and somehow we found ourselves hoisting pints at the Guinness Brewery in Dublin instead." **Craig** is working as a reclamation and compliance specialist in the Carson City, Nevada office of the Bureau of Land Management. **Sharon Frank Wichman** has

departed the east coast for Grand Forks, North Dakota. She writes, "After Nathan was born in June, we packed up the house and drove five days with a U-Haul... Now I'm teaching hands-on science to elementary school kids in between running after Nathan. We are setting up a city-wide after-school science club for first thru sixth graders (Brainy Bunch Science Club)." Sounds really neat, Sharon! **Kate Heimes Carlson** has found that her baby "is suddenly a year old and thinks he's a billy goat. Eats anything and always wants to be standing on the highest place. Never a dull moment!" **Kathy James** is now a professor of Recreation and Leisure Studies at California State University, Long Beach, and planned to have her PhD from Minnesota in recreation education ("no, that isn't a PhD in Rotblatt!") finished up by now. She commented on



Emily '86, Graham and Alan Pugh.

her card, "It's gonna be different out there!" Good job, Kathy, and good luck in your new position! Kathy's thesis was a study of ethnic minority participation in environmental sciences. **Roger Huddleston** says his job has been very busy, with the excitement of getting involved in radiologically contaminated site investigations, although he says he's not glowing, at least not yet! He adds, "Now that I have a house and feel somewhat settled, my life seems to be an endless stream of home improvement projects: indoor projects during winter, outdoor projects during summer." A letter from **John Leland** says, "I'm still a grad stud at UCLA and have a few years to go. I just returned from a trip to northern Pakistan where I spent five weeks collecting samples to determine incision rates along the Indus River. I never thought that I'd



work on any geomorphological problems, especially since I never had to take the then infamous Landforms class. But if you want an introduction to geomorphology in the field, I can hardly think of a more spectacular place than the Himalayas."

**Christine Massey** took a two-month trip to Australia collecting granite samples. She found it "an incredible, expansive country with kangaroos in the desert, crocodiles in the jungles and brilliant fish on the coral reefs." She's moving to the University of Vermont in Burlington in August. Got a note from **Tom McCabe** a while ago saying he and **Bonnie** are now in Seattle, having moved a couple of times in the last year or so. Tom has been a visiting instructor at the U of Washington teaching undergraduate programming courses, while Bonnie has been searching for a job in environmental education, taking a woodworking course and taking night classes in real estate so she can apply for a job with the Nature Conservancy. Tom and Bonnie, I hope things shake out pretty soon for you, it's about your turn for something nice to happen, job-wise! **Andrew Graham** and Bonnie announce the birth of Cole Alexander Graham, their first child, born April 26. Best wishes, guys! And a card from **Mary-Russell Roberson** says "Mark Johnson '85 and I are expecting a baby in December!" Best wishes for a smooth delivery, MR.

**1987. Lisa Shepherd** writes of plans to marry Peter Drzewiecki in September...He's working on a PhD in geology at Madison. Meanwhile, Lisa is a staff hydrologist working on groundwater modeling at RMT, Inc. in Madison. **Kris Hazard** has finished her first year of law school and will begin taking environmental law classes in the fall. Her plans for this summer were to clerk for the trial division of the Oregon Dept. of Justice, and next year she expects to be a TA in Legal Writing. She writes that she's "enjoying the career change, and Portland in general." **Chris Carlson** is "trying to finish up the semester that wouldn't go away. Graduate school isn't supposed to be this trying. After having my first dissertation project canceled due to funding, I've spent this year taking classes and teaching labs for intro geology. I found out yesterday that I will have a project starting, hopefully, next fall working on septic effluent and potential impacts on the Indiana Dunes National Lakeshore. If everything goes as planned, I will take my qualifying exam in October and be finished with all credit hours by the end of next semester." During the summer Chris planned to enjoy himself teaching at the Indiana U. field camp, and taking fishing and camping trips in Montana, Idaho, Minnesota and the Cascades.

**1988. Katrina Allen Kennedy** and her husband Dan moved to Prague, Czech Republic, last fall. She writes, "Our first six months here have been great. We live with a Czech family, are learning to speak Czech, and love being in Prague." This summer they planned a two-month bike ride through the Czech Republic, Austria, Switzerland and Germany. Sounds great, Tudi- let us know how it goes! **Carmen Curtis** plans to marry Mark Boshan Oct. 16 in Denver. She says "I still love teaching 7th grade and am teaching a program in Boston this summer. I am also still working in clay and am teaching an adult beginning class." **Carolyn Carr** is working on a graduate program in Conservation Biology up at the U. and liking it quite well. One of the highlights of her year, though, was a great journey to Big Bend to go backpacking with **Marilyn Yohe** and Paul Gore. Your faithful *Newsletter* editor really enjoyed seeing you both and Michelle again at reunion-your fifth! I got the following note from **Melissa Johnson**, a USGS hydrologist who is of the highest quality and is eminently employable (hint, hint for all you USGS water people): "I'm an author! My first report for the USGS was published last fall. It's a report on the water resources of the water-table aquifer in a river basin in southern NJ. I still love my job here with the USGS, but it's time to start thinking about leaving NJ -- I've been here long enough! Are there any USGS-WRD people out there looking for hydrologists? Let me know!" **Brooks Wallin** sent word last winter that he is in France being a vice president in charge of energy project finance for Credit National, a French Bank. He said, "Having turned into a banker, I finance oil field production, power stations and pipelines- still a little geology in there, I guess." Thanks for bringing us up to date, Brooks.

**1989. Thanks to Jeff Donald** for your update. Jeff is in Aurora, Colorado, as program coordinator for the Adventure Outdoors Program for the City of Aurora. **Dave Lewis** has been a staff geologist with the MARK Group in Pleasant Hill, CA, since last fall. He's having "a great experience and learning every day." **Mary Pyott** writes she is "still teaching inner city kids (4th-8th grades) in a beautiful yellow pine forest outdoor classroom as part of a science enrichment program for Los Angeles County Dept. of Education. My house is still standing, even though it sits smack dab on top of the San Andreas fault zone. So, barring budget cuts and major earthquakes, things are going fine!" Mary also helped Alison Rautman '80 in an archaeology excavation of a 13th century pueblo site in New Mexico last summer. **Carol Ormand** is



now on our mailing list by virtue of her commitment to the graduate program in structural geology at the University of Minnesota. It's something of a switch from her Carleton math major, but she says she "loves the field trips. I also find time to do a bit of folk dancing and contra dances." And, we might add, visit Dacie's once in a while for a muffin or two. Welcome, Carol, it's good to have you! **Rowland Cromwell** is a staff geophysicist with Golder Associates in Redmond, Washington. He reports he's been extremely busy with traveling and report writing, the stuff of consulting geology! **Eleanor Merritt**, Earlham College '62, sends her annual report on **Karen's** whereabouts: "Since January Karen's been settled in the small town of Brightlingsea, Essex, England, working and learning as an apprentice sail maker. Her future there depends on her luck at obtaining a work permit- British citizens get first choice, European Community second. She sailed in the big Columbus race across the Atlantic from April to September last year and sailed in New York harbor on July 4th. Stay tuned..." And thanks for keeping us posted. Eventually Karen's Mom may even qualify as an honorary Carleton Geo alum if she fills out enough of these little cards! **Holly Ewing** is in a graduate program in ecology up at the U in Minneapolis, and she's finding it "busy but a lot of fun. I'm struggling to get over the shock of going back to school." Holly, Mary's e-mail address is [msavina@carleton.edu](mailto:msavina@carleton.edu), and she reads her mail daily. **Kim Hannula** is working on the latter stages of her PhD at Stanford and planned to TA the field camp this summer in the Snake Range. This year she spent a lot of time trying to wrap up her thesis, sending articles off to be published and looking for a job for next year. **News break-** Kim just was appointed to teach structure and metamorphic petrology at Middlebury in Vermont. Good job, Kim! **Sarah Gramlich** has just about finished her masters at Michigan in the School of Natural Resources and Environment in environmental education. She was planning to go to Sweden this fall to look for a job. Sounds neat, Sarah- hope you find something and have a great time! **Sonja Wolter** was, when she wrote, jobless but not defeated: she was contemplating a four-week trip to Central America. She's still in the band, though, so

if you need some music call Raildog! **Kari Paulson** came home from the Peace Corps last winter. After some traveling around she spent a month or so this spring canvassing for Greenpeace. She said the apathy of suburbia was pretty alarming, but she's "really enjoying the peek into the homes of America, though- just the dose of reality a recently returned Peace Corps volunteer needs." Her plans for the summer involved heading up to Seattle with Morgan to live.

**1990. Andrea Earley** is now in Duluth, and when she wrote she had teaching jobs lined up for the summer with the Native American Summer Science Camp and the Kayak and Canoe Institute (two separate organizations). "This fall will find me embarking on the next leg of my academic journey



*Kari Paulson '89 and her host family for the first year of her Peace Corps service in Senegal. The picture was taken by Kari's sister, Anna Louise Paulson.*

in a Masters of Education program at UM-D;" good luck Andrea, I hope it all turns out to be great fun! **Betsy Hunt** wrote to announce her marriage to Jeff Hunsberger on May 30. Congratulations, and best wishes from the Geo Dept, Betsy! She also said she's "finished the classwork for my MS in environmental pollution control and only have two chapters left to write for my thesis!" Her thesis topic was "The development and application of a field method to measure the success of abandoned coal mine reclamation," and the tone of her letter clearly implies she's glad to be moving on to something else. **Susan Ford** has switched jobs and now works for an environmental consulting firm in Colorado. "Basically," she says, "I play environmental private investigator and research potential Superfund



sites." When he wrote, **Andy Garrett** was in the midst of choosing between medical school in Washington or law school in Vermont- Andy, let us know next year what happened! Andy spent the last year and a half working in cystic fibrosis research at the Seattle Children's Hospital. **Rebecca Arenson** has gotten a job teaching natural history for the Oregon Museum of Science and Industry in a place out in the sticks with the wonderful name of Fossil, Oregon! Fossil looks to be the only metropolis of any clout in northwest Wheeler County; it's located at F-13 on the map in the road atlas, not far from a unit of the John Day Fossil Beds National Monument. 'Becca, what kind of fossils do they have there? Anyway, 'Becca is teaching arid land ecology and geology to 6th



*Jen Macalady '91 in Ordesa National Park, Spain, in March. Photo by Kari Paulson.*

graders. She says, "The canyons here are incredible. Wow!" She added that some of her colleagues know such famous personalities as Andrea Earley, Becky Lang, Kari Cooper and Jenny Nigrini. Those colleagues must be OK themselves! **Andy Moore** and Cynthia stopped by in mid-June as they were driving from New York to Seattle and collecting sedimentary rocks for the department at Washington ("They have NO..."). Andy's working on finishing up his masters, which focused on a tsunami which hit Puget Sound 1000 years ago; he had an article published in *Science* last year about it. His PhD work will also be on tsunamis, in Puget Sound and/or Hawaii, depending on which proposal(s) get funded. Cynthia has finished her masters and is working on her PhD in chemistry.

Her research is centered on several hyphenated words which include letters like x, y, o, -, 3-4-t, etc. They plan to marry in Delaware in September. Many of you will be there, but if you can't go, don't fret. The Newsletter will have a picture next year as per the comment below in Butch's entry. Andy promised! **Sharon Stern** has been working on her PhD at Kansas, since she finished her masters at North Carolina last fall. Spring break saw her trekking out to Death Valley, and then in June she wrote, "I just got back from the first visit to my new PhD field area in Southeastern California and am settling down to learn how to date zircons this summer. Life as a student is pretty good, especially since I acquired my new four-legged furry companion, a Weimaraner named Misty!"

**1991. Kari Cooper** has landed an NSF Graduate Fellowship (good work, Kari!) to assist her in her program at the University of Washington this fall. This year, she has been working at the Alaskan Branch of the USGS writing a paper on the origins of some amphibolites from Alaska. Among her plans for the summer was a bike trip from British Columbia to San Francisco in July and August. Kari, that deserves a picture in next year's Newsletter! If you want a good deal on a PC talk to **Matt Stone**, a system consultant for a store called PC Express in Minneapolis. Matt sold the Vicks a 486, and my only complaint about it is I can't get time on it- Andy and Laura monopolize it all the time! Matt and Pam Birkholz '91 were married last fall and honeymooned in Belize and Guatemala. Pam is now in the process of applying to med schools. When **Butch Dooley** visited campus this spring he gave a lecture and amazed the paleo and intro classes with his storehouse of knowledge. In terms of his plans, he says, "In spite of LSU's budget crisis I'm still on track for my PhD. I'm spending the summer in east coast museums, then in September I'll be at Andy Moore's and Cynthia Graff's wedding. I should be at LSU for two more years, at least." Butch also hinted strongly at plans for him, Andy and Matt Stone to be decked out in kilts for Andy and Cynthia's wedding; The *Carleton Geology Newsletter* wants a picture of this!!! After spending this past fall at Carleton coaching women's soccer again, **Jenny Nigrini** is now out in La Jolla, CA, working at Scripps taking care of the sedimentary core collection. She says, "It's hard to say how long I'll stay, but the weather sure is nice. Life can't be too bad when you can eat your lunch on the beach every day." **Becky Lang** sent a nice card saying she's enjoying life with the Seattle Carleton enclave. This summer she's TA'ing with the Washington field camp, and Michelle said



she's also doing field work near Lake Chelan, Washington, on a layered gabbro unit near Holden Village. **Erich Cowgill** writes, and I can but transcribe, "Rocks, rocks, rocks. Mostly I've been working to get myself settled in working on my MS/PhD project. It looks like I'm going to be working in B.C. on basement involvement in the Cordilleran fold and thrust belt. I have managed to sneak away, on occasion, to Joshua Tree, The Pinnacles, and Yosemite for a bit of climbing, however." Erich wonders if the person mentioned in a "Rock & Ice" article on Thai climbing was Mark Newcomb? Maybe Mark can respond to that.

**Catherine Inman** wrote she was "finishing my last teaching season, and then plan to spend a relaxing summer as a volunteer ranger at Lassen National Park. Then it's off to the Peace Corps to Nepal to do forestry- a dream come true!!" Good luck, Cathy. Hope you have a successful and rewarding time in Nepal! **Pete Reiners** was working on finishing up his masters so he could start on his PhD at Washington when he wrote. He also commented on the number of Carls at Washington: "It's like I never left Mudd Hall. We've got quite an IM frisbee team here- almost as good as Shel'bee!" **Kea Umstattd** has been working on an MA in classics while taking geo courses and working at the Iowa Geological Survey. She and her friend, Paul Duckenfield, are coaching a girls' softball team. **Jean Morrill** is looking to finish up her masters by the end of the year and then work on her PhD at Arizona. When she wrote she was looking forward to attending a week-long NATO conference on global climate change; the grad students get to attend in exchange for helping with projectors etc.

1992. When **Jill Baum** wrote she was in the midst of her busy season at Frost Valley, a YMCA environmental ed. site in New York State, with 10 school groups visiting in a week. She said, "This summer promises to be exciting- I'll be a high school work crew supervisor for the Student Conservation Assn. in Pennsylvania after a week of training in Yellowstone. Yeehah." **Jim Rowe** has been, since January, an environmental consultant with Radian Corporation in Texas. "I have yet to see a real rock and I certainly never expected to be intimate with a hand auger! But I can't complain- field work has taken me to Utah and New Mexico, and this summer I will be in Anchorage, AK." **Erik Stokstad** is starting this fall on a masters in stratigraphy at UC-Riverside. This summer he was planning to do mapping for the USGS in northern Washington. Erik also said he and Nick Dewey dropped in on Dave Bice's expedition in the

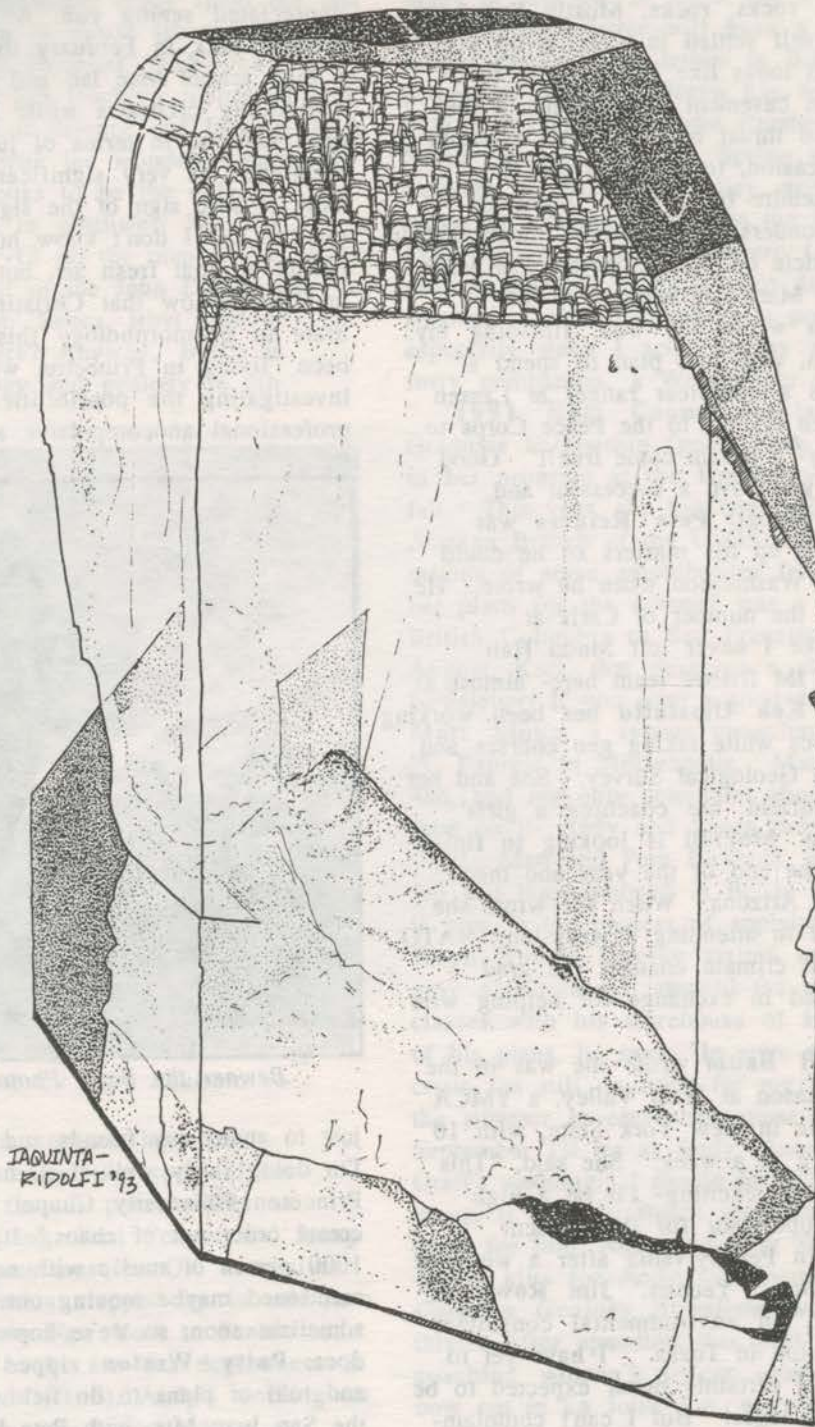
Canyonlands; "All that departmental cookware brought on an attack of sentimentality!" Erik, we heard happy reports of your visit- they really appreciated seeing you. A note from **Christina Vosen** back in February told about her working in a high school Mac lab and playing clarinet in the community orchestra while she was applying to grad schools. In terms of juicy gossip, she mentioned "a very significant other. As I told Betty Bray [a sure sign of the significance of this], he's a rancher and I don't know how I'd like being stuck out in all that fresh air, but time will tell." We understand now that Christina is going to Colorado State in geomorphology this fall. **Fer Horn** has been "living in Princeton with my parents and investigating the possibilities of becoming a professional ancompulsive as opposed to doing it



*Bewae the Baer. Photo by Patty Weston.*

just to annoy my friends and amuse myself. So far I'm doing fairly well at it, having been hired by the Princeton University Chapel Music Library to create order out of chaos." It seems they had over 1000 pieces of music with no cataloging system. Fer mentioned maybe moving out to the Twin Cities sometime soon, so we're hoping to see her if she does. **Patty Weston** zipped through town recently and told of plans to do field work this summer in the San Juan Mts. with Pete Lipman and Mt. Rainier and Crater Lake with Charlie Bacon of the USGS. Patty's planning on working at the USGS next year, at least as long as the job holds out.





The magnificent 44 pound topaz crystal given to Carleton about 25 years ago by Fred Kennedy. The crystal is roughly a foot tall. Freehand sketch by Frankie Iaquina-Ridolfi '95, a new geology major.



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