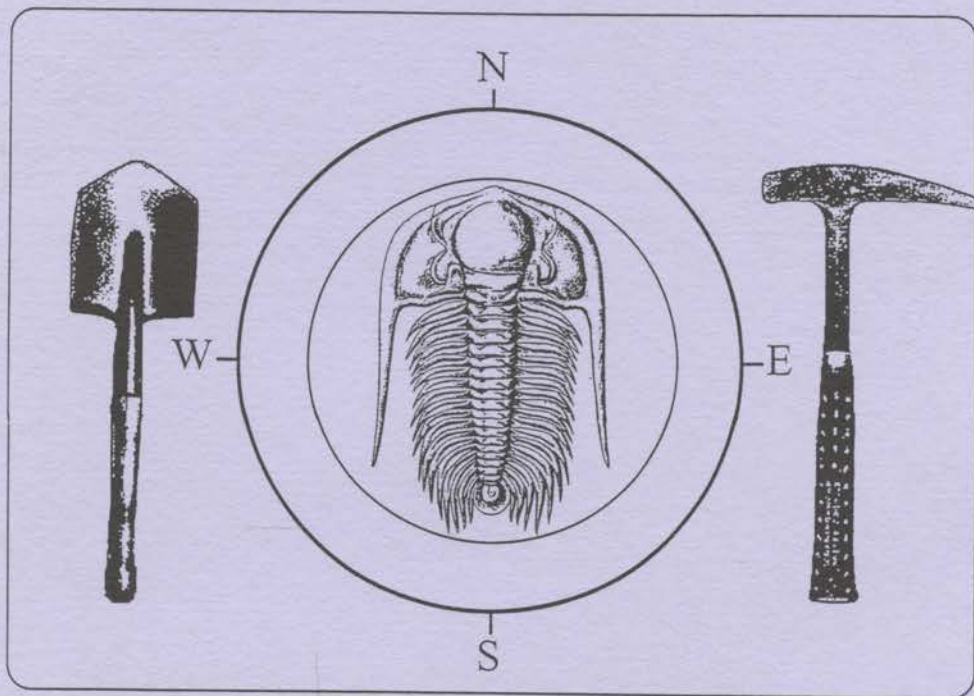


# Carleton Geology Newsletter

Volume XXI

1996

## MOHO CAFE



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The cover design is from this year's Geology t-shirt. It was designed and drawn by Justin Clarke and Anders Noren, both '96.

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

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June 17, 1996

Dear Friends,

None of us can remember a more beautiful day than we had on June 8th for Carleton commencement. The blue sky and temperatures in the 70s were a pleasant contrast to the cold, wet spring we've had. Twenty-one geology majors (and several geo wannabes) received their diplomas. Two geology majors, Karen Bobbitt and Carrie Morrill, graduated summa cum laude. So did Chris Cooper, one of our geo wannabes.

The weather was equally beautiful in St. Cloud on June 7th where about fifteen of us from the geology department, present and past, gathered (along with approximately 900 others) for the funeral and burial of Julie Williams '94. Julie's death is a tragedy, a premature end to a life full of possibilities. I can tell you, though, that having the support of the Carleton geology community has made it much easier for us to face this tragedy.

As I write this letter, I can hear the sounds of Olin-Mudd renovations happening all around me. The books and journals in the Science Library have already been moved to the bottom floor of the Gould Library (what you may know as the Main Libe). For the next academic year, the Science Library space will be used for physics labs while Olin is renovated, and then after that it will be chemistry labs and offices. Next June, we expect to begin the renovations of Mudd. The Geology Department will gain new analytical facilities for x-ray, rock crushing and geochemistry that will allow us to have some more "project space" on ground Mudd. And we will certainly be able to make use of that space! As of today, we have thirty one (31!) sophomores who have declared geology majors to go along with the 25 juniors. The class of 1998 is our second-largest group of geology majors ever.

We were delighted to have David Kirschner '84 teach tectonics in the winter term, replacing Dave Bice. David begins a tenure-track position at St. Louis University in July. We are fortunate to have Julie Maxson (now Dr. Maxson!) and Bereket Haileab continue as leave replacements next year, along with Ed, Dave, and me. Julie and Bereket have both served the Geology Department and the College exceptionally well. Shelby is still over in Laird, where he has done so well that he will be Acting Dean of the College for the first half of 1997. Cathy Manduca continues to do a fine job as Keck Geology Consortium Coordinator. Under Cathy's leadership, more and more of the Consortium business is taking place on the Internet. We are also pleased that Dean McKinsey has given us permission to fill a tenure-track position. When Ed retires, we will have to make a strong case to be able to replace him, but at least we'll have some additional teaching staff in the meantime. Tim Vick and Betty Bray continue to be the glue that holds the department together. We were all delighted to celebrate their accomplishments when students declared "Tim and Betty Appreciation Day" during spring term.

Our graduates continue to make waves in the world at large. I was particularly pleased that Carleton awarded Heather Macdonald '76 an Outstanding Achievement award at the recent Alumni Convocation at Reunion weekend. Besides being an exceptionally fine teacher and administrator at the College of William and Mary, Heather has led the entire geoscience community to consider new ways to teach the earth sciences. Thanks to all of you who helped our program in many different ways in the past year.

You'll hear from others of the faculty in this newsletter. This academic year has brought me three of the best classes of students I've ever taught and the chance to be involved in two wonderful events: the AWG Outstanding Educator Award breakfast at GSA in November (thanks to all who wrote letters on my behalf!), and Eiler Henrickson's "retirement" from teaching at Colorado College in May.

Best Wishes,

*Mary Savaria*  
Professor and Chair



Photo by Ed Buchwald

Our community was shaken in June by the murder of Julianne Williams '94. The bodies of Julie and her friend, Lollie Winans, were found in their tent in a campsite near the Appalachian Trail in Shenandoah National Park, Virginia, on June 1. A memorial service was held in Skinner Chapel at Carleton on June 6, and Julie's funeral was in St. Cloud on June 7. Julie is shown in the picture above with Sean Kempke '92 during the Boundary Waters research program run by Ed Buchwald in 1992.

Julie was a gifted student, a Duncan Stewart Fellow, and the author of a study on why the Carleton Geology Department graduates more female geology majors than most other geology programs do (see 1994 Geology Newsletter). Besides geology, Julie's interests included teaching and helping girls and women succeed in science. She made outstanding contributions to the wider community as well. She was active in Latino outreach community service through ACT, Take Back The Night, Prairie and Wood, and other groups.

A memorial fund has been established at Carleton in Julie's memory, and will be used to further the work Julie was interested in. Maria Panfil and Beth Lambert '93 are coordinating the writing of a statement of goals for the fund; people interested in contributing ideas or gifts should contact her, Tim Vick or Elise Eslinger in the Carleton Development Office.



Photo by Maria Panfil

## DEPARTMENTAL NEWS

### *Geology Enrollments Again Pushing Limits Of Capacity*

Each May we wait expectantly, along with other Carleton departments, to see how many students will turn in those little "declaration of major" cards indicating they are choosing to major in geology. This year 31 students declared; it is the second largest class after the class of 1983 which had 40 majors. This year's senior class has 21 geology majors and the junior class numbers 25.

This group of new majors raises the number of active geology majors on campus in the sophomore, junior and senior classes to 77. The number of students

caring and nurturing environment both educationally and for personal and social reasons. It's a great learning environment."

Another person attracted by the atmosphere was Lindsay Lightner, who said "The people are really interested in the subject. They get along well together and the department has a feeling you don't find in other places; it's not just a bunch of people studying the same thing in the same place." As a negative, however, she added, "Sometimes people spend *too* much time in the labs, sort of like the departmental spirit goes overboard."

Brian Klawiter said he'd been interested in geology for years, but he wavered between geology and physics as a major. In the end, he said "The Geology Department just drew me in" because of the department's openness and team approach.

### *Kresge Challenge Grant Funds New Equipment*

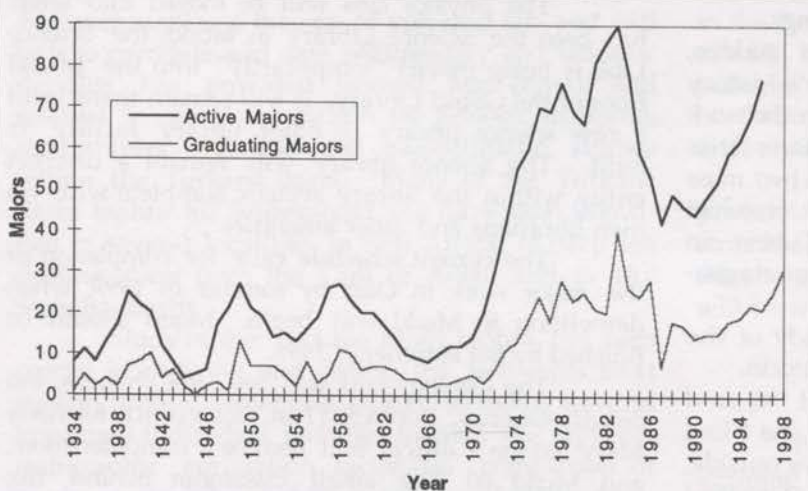
Approximately \$100,000 worth of new major equipment was purchased this year as a result of Carleton completing its challenge share of the \$1 million grant from The Kresge Foundation of Troy, Michigan.

New geology equipment includes all-new software and Pentium computers for the two x-ray machines, a SPEX fused bead maker for XRF samples, a Relion cathodoluminescence attachment for an optical microscope, new controls and electronics for the

Frantz isodynamic magnetic separator, a Swift automatic point counter for a petrographic microscope, a new electronic stream current meter, and two new global positioning system (GPS) receivers.

The Kresge Foundation provided the college a first installment of \$250,000, together with \$500,000 Carleton had already raised, to purchase new and up-to-date scientific equipment for the biology, chemistry, physics and astronomy, and geology departments. Meeting the \$1 million challenge by the first of 1996 qualified Carleton for the second installment of \$250,000. Income from the \$1.25 million endowed fund will maintain, replace, repair, and upgrade the equipment.

In the next several years the endowment also will fund Kresge Science Fellows, annual summer science research opportunities for Carleton students.



The number of geology majors has increased to levels not seen since the late '70's and early '80's. "Active majors" includes sophomore, junior and senior majors.

actively working around the labs is actually somewhat higher if you include students in the introductory classes and those with special majors such as natural history or environmental studies. This is the most students we have had in the past decade. Only once before, and then only for a few years, were our enrollments as high as they are now.

Curious about the causes of the recent upswing, we asked a few of the sophomores why they chose to major in geology. Most of the new majors had a long-standing interest in geology, natural history or environmental issues, but the final decision of a major was influenced greatly by the work style within our department.

Megan Anderson had had four geology courses when she declared. She said she was influenced by the atmosphere in the department. "It's a

## ***Italy Program Offers Interesting And Varied Field Experiences For Students***

An emphasis on field trips and field observations in the mountains of central Italy was the highlight of the off-campus seminar for the 24 students who participated this past fall term. The program was directed by Dave Bice and headquartered at the Osservatorio Geologico di Coldigioco in the hamlet of Coldigioco, Italy. Dave was assisted by Alessandro Montanari and Jenn Macalady '91; Beth Pratt '94 and Ian Wallace '94 were lab assistants.

Courses taught on the program included Field Observational Skills, the Geology of Italy, Basin Analysis, Event Stratigraphy, and an independent study project. All of the courses involved some field work; some also included lectures and readings.

Event Stratigraphy focussed on sudden, unique and catastrophic events in the Earth's history and how such events are deciphered from the rock record. Rocks exposed near the Osservatorio (the program's home base) contain evidence of two mass extinction events associated with asteroid or comet impacts including the famous one at Gubbio, in addition to several episodes of global ocean stagnation.

Basin Analysis was a regional study of the stratigraphy in the region near the osservatorio.

One of the participants, Gina Michl '96, said the emphasis on field work was the thing she liked most about the program. "We spent our days outside, looking at rocks in the field, learning mapping and logging, taking beautiful hikes... It was a nice change from classroom work and it was useful."

Of course, off-campus programs show students a slice of real life, too, such as the day it rained so hard during a mapping project they had to wait under a bridge until the rain quit.

Another person speaks of the night "a group of us went swimming at the reservoir and heard accordion music. We went out in search of it on the back roads and found two haystacks burning in the middle of the fields in front of a broken down barn. We continued our search until we found a little village having a festival. The 'accordion' was actually a synthesizer, and a group of Italians of all ages were line dancing. So we stopped and joined the party for a bit."

Also, as happened with the first Italy program (see 1994 Newsletter) the entire group was offered (condemned to?) membership in the Club dei Brutti (Club Of The Ugly People). Scott Propson '96 was named chair of the Carleton Chapter.

## ***Olin/Mudd Renovations Begin This Summer***

The completion of the new Biological Sciences Building (Hulings Hall) and the awarding of a \$4 million renovation grant by the Olin Foundation this year have paved the way for the renovation of Olin and Mudd halls to begin this summer.

Readers of the Carleton Voice learned in the Spring issue that the new grant from the Olin Foundation will be combined with grants from the National Science Foundation and other sources to permit the project to begin this summer. The schedule calls for the Physics and Psychology departments to move into temporary quarters this June, and demolition of the interior of Olin will commence immediately.

The physics labs will be moved into what has been the Science Library in Mudd; the Science Libe is being moved "temporarily" into the ground floor of the Gould Library. It will remain there until a new science library or other library facility is built. The science library will remain a discreet entity within the library system, complete with its own librarians and other amenities.

The current schedule calls for completion of the major work in Olin by summer of 1997, when demolition in Mudd will begin. Mudd should be finished by the summer of 1998.

The Geology labs will see some changes, but not drastic ones. Room 59 (Tim Vick's office, formerly Mary Savina's office) will become a computer room, and Mudd 60 (the small classroom behind the dinosaur display) will be converted into offices for Tim and Dave Bice. Dave Bice's office will become a storage area for geologic maps. We will gain two new rock specimen preparation rooms in the basement of Olin, and the x-ray lab in the basement of Mudd will be expanded to two rooms. New hazardous waste facilities, bathrooms and storage for field equipment will be built in the space adjoining the loading dock. On the science library floor, the library space will become chemistry labs and the area of Betty Bray's office and the computer room next to it will be completely rearranged to provide a new office for Betty and a conference room/lounge.

## ***Geology Home Page Is Up***

We now have a home page for our department; we are modern! The page has descriptions of our courses, faculty profiles, and quite a number of field trip pictures from the last ten years or so. Check it out- you might see someone there you know! The address is <http://www.carleton.edu> and push the academic programs button.

## Departmental News

### ***Bereket Haileab Finishes Thesis On East African Tephra Which Reveal Hominid History***

Bereket Haileab, Assistant Professor of Geology teaching mineralogy, petrology, and introductory geology classes while Shelby Boardman is on leave as Associate Dean of the College, completed his PhD thesis entitled "Geochemistry, Geochronology and Tephrostratigraphy Of Tephra From The Turkana Basin, Southern Ethiopia And Northern Kenya" in March, 1995. Bereket has just completed his third year in our department.

Bereket's PhD was done at the University of Utah under the supervision of Dr. Frank Brown. The dissertation summarizes and extends results of other tephrochronologic studies in Ethiopia, Kenya, Uganda, the Gulf of Aden and the Somalia Basin. Tephrochronology, the use of volcanic ash and tuff beds to correlate and date sedimentary and volcanic deposits, has provided isotopic age control and relative temporal correlation for geologic mapping, stratigraphy, volcanic and paleoclimatic studies within the Turkana Basin. Many of the Turkana Basin tephra are widespread and have been identified in several localities in East Africa, in deep sea drilling cores from the Gulf of Aden, and in the Somalia Basin.

Study of the Turkana Basin tephra has been crucial in ordering and dating the sediments that contain prolific vertebrate faunas, including several important individual hominid fossils. The tephrostratigraphic correlation facilitates comparison of the faunas and floras of these regions. Tephrostratigraphic correlations at about 30 levels between the Shungura, Koobi Fora, and the Nachukui formations provide a tight chronologic framework for all mammalian remains from the basin; correlations at three levels between Turkana Basin and the Middle Awash Valley bring hominid remains from various localities in the two basins into the same chronologic framework, and correlations between the Gadeb Prehistoric Site and the Turkana Basin at four levels relate Gadeb to the Turkana Basin chronology. Bereket described approximately 100 chemically and stratigraphically distinct tephra layers in the Turkana Basin.

Most of Bereket's work has been published in the *Journal of Human Evolution*.

### ***Julie Maxson's PhD Thesis On Origin Of Western Canada Terranes Is Approved***

Evidence that terranes which are now part of British Columbia may have originated on the west coast of Mexico is one of the major findings of the PhD thesis that Julie Maxson has just completed at the University of Minnesota.

In an article published last year in the *Journal of Geophysical Research* by Jane Wynne of the Geological Survey of Canada and her colleagues (Julie and Dr. Karen Kleinspehn), the paleomagnetism of rocks from Mt. Tatlow in southwestern British Columbia was analyzed by unbending the structural deformation and reconstructing the original position of the rocks according to magnetic traces left which indicate their natal position of the rocks in the Earth's magnetic field. The results show that the Mt. Tatlow rocks were originally formed at the latitude of Mexico. They must have migrated northward about 3000 kilometers along an ancient fault analogous to the present-day San Andreas.

Julie defended her thesis and earned approval for her doctorate in June. Julie has taught structural geology, sedimentary geology and introductory geology for two years at Carleton and she will be with us for at least another year.

### ***David Kirschner '84 Teaches Tectonics Class***

We'd like to thank David Kirschner '84 for stepping in to teach Tectonics this year while Dave Bice is on his well earned sabbatical leave. David did an outstanding job with a large class.

David earned his PhD at the University of Minnesota in 1992; his thesis was entitled "Structural and stable isotope analyses of the Heavitree Quartzite deformed in the Arltunga Nappe Complex, central Australia," and was done under the supervision of Dr. Christian Teysier and in conjunction with Jim Dunlap (class of '85).

Since earning his doctorate, David has been a postdoctoral fellow at the Université de Lausanne in Switzerland. His work there has been on integrated structural, stable isotope, and  $^{40}\text{Ar}/^{39}\text{Ar}$  studies of the Helvetic fold-thrust belt in the Alps.

At the time of this writing, he had just accepted a tenure-track position at St. Louis University beginning in July.

### ***GSA Reception***

Last fall's reception at the GSA meeting in New Orleans was such a good success that we will be doing another reception at GSA in Denver this year. It will be Monday night in the area of all the other school receptions, and Ed Buchwald will give "state of the department" remarks at around 8:00 p.m. You are all encouraged to come and visit!

## Missouri Field Trip

Missouri was cooler and rainier this year than in some other years, but the 36 students who went on the trip gave it good reviews anyway. Clockwise from right, Allison Payne '98 at the unconformity near Washington State Park; Shelby Boardman with Liz Kent, Laura Saxton and Megan Anderson (all '98) examining the limestone from the same outcrop; and Kristin Ullstad '98 dicing vegetables for salad.





## **Response to Presentation of AWG Outstanding Educator Award**

[Mary's acceptance statement for the Outstanding Educator Award at the Association for Women Geoscientists meeting in conjunction with the Geological Society of America convention in New Orleans, LA, on November 7, 1995]  
by Mary Savina

Thank you for this award. I'm overwhelmed by the comments made by my colleagues and former students. I'm awestruck by the company I find myself in - Weecha Crawford, Laurie Brown, Marie Morisawa and the other recipients of this award. We have very few honors for education in our profession - this recognition as a teacher is especially meaningful to me. I'd especially like to thank [nominator] Tim Vick - despite his words to the contrary, he's done much more than simply pass along letters.

I'm a product of the very same teaching philosophy that I'm now being honored for. I'm a Carleton geology grad and as an undergraduate, I was held to the same expectations as my peers - men and women. I didn't realize that the atmosphere at Carleton was sex-blind until I went to professional meetings and then to graduate school. The Carleton geology department - Ed Buchwald, Eiler Henrickson and Shelby Boardman - led me to expect equal treatment and on the occasions I didn't find it, I got angry rather than bitter or bowed down.

Our success at Carleton educating every geology student is a group effort involving all my department colleagues, the students and the alums. When you graduate 22 majors each year and half of them are women, there are going to be a lot of women geologists out there from Carleton and a lot of men, too. The most recent figures I've seen place us first among liberal arts colleges in women who go on to receive PhDs (and first overall, counting both men and women; Carleton is only about fifth on the list of men who go on to receive PhDs.) More importantly, an equal percent of men and women graduates from Carleton go on for PhDs; we do not see any unusual attrition of women in the pipeline. I wish we had equally easy ways to measure our success with alums like Barb Waugh who are successful and happy geologists in other parts of the profession (Barb teaches 8th grade earth science) and those alums who are successful and happy doctors, parents, ministers, carpenters and social workers, among others.

Why does Carleton have such a successful program and why is it successful for women? In the following remarks, I want to be descriptive rather than prescriptive. I'm also using the results of some interviews conducted by Julie Williams '94 who presented a poster at last year's national GSA meetings that many of you may have seen.

At Carleton, we try to remember that science is done by people, science is taught by people, and science is learned by people. It was not easy for me to learn how to personalize my teaching. My first few years were pretty horrible experiences and I remember being constantly surprised when lectures carefully reviewed for content fell flat. It is not true that good teachers are all naturally gifted. There are teaching skills that can be learned. I used to think that personality got in the way of teaching geology. Eventually I learned that the most important things I could bring to class were my own enthusiasms, for instance, my passion for gravel pits. Very early on in my teaching experience, I learned to begin a course by telling students about myself - especially my research and interests outside of class - and having them write something about why they were there. I did this initially for self-preservation - I am much more nervous talking to a group I don't know than to people I do know - but I found this technique also helps to make students comfortable asking and answering questions. At Carleton, we also emphasize the doing of geology rather than learning about what has already been done. Geology is a particularly tangible and tactile science. I think that the emphasis on practical experience - giving students tools to solve problems and machines to run - may help women students particularly. After all, most women of my generation were denied the chance to take shop. Learning to run a current meter or a computer, or even how to make simple hillslope measurements with a compass and tape, gives my students confidence in their ability to do geology.

We require students to cooperate, work in groups and share observations. A high point of the experience last week in a Geomorphology class that Shelby related was when the students said to me "We found out that no one group had seen everything at the exposure and we wanted to share our information to get the most complete picture possible." Another high moment a few years ago was when a senior geology major came to speak to a group of sophomores who were considering declaring a major. Asked what the most important things were that she'd learned in the geology department, she said "Now I know I can work with anyone." If I was the monarch in charge of degree requirements, these two insights would certainly be on my Top Ten list. Throughout their experience in our department, we try to provide a safe emotional space, modeling civil discourse as cooperation, not competition. One of my most important roles, I think, is as a cheerleader - the "come on, you can do it!" variety - helping a group of students complete their first geologic map, or hypothesize about river features on a topographic map or whatever is the problem of the day. I like to

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think that the reassurance I try to give students helps them feel free to try things out and, most important, to trust their own observations of nature without relying on a textbook, a journal article or me. A particularly positive atmosphere seems to result when I can cast our investigations in the light of discovery - finding out things about nature that are new to all of us, to me as well as to the students.

We try to keep as little separation as possible between "life" and "geology." I was very disturbed a few years ago when I heard the results of a survey of women students at liberal arts colleges in a consortium of Midwest schools to which Carleton belongs. Many of these students noted a marked dualism between their studies and what they perceived as the important issues in their lives. They felt conflicted, as if their teachers were asking them to make an unnatural choice. As it happened, I had lunch with a number of our women majors immediately after hearing these results, so I asked them about their own feelings. They reported that the conflicts they had felt between their personal priorities and their studies had largely dissipated since they found their way to the geology department. I think part of the answer is that the department expects students to be responsible for their own educations as well as for keeping the department running in many ways. Students also feel responsible for learning from and teaching each other.

Finally, let me end on a personal note. I've had a tough 18 months, which have included the loss of three people who were very important to my career - my thesis advisor, Clyde Wahrhaftig; Marie Morisawa, who won this award a few years ago; and most recently my father, Anthony Savina, who died at the end of August. The loss of three important mentors from the generations preceding mine have left a profound gap in my life. I wasn't ready to be through learning from them. I'm very gratified today to think that in some small measure I've repaid what these people gave me by passing on their values to my own students. Thank you again.

### ***Karl Korfmacher Returns To Teach GIS***

This Spring term Karl Korfmacher '86 served as a visiting Assistant Professor for the Environmental and Technology Studies Concentration (ENTS). A recent graduate of Duke University's School of the Environment, Karl taught a course titled Introduction to Geographic Information Systems (GIS) and Remote Sensing. The course explored the uses of both vector and raster GIS analyses, including thematic mapping; database

query and reclassification; Global Positioning Systems (GPS); map projection and error analysis; geographic overlays, splits, and buffers; map algebra; and surface analyses.

For the remote sensing component (satellite imagery), students learned digital image enhancement techniques and how to conduct classification analyses, such as the use of filters, stretches, Principle Component Analysis (PCA), unsupervised classification, and cluster analysis. Students also conducted independent projects for their final analysis, constructing databases from data sets found using the Internet or in the federal depository at the Carleton library.

This Fall, Karl will be joining his wife Katrina Smith Korfmacher at Denison University in Granville, Ohio, where they will be teaching environmental studies. Karl's current research projects involve using satellite remote sensing techniques to monitor sea grass habitat (coastal zone management) and GIS-based hydrologic and soil erosion models to investigate erosion, sedimentation, and water quality issues in NC and OH.

### ***A Note From Dave Bice***

I had another wonderful fall in Italy, leading an off-campus studies program on the geology of Italy. I was able to convince 24 geo majors to spend ten weeks with me and my Italian colleague Sandro Montanari, assisted by Beth Pratt '94 and Ian Wallace '95, who were participants on the first geology in Italy program. I naturally feel a bit guilty about this whole thing, but I manage to endure and put on the appearance of having a great time.

After the Italy program ended, I came out to Davis, California to spend winter and spring writing a book about using computer models (STELLA) to explore the dynamics of earth systems. The book will essentially be a lab manual, guiding students through the process of creating models, experimenting with them, and interpreting the results. This is something that has been on my "to do" list for a few years, and with a sabbatical term and a grant to cover another term, I've finally gotten the chance. It seems that a growing number of earth scientists are interested in finding ways to teach students about earth system science and STELLA models are ideally suited for this purpose. This winter, I was invited to show a group of educators from colleges and universities around the country how STELLA works in the context of earth system science at a Project Kaleidoscope meeting at Franklin and Marshall College.

As a break from the book, I've been spending one morning each week volunteering at the student experimental farm at UC Davis, learning the ins and outs of irrigation systems and tractors, in addition to

## Departmental News

the secrets of curing olives. My other diversion is a weekly trip to Berkeley to participate in the weekly meetings of Walter Alvarez's group. I've also been collaborating on the history of Late Eocene impacts with a former student, Aron Clymer, who just finished a master's degree under Walter; the result of this work appears in the June issue of *Geology*. I've also been periodically busy as an associate editor of the *GSA Bulletin*, which has been a great learning experience for me. *Dave*

### ***Stephen Jay Gould Speaks As Chesley Lecturer***

One of the exciting highlights of this academic year was a campus visit in March by Dr. Stephen Jay Gould, one of the most highly respected geologists and evolutionary biologists of the twentieth century. Dr. Gould gave a college convocation and visited Ed Buchwald's Paleontology class to answer questions.

Dr. Gould's visit was the tenth of the Frank G. and Jean M. Chesley Lectureship series. He was educated at Antioch College and Columbia University, and has been Professor of Geology and Curator of Invertebrate Paleontology, Museum of Comparative Zoology at Harvard University since 1967. His convocation talk, entitled "The evolutionary perspective: Charles Darwin's revolution in thought," was presented to a packed house in the Skinner Memorial Chapel.

Among Dr. Gould's well known writings are his books, *The Panda's Thumb* and *The Mismeasure of Man*, and his series of 200 essays which have appeared in the magazine *Natural History*.

### ***Fossil Flap Found Flaky, Full Of Fiction***

Will this burglary business ever be behind us? Apparently not if the pundits have their way.

In the November, 1995, issue of the *Reader's Digest*, on the "Campus Comedy" page, appeared the following:

"The theft of an impressive collection of valuable fossils and minerals from the Geology Department at Carleton College in Northfield, Minn., was cause for great concern. Everyone on campus and in town was talking about it, and there appeared to be some confusion over the incident.

"When I heard that some old fossils were missing at the college," a local shopkeeper said, "I thought the classics department had been kidnapped."

It was submitted by Scott Richardson, editor of the *Northfield News*.

The item triggered a rebuttal in the form of a letter to the editor of the *Northfield News* from a

Robert Hardy, husband of one of Carleton's classics professors.

Hardy wrote, "I woke up a little cranky this morning, otherwise I wouldn't be writing in to the editor to respond to Scott Richardson's Campus Comedy anecdote. Scott implies that the Carleton College classics department is a collection of 'old fossils.' To set the record straight, the average age of the department is 42."

Mr. Hardy added another paragraph defending the study of classical languages and pointing out the age of his wife was only 34 years.

Further digging by the Geology Newsletter investigative team revealed that the original quote was uttered not by the town's shopkeeper/jokester-in-residence, Bob Jacobsen of Jacobsen's Department Store, but by Scott Richardson himself! Turns out Scott thought of it one day while he was picking up police news. He tried it out on Mick Scholl, the crusty (now retired) assistant chief of police, and got a laugh. Flush with success, he tried it again later on Shelby Boardman (honest, this is what Scott said!) who also laughed at it.

So the die was cast. Taking generous advantage of editor's license and camouflaging himself as "a local shopkeeper," Scott committed his joke to writing and submitted it, to some "readers' disgust."

### ***Heather Macdonald Honored For Distinguished Achievements***

R. Heather Macdonald '76, Professor of Geology at the College of William and Mary in Virginia, was awarded a Distinguished Achievement Award by the Carleton Alumni Association at alumni reunion weekend this June. The plaque commemorating the award cites Heather "for her passion and commitment to the teaching of geoscience."

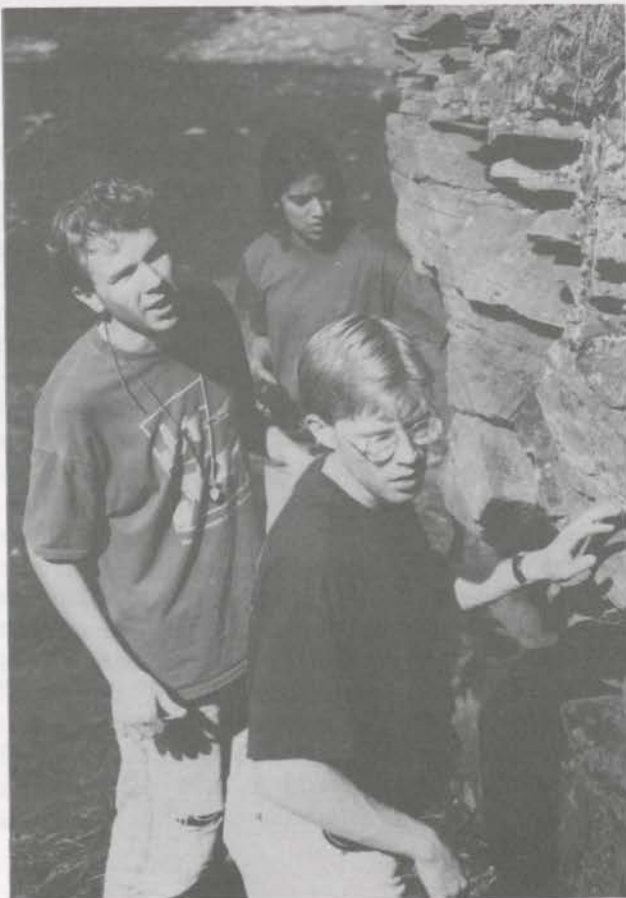
Heather has been known for some time as an outstanding leader in geology teaching. She has won several teaching awards from William and Mary, is current (and retiring) president of the National Association of Geoscience Teachers, and chaired for several years the SEPM (Society for Sedimentary Geology) K-12 earth science education committee. She also helped edit two books for pre-college students, *Hands-On Geology* and *On The Rocks*. For the past several years she has served as Dean of Undergraduate Studies of Arts and Sciences at William and Mary, although next year she is returning to classroom teaching.

Good work, Heather!



## Northern Minnesota Trip

Clockwise from left, Julie Maxson describes fault plane motion at the "confusion point" roadcut; Bereket Haileab with students at Gooseberry Falls State Park; and Nate Hultman and Anders Noren, both '96, with Trina Vithayathil '98 figuring out the stratigraphy at Amnicon Falls State Park, Wisconsin.



## Departmental News

### ***Thanks For Your Help!***

We'd like to extend special thanks to several of you alums for your contributions during this school year:

Robb Jacobson '79 was our host and guide for a day-long canoe trip on the Current River in Missouri during our spring departmental field trip. Robb explained his research on the gravels entrained in the river bed and their relationship to the geology of the surrounding hills. It was a wonderful day, and the students on the trip rated it as the highlight of the trip. Thanks Robb- it made a real difference!

Bruce Nesbitt '73 stopped by on his way to a conference in Madison to give a talk entitled "From Carleton To Canada: research and careers in economic geology" and spend time talking with students about careers; thanks, Bruce, it was great to see you again!

Jeff Bartlett '89 donated some excellent fossils specimens, some of which were extremely old and rare;

Sara Drake '65 contributed more very nice fossils from the Chesapeake Bay and James River area; in May we received five boxes of fossil whale bones, mollusks and other items;

Barb Wonson Liukkonen '76 stopped by in November to give a very interesting talk on a groundwater contamination project she has been working on. The problem centers on educating people in a rural sand plain area with a water table aquifer of the hazards of nitrate contamination of their water.

Herbert J. Goldsmith of Clearwater, Florida, donated a beautiful cluster of large pink barnacle shells in addition to a group of brachiopods and other sea shells. They will be used in paleo classes to show the colors and features of modern shells you can't see so well on fossils.

Dr. Tom Hoak '85, passed on to use a couple of extremely nice slabs of rock encrusted with brachiopod and gastropod fossils this spring- thanks, Tom!

### ***Stewart Fellows For '96-'97***

Three juniors, Claire Fellman, Lindsay Schoenbohm and Sarah Simmons, have been named Duncan Stewart Fellows for the next school year.

The fellowship was established in 1976 by Daniel Gainey ('49) in honor of Duncan Stewart, professor of geology at Carleton for nearly 25 years. It carries a stipend plus a fund which may be drawn on to cover research expenses. 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.

These students will extend the number of Stewart Fellows to 57.

### ***Theissen Awarded Academic All-Conference Honors***

Senior geology major Kevin Theissen was among five Carleton College athletes earning Academic All-Minnesota Intercollegiate Athletic Conference (MIAC) honors last fall, recognizing him as a student who has excelled academically as well as on the playing fields.

Kevin, a three-time All-MIAC runner and 1994 All-American, led the Knights to two straight MIAC titles and three appearances in the NCAA Division III National Championships. He is from Minneapolis with a 3.57 grade point average and this is his third Academic All-MIAC honor.

Other students earning plaudits were biology major Maura O'Leary '96 in volleyball with a 3.57 GPA; Jon Bougie '97 in cross country for the second year in a with a 4.01; cross country captain and history major Jennifer Keeley '97, with a 3.48 GPA; and soccer captain J.J. Kuhn '96, a senior goalkeeper majoring in psychology with a 3.46 GPA.

### ***Kim Knight '97 Wins AWG Scholarship***

Kim Knight, a junior from Anchorage, Alaska, was awarded the Inge Lehmann Scholarship by the Minnesota Chapter of the Association For Women Geoscientists this spring. The award honors the work of Inge Lehmann, who headed Denmark's seismic agency in the 1920's and discovered the Lehmann Discontinuity. It carries a scholarship of \$500.

Kim is interested in continuing her studies in geology, possibly working toward a PhD in geochemistry, after she graduates. She is planning a six-month study in India this summer involving working with Indian geochemists on an independent research project on the petrology of some basalt swarms on the edge of the Deccan Traps.

Last year the award was won by another Carl, Cari Johnson '96.

Congratulations, Kim!

## Departmental News

### *Awards*

**Mortar Board**  
Carrie Morrill  
**Phi Beta Kappa**  
Karen Bobbitt  
Cari Johnson  
Georgina Michl  
Carrie Morrill  
Stephanie Phippen  
David McGee '97  
**Distinction in Comps**  
Karissa Baker  
Karen Bobbitt  
Shannon Ginn  
Sara Gran  
Cari Johnson  
Georgina Michl  
Carrie Morrill  
Anders Noren  
Stephanie Phippen  
Andrea Stein  
Kevin Theissen  
**Sigma Xi, Associate Membership**  
Karissa Baker  
Karen Bobbitt  
Shannon Ginn  
Sara Gran  
Carrie Morrill  
Anders Noren  
Stephanie Phippen  
Andrea Stein  
**Warren L. Beson Award**  
Kevin Theissen  
**Independent Research Fellowship**  
Lisa Van Arsdale '97  
Laura Veirs '97  
**Adelaide Matteson Internship**  
Stephanie Phippen  
**GTE Academic All-America District At-Large Team**  
Kevin Theissen  
**One Of 10 Best Student Papers - North Central GSA**  
Ann Zawistoski

### *Senior Geology Majors*

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

**Karissa Baker**, Duluth, MN "The effects of land use on sedimentation rates in two small lakes: A comparison study"  
**Karen Bobbitt**, Houston, TX "Drainage basin controls on gravel distribution in the Current River, Missouri"  
**Vanessa Bodrie**, Chicago, IL "Factors influencing the Formation of an Alluvial Fan in the Minnesota River Valley, Brown County, Minnesota"

**Justin Clarke**, Collinsville, CT "Geology along the Farmington River Trail, Canton, Connecticut: Four signs reveal a town's geology"  
**Joshua Galster**, Wooster, OH "Popocatepetl volcano, central Mexico: A study of current lahar hazards from an historical perspective"  
**Shannon Ginn**, Bellevue, WA "The impact of land use practices and hydrology on a slump-earthflow landslide, Olympic Peninsula, Washington"  
**Sara Gran**, Eden Prairie, MN "New Ulm till in the Minnesota River Valley: Evidence for varied subglacial environment beneath the Des Moines Lobe"  
**Cari Lynne Johnson**, Louisville, KY "Structural controls on epidote formation and timing of hydrothermal alteration, Troodos Ophiolite, Cyprus"  
**Allon Katz**, West Hempstead, NY "Coastal dynamics and placer deposits on Fire Island, New York"  
**Georgina Michl**, Boulder, CO "Interpretive signs and translation for the Parco Naturale del Conero, Italy"  
**David Mitchell**, Clayton, MO "The origin of Four Ridges and the Late Quaternary Geomorphic history of Box Canyon and the adjacent Greys River Valley, Wyoming"  
**Nina Molumby**, Evanston, IL "A quest for the missing sink: A theoretical calculation of the absorption of anthropogenic carbon dioxide"  
**Carrie Morrill**, Avon, CT "Climate of the latest Paleocene and earliest Eocene Bighorn Basin, Wyoming: A comparison of Four Climate-Leaf Morphology Correlations"  
**Anders Noren**, Taylors Falls, MN "Origin of the Stockholm Esker: Implications for the deglaciation of Uppland, Sweden"  
**Stephanie Phippen**, Bloomington, MN "A petrographic and geochemical study of High Cascade Pliocene volcanics across the Klamath River, South-Central Oregon"  
**Scott Propson**, Greenleaf, WI "High-resolution magnetostratigraphy of the Scaglia Rossa Limestone in the Contessa Gorge: Gubbio, Italy"  
**Art Rodriguez**, Baldwin Park, CA "Trace metal pollution in the Cannon River: An analysis of copper, lead, nickel and zinc" (Special major: Geochemistry)  
**Andrea Stein**, Cypress, CA "The significance of a crustal weakness on the development of detachment faults as demonstrated by scaled modeling"  
**Evan Stoner**, Renton, WA "The trans-Atlantic adventures of two intrepid geologists OR, There and back again"  
**Kevin Theissen**, Minneapolis, MN "Origin of carbonate sedimentary breccias of the Middle Wallace Formation: A further study"  
**Kris Votruba**, Santa Rosa, CA "Environmental feasibility analysis of aquifer storage and recovery

## Departmental News

based on the Santa Rosa long term waste water storage plan in Sonoma County, California"

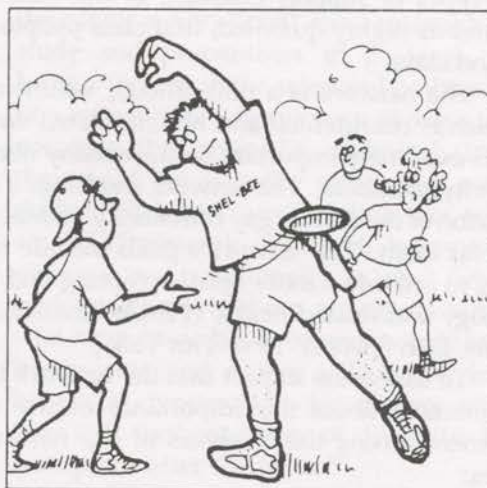
### Class of 1997

David Barbeau	Marshfield, MA
Joshua Feinberg	Concord, MA
Dan Feiveson	Princeton, NJ
Claire Fellman	West Hartford, CT
John Fiege	Chevy Chase, MD
Alison Jerris	Huntington Woods, MI
Kimberly Knight	Anchorage, AK
Fawna Korhonen	St. Paul, MN
Alison Macalady	Golden, CO
Molly Madden	Moon Township, PA
Nicole Maxwell	Rushville, IN
David McGee	Orinda, CA
Erica Oesting	Anchorage, AK
George Oliver	East Haven, CT
Katrina Petersen	Silver Spring, MD
Karen Purdy	Papillion, NE
Geoffrey Ruth	Doylestown, PA
Lindsay Schoenbohm	Appleton, WI
Benjamin Sheets	St. Paul, MN
Sarah Simmons	Pincher Creek, Alberta
Adam Soule	Olympia, WA
Allison Thomson	Oak Ridge, TN
Lisa Van Arsdale	Pittsford, NY
Laura Veirs	Colorado Springs, CO
Ann Zawistoski	Ellettsville, IN

### Class of 1998

Megan Anderson	Rochester, MN
David Bitner	Rockford, IL
Joshua Bookin	Portland, OR
Martha Carlson	Eden Prairie, MN
Kelvin Chan	Chino Hills, CA
Joseph Colgan	Rochester, MN
Deborah Cussen	Bolton, MA
Erik Ekdahl	L'Anse, MI
Caroline Elliott	Midland, TX
Peter Erickson	Moline, IL
Todd Fleming	Glenwood, IA
Ada Hamilton	Boston, MA
Alexander Hildebrand	Edina, MN
Sarah Jarvis	Bloomington, IL
Christopher Jones	Arden Hills, MN
Brian Klawiter	Hayfield, MN
Elijah Levitt	Eugene, OR
Lindsay Lightner	Salem, OR
Adam Maloof	Lexington, MA
Aaron McDaniel	Vail, CO
Miles Mercer	Rochester, MN
Peter Moore	St. Paul, MN
Anders Nilsson	Marblehead, MA
Nicolas Patterson	Morgan, UT

Allison Payne	South Bend, IN
Kurt Steffen	Minnetonka, MN
Kathryn Szramek	Salem, OR
Daniel Thornton	Indiana, PA
Kristin Ulstad	St. Paul, MN
Trina Vithayathil	St. Louis, MO
Frances Watson	Concord, NC
<b>Natural History major</b>	
Adam French	Clarksville, AR



**Figure 3.1** Ultimate Frisbee is force in action. (Artwork by D. A. Fischer.)

Learn about the force: read *Structural Geology Of Rocks And Regions* by George Davis and Stephen Reynolds, 1996.

## ***LGBT Network Provides Important Support***

by Timothy Vick

The Carleton Network For Lesbian, Gay, Bisexual and Transgender Geology and Natural History Alums is now six years old and has 29 members. At the time the network was organized we viewed it as a good idea but something of an experiment. Whereas the Geology Department and the college had extended significant support resources to students who were members of racial and ethnic minorities, we were reaching out not at all to assist the significant but invisible minority of our students who are les/bi/gay. It turns out we have and always have had les/bi/gay students, but for many years we did not realize it.

Les/bi/gay people are perceived as and treated as second class citizens in many arenas. It is worthwhile and appropriate for our department to offer les/bi/gay students at least some of the types of support extended to the other minorities. Naturally, we regard all of our graduates as highly qualified, first class people. We are distressed to see some of them treated as second class.

The network is a non-official, voluntary group of people. It maintains a membership list which is confidential and not circulated among departmental faculty and staff. Confidentiality is extremely important because many network members have not yet "come out" to all of the faculty members. The network publishes a newsletter once or twice a year, and it provides recognition of our les/bi/gay community members and affirmation of the Geology Department's regard for them. The network's goals include reducing isolation among alums and students and helping to provide a more open, accepting and informative environment on campus for students in geology and related fields. (People interested in joining the network should contact Marilyn Yohe '88, Dan Spencer '79 or Tim Vick.)

To assess the impact that the network has had during its six years of life we circulated some questions about the importance of the network and its appropriateness for a science department among the members of the network. Below are excerpts from the members' responses:

**What is the importance of the Geology/Natural History LGBT Network to you?**

"I think its mere existence and support from the Geology Department speaks VOLUMES about the Geology Department. It's one of the things that makes Carleton distinctive."

"It was within the context of the Geology Department and its majors that I first felt comfortable coming out; I knew I was not merely making a political statement, and I would not be shunned. In the department people cared for others not only because of their geologic abilities, but also for their personal qualities."

"I'm glad it exists and that I knew it existed. When I came out at [a high profile California graduate school] I'm glad I knew of a supportive group of people. After dealing with this hostile department at the university, receiving the network newsletter from supportive Carleton friends really

helped... The department here is a homophobic anachronism. It is sad and depressing to have to identify with [this department] sometimes."

"It is more for students than [after graduation]. Coming out is hard for most people, and being out is hard at some time or another for all of us. Having a network in place lets students know that they are not the only ones, and indeed, there are lots of us. Isolation is one of the hardest things I have faced."

"Letting people know they are not alone offers a sense of community."

"We who are usually defined by popular stereotype get to define ourselves" within the network.

"My experiences in high school were so awful that I wrapped myself up in a cute little heterosexual package when I shipped myself off to Carleton. But I wear the label 'Lesbian' now and I wear it with pride!"

"As a current Carleton student and member of the network, it is easy for me to



## Departmental News

take for granted this group and its significance. But the process of applying to graduate programs recently has made me seriously aware of the reality of living and working in less supportive or even hostile environments."

**What functions should the LGBT network serve? What activities should it engage in?**

"The network exists now to provide a background of people and communication that acts mostly as an emotional cushion. Members know that there are others both at Carleton and elsewhere who are part of this group and who are willing to be contacted about these issues should the need arise."

"A group like this has a wide range of possibilities in terms of its size, level of community action, visibility, etc. but the most important aspect by far is simply its existence."

All of the respondents said they appreciate getting the newsletter, even though usually it is a simple document rather than a long elaborate one. Some members commented that personal statements and even creative pieces of prose or poetry would be interesting and valuable.

**Do you feel it is appropriate for a department of geology to be encouraging the existence of an LGBT group within its majors and alums? How would you respond to someone who said they thought such a network was outside our area of expertise or responsibility?**

"YES!! Geology still wallows in the 'good old boy' mentality in too many places.

We need a network; we need people like Clyde Wahrhaftig to come out; we need to let people know that we are good scientists and good people too. Homophobia rears its ugly head in the field and in the lab." [The late Clyde Wahrhaftig was a well known geomorphologist at the USGS and UC-Berkeley who came out as a gay man when he received the Outstanding Career Award from the Quaternary Geology and Geomorphology Division of the Geological Society of America.]

"Being LGBT in the sciences is most definitely a vocational issue relevant to the study and preparation in geology, just as being a woman in the sciences has been. Part of a responsible education is giving students not only the scientific technical training they need, but also the savvy and survival skills to thrive in the discipline- not easy for any LGBT person in any field, but especially not easy in a traditionally 'macho' field like geology. Knowing there are others out there who have made it can be enormously helpful to students and alums alike. It is also beneficial preparation for nongay students who will confront issues of diversity in the workplace after Carleton."

"It is appropriate. Who knows better than us what it is like to be queer and part of the geology or natural history communities? Those who would say it is outside our area of responsibility must understand that without the existence of such a support group, some people's experience may be a lot harder to deal with."

"The department and school benefit from the network 100% whether they realize it or not."

# Shakedown

by Timothy Vick

This is an account of the police search of a private residence conducted in August, 1995, to recover fossils and minerals stolen during the September 24, 1994, burglary in the Carleton Geology labs.

Thursday Evening, August 17- Mark Barlau, Northfield Police Officer, phones to ask if I would accompany a Twin Cities area rock dealer, Larry Costigan, to visit a woman who is offering to sell some rocks. Apparently her boyfriend has been apprehended for drug dealing and needs to raise \$500,000 bail. Costigan is suspicious of the deal and notifies police.

Friday, August 18- I had already responded to several calls to look for or identify specimens that were reported as possibly being the ones stolen from the Geology labs. Not wanting to be perceived as the only person who could or would identify our stolen mineral and fossil specimens, I request a meeting with Vice President Carol Campbell and Shelby Boardman. We agree that Shelby will take this call and in the future we will split them. Shelby draws \$500 of college money; if the woman actually has Carleton specimens and is trying to sell them he will buy a few to give the police cause to do a search.

Saturday morning, August 19- Shelby and Larry Costigan visit the girlfriend in her home in Washington County, a suburban area near the Twin Cities. Shelby identifies some rocks as Carleton's and purchases 26 specimens for \$400. When they tell the girlfriend how much of the value of the specimens depends on knowing their origins (such as the mine and country), she gives Shelby the Rosetta Stone of the case, a typed inventory which lists both fragments of our inventory numbers and the new numbers which the burglars have put on the specimens in place of ours. After the purchasing session Larry Costigan donates a beautiful specimen of scolecite from India priced at \$1300 to the Geology Department.

Monday, August 21- Shelby and I inventory the samples and correlate the burglars' sample numbers to our own, producing an inventory for the police showing the numbers, the mineral names and values. For \$400 Shelby had bought 26 minerals originally valued at roughly \$7000. Officer Barlau photographs and documents the specimens and seals them in a cabinet for safekeeping as evidence. The Northfield police decide to raid the girlfriend's house Tuesday morning and ask me to participate in case they find more specimens. The raid will begin with a stake-out because they believe there could be a number of people living there. They plan to allow the girlfriend to drive away toward work before stopping her for questioning.

Tuesday, August 22- I have to be at the Northfield Police Station before 6:00 a.m. prepared for what could be an all day affair.

1:30-4:30 a.m.- Fitful sleep. I keep waking up to see if it's five o'clock when I have to get up yet. I have a dream about walking on the railroad tracks into town for an early morning appointment at Dacie Moses House. I never get there.

4:45 a.m.- Get up, get it over with.

5:45 a.m.- Leave home on my bicycle in the darkness.

6:00 a.m.- Leave Northfield PD with Officer Barlau in a squad car. The squad car is a big sedan, but it is so stuffed with radios, radar equipment, and a barrier between the front and back seats that it seems cramped. We talk about the case. The guy in jail on the drugs charge hacked another man to death with a knife and hatchet in 1975 in northern Minnesota; spent 17 years in Stillwater Prison. [Later we learn that he made excellent use of his prison time. According to reports in the Minneapolis Star Tribune, he earned a college degree in prison and started a computer business which earned him so much money that prison officials (who earned less than the murderer) were embarrassed into shutting the business down. His business provided custom software for businesses and job training for inmates; he was credited with creating the first commercial software to combat computer viruses.] He was paroled on the murder sentence a few years ago, but has been reincarcerated for a violation of his parole involving drugs.

6:50 a.m.- Cruising up I-694 near St. Paul, Officer Barlau demonstrates his radar unit to me by switching it on. Semi-trucks around us in the traffic stream immediately drop their speed and fall back. "Radar detectors," he chuckles.

7:30 a.m.- Near the neighborhood where Shelby bought the specimens Saturday, we rendezvous with a Washington County investigative officer who will help with the search. We park the Northfield police car and move to the stake-out position in the Washington County investigator's unmarked car. We are in an average looking suburban neighborhood: working class, many large

trees, relatively safe looking. The house is a mud brown L-shaped rambler duplex, vintage 1950's or 60's, with a single car garage at the intersection of the wings. We radio for ID checks on license numbers on cars parked near the house. Most belong to neighbors, one belongs to jailed boyfriend. Lady in jogging outfit walks by with her dog, looks us over.

Going over the story with the Washington County investigator, Officer Barlau relates how someone had shown photos of our hallway displays to a dealer before the burglary to establish the existence of a market for the specimens. We will look for those photos as well as the rocks this morning. Officers discuss their pension plans and retirement options.

- 7:50 a.m.-Go across the street from girlfriend's house to the landlord's house to ask about her rental history. No one home. Officers attempt to call landlord on car phone; no answer.
- 8:00 a.m.- Officers see no sign of large numbers of people in the house, although there are lights on; they decide to approach the girlfriend. They knock on the door, talk to her through the screen door for a few minutes; she initially denies them entrance and claims she can't understand what they are looking for, but then she lets them in. I wait in the unmarked car.
- 8:09 a.m.- Sitting in car waiting for officers to emerge from house, listening to chatter on police radio. Minor auto accident; officer dispatched to scene. Seventy-five year old woman having trouble breathing; ambulance called.
- 8:12 a.m.- Crows cawing in neighborhood. Picture window on front of girlfriend's house vibrates visibly; opening and shutting of doors inside house? I hope that's all it is. The only thing we know about this woman is that her boyfriend is a convicted murderer who is alleged to deal in drugs.
- 8:14 a.m.- On the radio, an officer does a traffic stop, checks the license number.

The plan for the initial interview with the woman is to confront her with the fact that she had sold Shelby about \$7000 worth of our stolen minerals, and try to get her to tell what she knows about who stole them, how she got them, and where the rest of the minerals and fossils have gone. If she is uncooperative she can be charged with possession and sale of stolen property.

- 8:19 a.m.- Mosquito enters unmarked car through open window, buzzes around annoyingly.
- 8:22 a.m.- Suddenly mosquito expires by traumatic compression.
- 8:24 a.m.- Officers still in the house; radio quiet.
- 8:26 a.m.- Washington County officer comes out to use car phone. Woman has agreed to cooperate but she wants to talk to her attorney. We will get a search warrant for rock specimens and photos. "She's cooperative but she's playing dumb," he says. "We're going to get a warrant so we can go through the whole place."
- 8:36 a.m.- Washington County squad car arrives to take me and Officer Barlau to the court house to get the search warrant. Squad car parks under oak tree and is peppered by acorn-dropping squirrel. Patrolman, too tough to care about acorns, waits in car and makes no move to find another parking spot.
- 8:46 a.m.- Passers-by curiously check out police cars.
- 8:49 a.m.- Washington County Investigator emerges from house, opens his car trunk and pulls out a "permission to search" form which the woman may sign to allow us to search without having to get a court-ordered search warrant. Girlfriend's attorney, after hearing the situation, has advised her we will be searching anyway and she might as well sign the "permission to search" form in the interest of appearing cooperative to help us save time. Squad car under oak tree, no longer needed, departs.
- 8:52 a.m.- Recycling truck clatters by sounding like breaking glass.
- 8:55 a.m.- I join the officers inside the girlfriend's house. Officer Barlau introduces me and has her sign the "permission to search" form. She is a slight woman wearing a black sleeveless summer outfit, a sort of body suit with a short little skirt. Her dark brown wavy hair tumbles over her shoulders, her face is dominated by round metal-rimmed glasses. She might be 40 years old. She does not look scary, but clearly she is shaken. Officer Barlau asks for and she gives him the money from Shelby's purchase.

The search begins. Initially, she says she doesn't know what we are looking for, but one by one she remembers this box or that box with "something like that" in it. Eventually she comes up with five large cardboard boxes full of our fossils, numbers still intact but the samples just dumped into the boxes. I look into the boxes in amazement; there they are, by the cubic foot! Looks like a mess; there must hundreds of fossils there. I had about given up hope of ever seeing

them again. She also produces some more mineral specimens, but on these minerals, as on the ones Shelby had bought, the Carleton numbers have been stripped off and the burglars have put the specimens in zip-loc bags with different numbers. Most are broken or damaged. A beautiful pale blue aragonite stalactite worth \$2500, one of the best pieces in our displays, is crumbled in pieces with some missing, ruined.

9:45 a.m.- Still searching. We have pumped the girlfriend for as many boxes as we can, and the police have begun going through her boxes of belongings one by one. We find no need to unpack each box because the boxes containing stolen material are all full of the material. There is nothing packed under clothes or otherwise concealed. We quickly probe boxes of clothing by sticking a hand down into them.

She obviously cares a lot about her two children. Their pictures, toys, books and piles of collected stones are everywhere. She has two sets of encyclopedias for them plus several more shelves of books.

We are joined by a second Washington County investigator. The three officers now start finding items which they don't believe a person in her circumstances should be able to afford: jade figurines, ivory carvings, and framed prints of butterfly pictures which appear professionally wrapped for shipping.

10:00 a.m.- The officers go outside to talk and make phone calls, asking me to chat with the girlfriend for a while. No problem finding non-threatening topics to talk about: one is three, the other five, both have been in nursery school, one starts kindergarten this year. They love to collect rocks; here are some polished agate pebbles their aunt gave them. We examine the stones individually, remarking on the pretty ones, identifying the moss agate, chert, jasper and so on. Here's a piece of banded iron formation. Must be from the Iron Range, transported down here by the glacier. The rock has enough iron in it to pick up a refrigerator door picture magnet from the table if you hold it right.

10:20 a.m.- The officers return; Officer Barlau explains to the girlfriend her rights and the charges which can be filed against her and the possible penalties, but is careful to ask no questions. She is not charged at this point, but he tells her the officers do not believe her contention that she doesn't know where the stolen specimens came from. He says he will be talking to the county attorney about a possible plea bargain if she helps solve the burglary. One of the officers goes to fetch the Northfield squad car and the others photograph the specimens and boxes laid out on her living room floor. We carry the boxes out through the garage and fill the trunk and back seat of the Northfield squad car with them. She opens the door between the kitchen and garage and closes it between people so the mosquitoes won't get in. Tears are filling the spaces behind her round glasses but she doesn't cry audibly.

10:50 a.m.- All the material packed up, the officers and I stand around in the garage chatting for a couple of minutes, the officers shaking hands and exchanging business cards; they will be seeing each other again. We hear a muffled scream from inside the house. "She's upset," notes one of the officers. We close the garage door, get in the cars and are gone.

This search resulted in the recovery of almost a thousand fossil and mineral specimens with a total appraised value of over \$11,000, which together with the minerals Shelby had purchased accounted for about 20% of the total value of the September, 1994 theft. Many of the larger specimens were damaged so their value now is diminished, but most of the smaller fossils and a few of the larger ones still are in good shape. We did not recover any of the pre-burglary photos of our displays.

We didn't know it at the time, but packed in with the fossils in one of the boxes was a chemical arsenal of 45 bottles of strong poisons such as strychnine, nicotine tartrate, metals salts, brucine, snake venom and other compounds. One old bottle contained 300 chocolate coated strychnine tablets. The poisons clearly did not come from Carleton, but after the police inventoried them we disposed of them as hazardous waste.

The girlfriend has been charged with receiving stolen property, a felony, but as of this writing has not yet been tried.

## News From Alums

**1938.** Mary-Hill Kueffner French writes that she and Bevan visited New England where he gave seminars on meteoritics at Dartmouth and the U. of Connecticut. "A stop at our daughter's in Vermont provided a fine example of a sole fault: combined soaking rains, melting permafrost, and gravity resulted in a shift of the hillside, complete with 20 ft. trees still upright, to completely block the road. In July we leave for Berlin and a meeting of the Meteoritical Society and then on to Norway for further fieldwork investigating the Gardnos Impact Structure."

**1939.** Jane Scholl has been traveling including visiting campus for the "Carleton Now" event in April, and she writes, "Everywhere I go I think of Larry Gould's geology lectures- Scandinavia and St. Petersburg last June, the Terra-cotta Warriors in Xian and up the Yangtze through the gorges in September- and try to figure out the geology of the area. Carleton is even more remarkable than 57 years ago and being back was great."

**1940.** John Lewis says "Retirement keeps me pleasantly busy doing what I want to do, not what I have to do." He adds his older son and grandson are both businessmen in Alaska (in Fairbanks and Cordova), so he tries to get up to that geologist's paradise occasionally. "Only trouble is, they're both earning their livings with their mouths-- on radio!!" H.P. Constans III at 78 years of age is at home with a walker, waiting for his wife to get home from the nursing home where she has been for three years. He writes, "I still remember the freshman team I coached in fall 1939; won everything, for the first time in 30+ years."

**1941.** Lloyd Pray wrote that he "continues to enjoy travel, our growing family of four sons and 11 grandchildren, and geological activities such as field trips and seminars related to Permian reef and bank strata and caves (porosity) in the Guadalupe Mountain region of Texas and New Mexico, and my continued contact with the University of Wisconsin Sedimentary Geology program." The

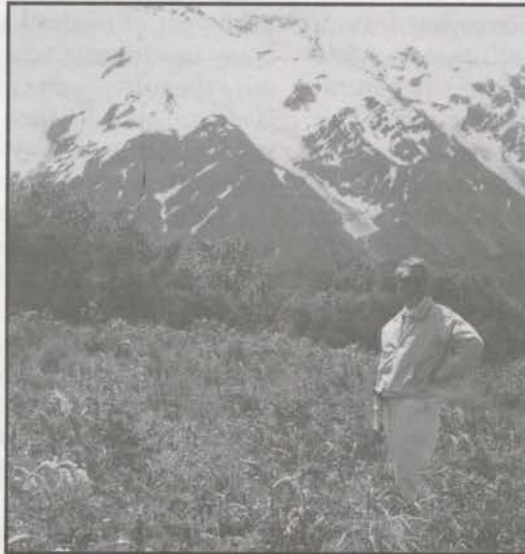
program was recently enhanced with the addition of Alan Carroll '89 (PhD from Stanford '91) and was highly rated by US News And World Report. Edwin Buffington writes that he's "in great shape, especially considering the shape I'm in." He's been enjoying his children and grandchildren and doing carpentry and plumbing repairs to the aging plantation "which is not getting old as gracefully as we are." Plans for this summer and fall include a month in Scotland plus other travel. "Cheers to all- looking forward to the 60th class reunion!" Robert Chapman has been "Keeping in touch with Alaskan geology in a volunteer status. Our 90+ year-old Alaskan Branch of the USGS has been dissolved in the downsizing. A sad situation." We're looking forward to seeing you at a reunion, and yes, we will gratefully accept back issues of journals! If they duplicate ones we already have, we can use them to trade for ones we are lacking.

**1942.** Ethel Wonson writes that she's enjoyed hearing Carleton Geology professors Mary Savina and Bereket Haileab speak at the Minnesota Geological Society this year. They enjoyed it too- we heard all about it in the geo labs!

**1943.** Eiler Henrickson retired (again!), this time from Colorado College. The event was celebrated with a gala party; Mary Savina represented our department there. Congratulations Eiler, and best wishes!!

**1945.** Charles Repenning says he's retired but working more than ever; "perhaps I am working slower than ever... Retirement is nice because you get to work on what you think is important and not on what somebody in Washington D.C. thinks is important." Richard McCarthy said he's doing pottery as well as community activities. He was president of the Sandia Civitan Club in 1994 and 95 in addition to some church committees.

**1946.** Congratulations to Charles Higgins and his colleague Donald Coates who were awarded the E.B. Burwell Jr. Award for their book, "Groundwater Geomorphology: The Role of Subsurface Water in Earth-Surface Processes and



*Charles Higgins '46 toured Australia and New Zealand with Carleton alums under the guidance of Mary Savina '72. This scene is in Mt. Cook National Park with Mt. Sefton in the background.*

Landforms" at the GSA meeting in New Orleans last fall.

**1949.** Bill Roth is "Hanging in, hanging out and hanging on..." He is still doing consulting geology part days, mainly development drilling for gas in western Pennsylvania.

**1954.** Pat Bickford plans to retire from active teaching in June '97, when he will be appointed Research Professor. "I have a newly funded project to study Pb and Nd isotopic compositions in the early Proterozoic Trans-Hudson Orogen in Canada. Following replacement of both arthritic hips, I will go to Canada in June '96 for field work. Modern medicine is a miracle!!" Hear, hear.

**1955.** Joe Mancuso has just retired after 36 years teaching at Bowling Green State University. "I will be teaching part-time in the fall semester for three years as part of my retirement package. This past year I was Director of the Center for Environmental Programs. Nancy and I will remain in Bowling Green." Fletcher Driscoll was named a GSA Fellow last year! Congratulations, Fletcher!!

**1956.** Robert Scheevel writes he's involved in civic and church organizations. Also, "During the growing season I have a small orchard and vineyard which keeps me off the streets. When the irrigation water is turned off I continue to do some painting and wood carving plus a bit of golf and traveling." Bob welcomes visitors to his Grand Junction, Colorado, home and I know he's earnest about it because I hear about his enthusiasm from my father in law who lives just a few houses away from him.

**1958.** William Hollweg is "still enjoying travel, golf, fishing, etc." He adds that all three of his children are living and working in Texas. Restaurateur Dante Stephensen writes, "Watch for me in the Olympics in Atlanta... I wish I were competing. We will have our Jazz club dinner menu in over 40 languages which will allow 191 of the 197 countries to have a menu in their primary (161) or secondary (30) language."

**1959.** Norris Jones will be serving a term as chair of the Geology Department at UW-Oshkosh beginning this summer. "It will be the second time for me. That's what happens to you when you get old; history starts repeating..."

**1960.** Michael McLanahan, President of G.M. McLanahan Corp. and the Pennsylvania Foundrymen's Assn., recently became a grandfather for the second time.

**1961.** Jeff Hanor was named last summer as the Charles L. Jones Professor of Geology and Geophysics at Louisiana State University; congratulations, Jeff!

**1962.** John Lufkin is in his second tour of Austin working as a Senior Geologist for Turk Associates, a

small firm that consults in environmental litigation cases. Chris and his sons, Nate, 13, and John, 14, enjoy Austin, "but we don't like the long hot summers, the only significant drawback." John's outside activities include radio controlled airplanes and golfing, which annually takes him to the Lofgren Green Lake, Wisconsin, reunion in May and the Wyoming Open in July.

**1964.** Peter Rowley was named winner of the 1995 Dibblee Medal from the AAPG last year. The Dibblee Award underscores the importance of geologic field mapping as a means of solving complex geological problems and commemorates the extraordinary geologic mapping achievements of Tom Dibblee. Good work, Peter!

**1967.** Mark McBride writes that he was "involuntarily self-employed due to the general collapse of the environmental consulting market in the Washington area. Not doing too badly; right now I'm on a long assignment with a large DC law firm helping with environmental matters. One major activity of the last year was teaching a short course on 3-D visualization (with Paul Morin of the U. of Minn.) at the GSA meeting in New Orleans."

**1969.** Alan Hartley is still a stevedoring superintendent, although he has switched to a different company in Duluth. He adds, "I'm also working for Oxford University Press on the coming 3rd edition of the Oxford English Dictionary, presently on nautical terminology and a couple of other entry-revision projects." It is comforting to know that the OED gets its information from editors who are expert in their fields! From William Henry: "I am just finishing my third year of medical school, and I'm looking forward to my fourth year which should have a much lighter call schedule. I can certainly use the extra sleep! This is also an exciting time because I'll be matching with a residency program. Who knows, maybe I'll find my way back to Minnesota!"

**1971.** Karen Klusmeyer Lubke writes, "I've been at Vastar (ARCO) 18 years and am one of the oldest people here. What a thought! I am working on south Louisiana oil and gas properties, picking around the old fields, and having some success." Jane Willard was appointed the first geologist on the Minnesota licensing board responsible for architecture, engineering, land surveying, landscape architecture and interior design. The Minnesota legislature recently added geologists to the list of professions covered by the board; Jane will serve a four-year term.

**1972.** Mark Taylor started a new job last year managing the polymer research, development and engineering groups at Corning. "So what's new with me? Just one word- plastic!"

**1973.** Bruce Nesbitt visited campus this spring, giving a talk on his current research and discussing

career issues with students- Thanks, Bruce! On his card Bruce says, "As Associate Chair for Undergraduate Programs, I am quite busy revising the whole undergraduate geology program at the University of Alberta, Edmonton. The department is in a major hiring phase, seven new faculty in two years, so we are very busy interviewing. The family is fine. We are all hard core skiers, which is good if you live here." Dick Pautsch tossed his card into a mailbox on the run: "We're on our way to the L.A. Airport with our three daughters to begin our European vacation. This should be interesting!"

**1974.** George Bentley, now an Assistant Purchaser and Inventory Manager for Bergin Nut Co. in Minneapolis, writes "after a brief fling with the insurance industry, food has reclaimed me. My small children are growing fast- the older one starts kindergarten in the fall."

**1975.** Milly Powell is leaving the University of Connecticut and heading back to Colorado where she and her husband (Jim Loyd) plan to build a solar house. "I will be looking for a job in geology and/or computers near Boulder or Longmont." Ginna Gillerman has been very busy this spring: "Have given five talks (almost the same one, luckily) in the past five months, to audiences from Johnny Public to mining geologists. Not bad for someone who could hardly talk in public at Carleton. I'm just thankful my dog is better, and we should be able to do some work in Idaho mountains this summer." A note from David B. Rogers: "I whined my way through a winter with little snow despite my trying to appease the winter gods with a new pair of skis... Did manage a couple of hut trips in Colorado though. Still working on my quest to climb all the 14,000 ft peaks in Colorado. Have a great rock collection, camping equipment collection, no dogs or kids, and a great view out the office window..." Jim DuBois calls "Help! I'm caught in a parallel universe called state government. They speak in never ending run on sentences; they verbize nouns; they promote people who care to levels of tortuous responsibility; they leave a zero off the end of every paycheck. It's Hotel California right here in Arizona." Jim is a hydrologist with the Department of Environmental Quality.

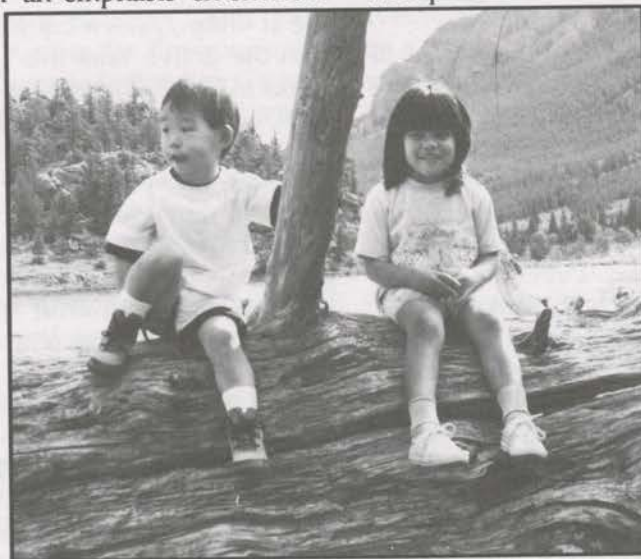
**1976.** Jim Evans reports a busy year including a sabbatical last fall. "I was able to do field research in the Badlands (South Dakota and Nebraska), and Scotland and Wales. The family came along for that part, quite a trip doing field work with a 3-year-old." Jim also attended a conference in Copenhagen and the SEPM field conference on alluvial fans in Death Valley in October. Barb Wonson Liukkonen stopped by in November to give an interesting talk on a groundwater contamination project she has been working on. The

problem centers on educating people in a rural sand plain area with a water table aquifer of the hazards of nitrate contamination of their water. Thanks, Barb! Eric Held, son of Marge Hulbert and Arthur Held, arrived Jan. 21, 1995. Marge says, "I'm staying at home with Eric and our 13-year-old daughter, and loving it! I'm serving on the Missoula Valley Water District Advisory Council, and otherwise trying to decide whether I'm a hydrologist, software developer, or something else. Fill you in next year!" Heather Macdonald, with a hint of glee in her writing, says "June 28th is my last day as Dean of Undergraduate Studies and at the fall GSA meeting I'll become the past-president of the National Association of Geoscience Teachers AND next year I'll be on leave!!" I think you've earned it, Heather. Jamie Foster says "Please check out our jewelry store's web site at <<http://www.ccjewelers.com>>. Our kids have been the active ones this year. Trevor (16) spent 3 weeks in Gomel, Belarus on an exchange program, and we'll in turn be hosting a Belorussian student in November. Tracy's (14) Odyssey of the Mind team took 8th place at World Finals at Iowa State University May 29 through June 1. Tracy's also become a 'nanny to the stars' being the babysitter for the triplets who play Dr. Quinn's baby on 'Dr. Quinn Medicine Woman.' Life remains a beautiful thing here on California's central coast. We welcome all Carls to stop by and sit a spell - we're right on the ocean." Will Maze finds himself "Another year older... Still working Venezuelan geology from an office in Houston. Perhaps my thesis makes sense 15 years after?" Take heart, Will. The rest of us are cruising through time right along with you, so at least you're not alone.

**1977.** Philipp Muessig, now a waste prevention specialist with the Minnesota Office of Environmental Assistance, sent an appropriate business card printed on 100% post-consumer recycled paper. He writes, "The self-reliance movement of the 70's has come around again, bigger and better this time, using the framework of sustainable development, and I'm in the fortunate position of working with communities applying for grant funding. Having spent years raising money for a small non-profit, it is a nice change of pace to be giving out money." Congratulations to Holly Huyck on her crashing of the motherhood party!! Kevan Rio Huyck O'Connell was bom last Oct. 25, and Holly says he keeps her and Dan hopping! Holly has temporarily cut to part-time work, mostly environmental remediation of mine sites, but continues as a Society of Economic Geologists Foundation trustee and she's still with the Colorado Minerals, Energy and Geology Advisory Board which advises the state legislature and governor on natural resource issues. "Our only regret is that we didn't

move to Denver sooner," she says. From **Bruce K. Nelson**: "Seems that studying volcanoes is becoming more and more central to my teaching and research at the UW. I'm teaching a course on the eruption of Pinatubo, as seen from the geophysical, chemical, petrologic, geomorphologic, climatic and sociological points of view. The class will end with a two-week field trip to Pinatubo; it should be overwhelming. My research continues on Hawaiian volcanism, with a new effort beginning on the Canary Islands. Yet we still pay some attention to the ancient record, and I'm in the middle of a project on chronology and tectonics of crust in Central America. We're still seeing a regular flux of Carleton grads through the UW - they seem to be doing pretty well in Chemistry as well as Geology." **Dave Gambill** has just finished a masters in Public Administration with an emphasis on environmental economics and policy at the Kennedy School at Harvard. The program is about equally divided between classes on environmental economics and the interpersonal issues involved in helping countries develop. Dave was honored by being named a Littauer Fellow this year, for academic excellence and contributions to the community at the Kennedy School. Good work, Dave!

**1978. Dorothy Davis Morrow** and her husband Jim married in October '94. "Now," she says, "I am a step-mother every other weekend to Jim's eight-year-old daughter Courtney who LOVES rocks. In January '95 I started a new job which has me raising funds and designing alumni programs for a university geared toward the non-traditional student. Also, I do a fair number of volunteer projects in my spare time." **Sarah Mills Ervin** and her husband are expecting a baby boy in August. "He will bring us to a total of four children- 2 boys and 2 girls, with an age range of 15 years to 0. So, one boy won't be able to even roll over while the other boy is learning to drive. It is more work, but also lots of fun having so many of us." Their 7-year-old business continues on in good shape. **Craig Banister** is a Graphics Trainer for US WEST Direct in Colorado. He has been working on their new Yellow Pages layout and design computer program this past year. "I be-



*Nathaniel, 3, and Camilla, 4, are the children of Barb Okamoto and Mark Bach. From this scene, one could imagine they are budding outdoorspeople!*

came part of the project to write the training/user manual which turned into a 270 page document with 350 graphics!" He's also been doing a lot of employee training and traveling for his job. **Alison Krafft Rempel** has passed her fifth anniversary at Hewlett Packard, and still finds it a great place to be. "My group, the Remediation Team, has spent that time getting groundwater and soil remediation systems in place. Now we need to figure out the regulatory and technical off-switches." It hardly seems like Rebecca can be 2 already, but she definitely is acting that way (according to her mom anyway), and Sarah is beginning kindergarten this year. (Hi Alison) **Zach Wilson** was, when he wrote, planning a trip to Germany with his family in July. "Need a crash course- 'Ein Bierer, bitte,'" er sagt. "Recently indulged rock star fantasy with purchase of 1958 re-issue Stratocaster guitar and Fender amplifier. Look for album soon." Zach, will that be a 45 or new LP 331/3? Mono or stereo? **Laura Nadelhoffer** is doing "lots more travel these days with my new position (Director of Global Marketing Programs at a division of Citibank), but I'm finally using some of my marketing training, which is fun although I still prefer technical project management. Claire is now 5 1/2 and loves to draw and dance. Alexander is 2 1/2 and has to spray hoses and pound objects with hammers. Vlad is working at his own advertising agency. For fun we're going to family weddings..."

**1979. Evan Dresel** writes he's still enjoying the arid northwest in Washington; hi Evan! **Jerry McNeish's** company, Intera, was purchased by Duke Engineering and Services last fall in the continuing consolidation of the environmental consulting market, but he's still working on the safety assessment of the Yucca Mt. project. "My son Corey was 10 months old in May and lots of fun to hang around with. My wife, Nancy, recently xeriscaped our yard to convert from turf to mainly native plants. Our water use should drop from the high of 40,000 gal/month of last summer." **Dave Tolley** sends greetings to all... **Robb Jacobson** writes, "I am finishing up the Ozarks Stream Geomorphology Project this year and turning my attention in several different directions, including geomorphic and ecological effects of instream gravel mining, habitat restoration on the



Missouri River, and a national synthesis of USGS studies on channel disturbance and habitat. The Ozarks project benefited greatly this past summer from the efforts of Karen Bobbitt '96. Karen developed several useful GIS tools for characterizing channel and basin characteristics at the drainage basin scale. I also enjoyed sharing the work with the enthusiastic spring Carleton field trip group. My family (Anne, Sarah 5, Alex 4) is reasonably content in the Ozarks. The kids have learned to pick their own ticks and not to play with copperheads. The climate helps us cultivate a small patch of native prairie and a quarter acre of flowers (mostly everlastings for drying); with a local bioregional cooperative we also raise bees, sorghum (for molasses), and rabbits. This would be a pretty nice place to live if it had more snow...." Christine Brick sends word by e-mail from Missoula that "It's hot and sunny and the rivers are gushing in Montana. It's been a good year for snowpack and runoff and a pretty good year for me, too. I finally, finally, finally finished my dissertation (topic - trace metal cycling in rivers) and got a job teaching here for a year and a half as a sabbatical replacement - one year done, one more semester left. I love teaching and am looking for other ways to continue once this stint is over. Another possibility is working as a consultant with a small company (i.e. group of friends) in town. In any case, I'll be in Missoula so if any of you geo-types are in the area, be sure to drop in!" Marie Del Toro writes of a year of big changes: "We're expecting our second child at the end of June! By September we will have relocated to the Northwest. Are there any geology majors left in Portland?" Good luck with everything Marie- it sounds exciting!

**1980.** Reid Fisher is fiddling honky tonk these days; "Tim, when you plug in and go electric, you can play louder than any banjo!" Thanks for the tip Reid; don't tell Swannie, I'll just sneak up on him. Reid says his other activities include geology, cross-country skiing and growing world-class weeds in the back yard so it sounds like he's in the mainstream of our alumni group. Muffy Barrett says she and Scott have a new puppy, and their savanna and prairie restoration projects proceed steadily. Muffy, are you guys doing any music these days? Kim Jones is a mother!! Minda Catherine Dettman was born May 14 and weighed 7 lbs., 10 oz. (about 3500 grams). "She was a very healthy baby with the exception of needing her first stitches as soon as she was born--she was born by C-section, and the doctor nicked her cheek with his scalpel getting her out! Anyway, she's recovered from that minor trauma now and is doing fine. She knows night from day, so I'm actually not suffering much from the sleep deprivation that new moms are supposed to face. Just general time deprivation! I understand this

may be true for the next 16 years or so. I'm on sabbatical next year, so the freedom from teaching responsibilities should help me settle into parenthood." In June Kim also co-directed a Ford Foundation sponsored institute on integrating gender studies and area studies, both in research and in pedagogy (emphasis on the latter): "Our first attempt to balance the demands of parenthood and work!" Good luck Kim, and welcome to Minda! Kim earned tenure at Arizona this year, and David is in a 3-year post doc. Glenn Lee has begun working at NSF International. "No, this isn't the National Science Foundation. NSF is a third party testing and certification firm that conforms with ANSI and ISO standards. I'm in the drinking water section and will be responsible for 'process media'. Mainly, I'll be helping customers through the certification process." Glenn says he's also doing a little folk music these days; his address is Lee@nsf.org Dr. Mark Timmerman has bought a farm! "We have many projects for this 110 acres of neglected farmland in the Driftless (unglaciated) area near Madison, Wis. We hope to get the barn restored this summer, and plan to work the next 40 years on the oak savanna." Bill Hughes writes, "We're moving to Davis where Eileen has been appointed pastor of the UMC church. Work is hopping as we ramp up remediation for the bulk of the soil, landfill, and groundwater sites at Mather AFB. Kat, Will Forest and Claire are growing up fast..." Mindy Bell and Lindsey (4) were heading to Hawaii to visit Mindy's mom while Darrell went to Alaska for fieldwork. Mindy said, "I'm still teaching half time and loving it. We're doing 'old home' renovation so we'll have more room for guests; come visit!" Martha Buss-Bond attended reunion last year with her husband and two daughters; it was pretty warm compared to Montreal! Well, try it again sometime, Martha. This year it was pleasantly cool. George Witman and his partner Dennis visited Northfield around Christmas time. George has been teaching ninth grade earth science in a Denver high school, and has built an amazing-sounding climbing wall (maybe more properly called a climbing environment?) in the garage of the house that he and Dennis own. The wall includes an overhang that sounds impossible, but George can climb it!

**1981.** From Cathy Villas-Horns: "We had a wonderful baby girl, Zoe Noel, in November '94, and moved to the 'burbs to do that family thing in May 1995. Life is busy with both of us working full time and being the best parents we can be to Zoe, who is feisty and fun. I still try to fit geology into my life-like looking for fossils at the old St. Paul brickyards over lunch and going to the AIPG luncheons. We try to fit in fly-fishing whenever we can too." Welcome to Zoe from the Geo Dept!! It was fun seeing John Hank-

ins and Beth at their 15th class reunion this June... John says, "I ran the 100th Boston Marathon with 40,000 other souls in April. Recently wowed my daughter's 3rd grade class by showing them the 'oldest' and 'youngest' rocks in the world: The Morton Gneiss (from an Eiler Henrickson field trip) and a bread crust bomb from the crater of Mt. St. Helens, courtesy of Dave Bice." Gail Peretsman Clement sends this: "Well, the planets must have been aligned in the right spot for us, because this has been a most exceptional year... Brad's research on the effects of the inner core on magnetic field reversals has drawn a good bit of interest, gaining coverage in the NY Times, Science, Discover magazine, and the like. He was also profiled in Shawna Vogel's new book, 'Naked Earth: The New Geophysics' (fortunately, he did not have to submit a photo :\*). My work as an Internet consultant/trainer/writer has also gone 'national', with the publication of 'Science and Technology on the Internet' (Library Solutions Press, Berkeley, CA -- now in its second printing). After some nice reviews in pubs such as Geotimes, New Scientist, Engineering News Record, etc. etc., the book has found an audience among scientific-engineering-medical folks, as well as librarians and Internet trainers. I've also gotten the chance to do a lot more Internet training for various associations and corporations across North America, with opportunities to develop and lead workshops and programs for chemists, environmental scientists, medical professionals, librarians, k-12 teachers, and pharmaceutical groups (yes, I get paid to teach 'Drugs on the Internet' -- I LOVE this country! :\*)... I also contributed to a second book, File Formats on the Internet, and have been running Internet Rooms for national conferences such as the American Library Association and ONLINE WORLD. Our boys Tyler, 7, and Peter, 5, are also doing well. They loved camping across Oregon last August for vacation, and enjoy canoeing and bird watching in the Everglades on weekends. They are grateful recipients of all our old, shrunken up tee-shirts, which they wear as night shirts, so every evening we get fond reminders of Carleton circa 1981, i.e. "Subduction leads to Orogeny", "Good-bye Minnesota", etc. Anyone in South Florida, please come and visit! Or if you're on the 'Net, drop by my page (<http://www.fiu.edu/~clementg/gpc/>) and leave a note in the box." Mary Lucas McDonald is balancing mothering two kids, one 4 1/2-year-old and one 14-month-old, and a part-time job. "I'm working with the University of California at Berkeley on their innovative technologies program for Naval Air Station Alameda. I've assisted them in preparing work plans for treatability studies of steam enhanced extraction and intrinsic bioremediation, we'll be in the

field for intrinsic soon. Our neighborhood recently put Ian Wallace, a recent grad, to work in our yards. Unfortunately (for us) he got a job working with the USGS and won't be available any more. He's helped a lot of us over-worked folks."

**1982.** Dan Sontag is balancing his work with family time with his four children, aged 2-16. "I'm working 60 or more hours per week and still enjoying my work. I'm now a senior clinician and preparing to present my work with school age children and parents around social skill building to other professionals, even doing a bit of research (outcome data). At home I put up a basketball hoop, planning summer camping and cookouts...My two-year-old daughter has me completely wrapped.. life is good." Heidi Bredenbeck Wells "bought a vacation house in the mountains just in time to get fired. So desperation (among other things) led my husband and I to mortgage life, limb and our first-born (well, almost) to start our own competing enterprise. It is going well, although it has been quite an experience trying to crank up a medium size company from scratch. We are hanging in there and soaking up new challenges daily." Way to go Heidi- if you can't join 'em, beat 'em! Peter Wiegand, a partner in Engineering Designworks in Steamboat Springs, CO, says "Business is good; we've opened a Vail office and have expanded our civil engineering services. Awesome skiing this past season, over 250" in January alone." Kristin Kennedy Moeller writes, "After ten years in geology I had moved up to be the Manager of the Environmental Remedial Assessment division and the instructor and chief Health and Safety Officer - the last a dubious title at best. Having mastered that career (ha, ha), I decided it was time to give my dream career a chance - besides I'm not getting any younger (rats!). Now I am a Floral Designer specializing in silk design. I went to night school for two years and picked up a degree in floral design and started working out of the house. Not much related to Geology, and the drop in pay was staggering, but I am very happy. Speaking of happy, my husband Ron and I are proud to announce that we have a new baby girl, Keelia Marika Kennedy Moeller, born July 8, 1995. Her big brother Matthew (six) worships the ground she crawls on. To get in touch, e-mail me at [moellerk@freenet.msp.mn.us](mailto:moellerk@freenet.msp.mn.us)" The Geo News team is trying hard to get people's e-mail addresses in the listing in the back of the Newsletter, so if you gave us yours check and see if it's there. We are now considering it part of your address, so keep us posted... Cathy O'Dell has been out of work since April but she's positive about the opportunity to start fresh somewhere new. "I'm rather enjoying the contacts I'm making while networking through the Twin Cities, and hope my efforts pay off with something interest-

ing soon," and of course we wish her the best of luck in her job hunt. Cathy's kids are 5 and 2 now, and she says they keep her alert... also she visited Dan Packer and Ruth MacDonald and Kinchen in New Mexico recently. Ralph Welliver's son Reid is three years old, and Laura Ferguson Jacobson's third son, Peter, was born last October. Laura says, "He's pure delight!" even though he raises the boy/girl ratio in the family to 6/1 (counting the dog and cat).

**1983.** Amy Sager Patton "is back at work (Groundwater Protection Section Manager, Oregon Dept. of Environmental Quality) after my wonderful two years at home with my kids, now 3 and 7. I miss the volunteer work but enjoy the challenge of trying to run a successful groundwater protection program for the state despite continuing budget problems. We depend a lot on volunteers and community efforts so my two years of experience as an involved citizen was good perspective to gain!" From Keith Knudsen: "Things are just ducky with me and family. I continue to work at William Lettis & Associates where I will shortly be publishing (as an Open File Report through the USGS) maps of the Quaternary geology and liquefaction susceptibility of the San Francisco 1:100,000 sheet. I'm keeping busy doing Quaternary geology and geomorph., often related to earthquake hazards. Annie is teaching at CPS in Oakland, Casey is soon to finish kindergarten (you should see him hit a curve ball!) and Sydney, who will be 3 this summer, is prepping for a career as a standup comic. Our company softball team that I organize, and for which Bruce Pfaff plays, is 3-0. Bruce has been a key ingredient - though some might use the word 'ringer'. I see S. Linneman occasionally, and D. Purkey and family at least annually at Casey's annual camping/birthday party. Was on a field trip with Lucy Piety prior to the Cordilleran GSA meeting. I also saw Chris Hinze several times over the last couple of years while I worked on a seismotectonic study of west-central Idaho." Cecelia Warner has been starting a Carleton alumni kids play group with Susan Orandi '87. Has the alumni office heard about this? They should at least have an event at reunion, don't you think? Kathleen Duffy Carmona says on her card that she was delivering on April 30 "one way or the other," but we never heard what happened! Hope everything



The official 1996 Geology postcard lady, Sana Chen Aloui, daughter of Julie Chen '84.

was fine, Duff! The pregnancy was problematic and she had to spend a number of weeks in bed, and she says "My 8th graders are really mad that I've left them with a sub, too." Duff, best wishes to the whole family (and your students) from the Geo Dept! Tom Ferris has moved back to Kentucky from Chicago. He is a pilot for UPS. Tom Baring is now a User Consultant at the Arctic Region Supercomputing Center in Fairbanks. He writes, "Just when things were going pretty well in Colorado, I met and fell in love with a woman from Fairbanks. So I quit my day job at NOAA, my weekend job (the most fun I've ever had) teaching snowboarding at Loveland, loaded the Subaru, said goodbye to family and friends, and drove on up." Amy Zacheis is up in Nenana, Alaska, plugging away on her PhD in biology. She says, "Finished two school years and three field seasons and having a great time."

**1984.** Julie Chen is a country representative for Catholic Relief Services in Macedonia, "and for those of you who would like to confuse us with missionaries or with Catholic Charities: no, we are neither. CRS is one of America's largest international relief and development agencies providing assistance to the poor and disadvantaged people in over 75 countries in the developing world. My business address is Skopje (say Skopia), Macedonia. And in case you can't point right to it on your world map like I couldn't before I arrived, it was one of six republics of the former Yugoslavia which declared independence a few years ago. Life is pretty good now compared to in West Africa-- this is Europe, after all. Sana is growing so fast-- life really is a miracle. She's talking now and can't find time to stop. Lazhar is working the consultant track and has had much better luck since arriving here--so we're all happy as peaches for the moment. We live in a nice middle class house with a yard and drive a company car. I love my job as the boss (you knew I had it in me, didn't you?) but it does get pretty stressful sometimes. The work is extremely rewarding, especially the community organization aspects of it." Chris Foley sends greetings from the thriving metropolis of Buffalo! "Susan and I are counting our days until we pack up (again) and move to the Norfolk, VA area. I have finished my Pediatric Critical Care Fellowship and have taken a position at the Children's Hospital of the King's Daughters and Eastern Virginia Medical School as an Assistant Professor of Pediatrics and Critical Care (sounds pretty grandiose, huh?!). My

wife Susan is a Family Doctor and has joined a practice half-time while our two beautiful children, Caitlin and Matthew now 5 and 2 1/2, are keeping us happy and busy. Our two golden retrievers are going to miss the flea-less winters, but that's life! Of particular note is my re-acquaintance with an old buddy, Libby Bent (now Libby Weberg) who has moved up here with her husband and two children a few months ago. We are very saddened to be just getting together again and our moving away so soon. If you recall, Libby (class of '84, Chemistry) and I were running one morning at Camp Vermillion on our first, glorious week-long fall field trip when we got lost, ran across a bear, missed breakfast (and KP that my partner in crime, George Hudak, took for me) and nearly missed the vans departing. Libby also took landforms before

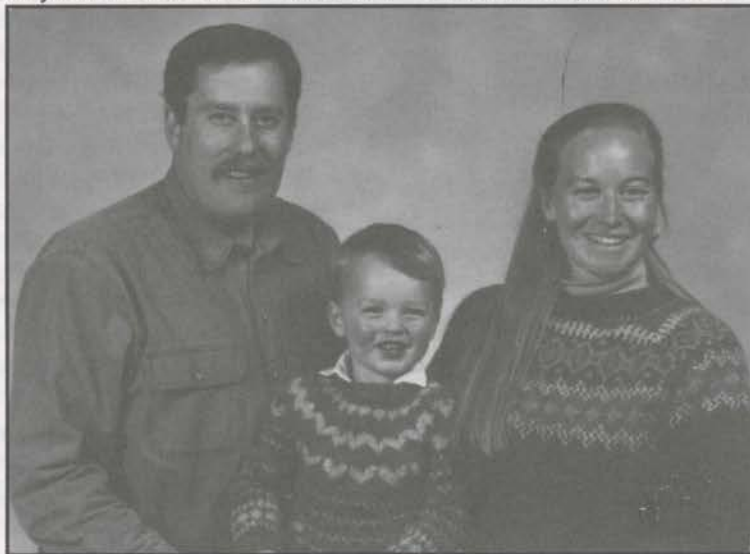
caving in to being a Chem major, while that trip, taken during Geo 10, solidified my choosing to be a Geo Major!" Yes Chris, I remember that day. My other memories of the trip include heavy frost on the ground and playing some violin music in the dining hall. Mark Gordon writes, "About a month after I started working for CogniSeis, I received an offer for a visiting scientist position in Paris. Although I hesitated to accept

at first, three chaotic months following a merger between CogniSeis and Photon convinced me that it would be a good idea or at least a lot of fun to go to Paris. Now I am back in the lab where I worked five years ago learning the latest on fault and fracture analysis. My research will be on Saudi Arabia and I will start fieldwork in May." Carolyn White, Senior Staff Scientist at ENTRIX, Inc., is at home in Houston, enjoying random encounters with Barb Waugh and Jay Jackson. Jeff Pipes became the father of his and Florence's first child, named Grace Mae Tien Oi Wong Pipes!!! "Mae" is from her grandmother's great-grandmother, and "Tien Oi" means "heavenly love." Jeff, are you and Florence out to push back the frontier on our alumni-children database software or some-

thing? Anyway, congratulations to Jeff and Florence, and welcome to Grace from the Geoids. Christine Smith recently married Mike Siddoway, a Colorado College mathematician. Congratulations Christine! When she wrote in December Christine said the ceremony would take place on the Rio Grande Rift on an active fault system at the foot of the Sangre de Cristo Mountains.

1985. When she wrote, Maria Peterson was working on finishing up her PhD research. She's looking forward to presenting some of her results at a conference in Grenoble, France, this fall. "I can see that trip turning into a vacation :-)". Mike O'Connell added a son, Matthew, to the family on New Year's day 1995. He writes, "We all moved in November to southern California (ack!) so I could become director of the

Natural Communities Conservation Program for The Nature Conservancy. The project seeks to create viable nature reserves in the middle of one of the most urbanized areas in the country. It is a huge scientific, political and conservation challenge and one of the highest priority projects for TNC. I'm also working on a second book, on integrating scientific methods with habitat conservation planning for endangered species. California is quite a geo-contrast from the endless limestone of Florida." Peter Cole has a new job as Liter-



Elliot Bruhl writes that Gus is now 3 and Sara is expecting again. "I am in the middle year of my residency and continue to work my tail off- and considering the size of it that's a lot of hours. I enjoy the work, especially when I manage to keep my eyes open."

acy Coordinator in the Seattle Public Library. He says he really likes the job, but "it keeps me away from the best part of life these days- our little boy. Azor the amazer is 21 months old." It's been four years since Jerry Carlson last wrote, so there's a little catching up to do: "In Aug. '93, Terri and I had our second child, Jennifer Nicole, arriving 3 1/2 months prematurely. Despite numerous scares and being as small as one pound 15 oz. at one point, she has pulled through wonderfully and, we're convinced, will someday rule the world. (Think of Bill Dewey's energy level, and quadruple it!)" Jerry is still working for Ethyl Corp., but has moved to Virginia and is in marketing rather than in the lab. Tom Hoak passed on to use a couple of

extremely nice slabs of rock encrusted with brachiopod and gastropod fossils this spring-thanks, Tom!

**1986.** Christine Massey writes that she spent last Christmas in New Zealand after painting their house last summer. She's "busy coordinating three summer service programs for 6-8 graders, 10-12 graders, and K-6 teachers; earning some extra money teaching Evening Division Geology Courses at the University of Vermont." Christine says she's looking forward to attending some weddings of Carleton alums, and sends a special message via Newsletter teletalk: "Laura Moore, let's get together!" Lisa Morrison has been back at work full-time since February; she says "My two sons keep me so exhausted that I actually feel euphoric from lack of sleep!!(zzzzzzzz)" Sean McKenna was looking forward to his class reunion, and a post-reunion canoe trip, their first vacation without kids. Hope to see you, too, Sean! Speaking of kids, John Sorlie and his wife just produced twins in February! A boy, Walker, and a girl, Abby. "Needless to say I have been quite busy ever since." Mary-Russell Roberson, with her family Mark and Susannah (age 2 1/2) were looking forward to seeing people at alumni reunion this June. "I've been busy with my free-lance writing business", she writes. "I'm still working on an earth science education project at UNC and am writing a new lab manual with some professors in the UNC geology department for their intro geology course. My most exciting project is in unexpected and unpleasant limbo. I had just started writing a book for lay people about the geology of the Carolinas with James Robert 'Bob' Butler, a newly retired UNC geology professor, when he died unexpectedly in April. I would like to continue the book, but haven't decided whether I will look for another co-author or finish it myself." Tom McCabe has switched jobs. "I now work at Adobe in downtown Seattle. It's better than the impractical academics I was working for before but I still have my unhappy moments (weeks?). Bonnie has been traveling in South America (maybe Peru or Bolivia now?) since March." Tom, it was great catching up with you at Carolyn's and Jonathan's wedding, and at reunion too. Emily Adams Pugh announces the birth of Mara Elizabeth Pugh on March 12. When Emily wrote as the crazed



*Too bad we couldn't print this in color to highlight Ben's very blue eyes! Ben keeps life interesting for his parents, Kristin Grady Mitchell and Dale. Kris says, "Life is never dull with a one-year-old!"*

mom of the Cheshire Road funny farm, Mara was driving her nuts with colic. Em says Mara's older brother "loves her but doesn't want Mom or Dad to spend any time with her. If I want a real conversation with Graham, I have to call him Monday or Wednesday morning at work, when Alan is at play school." Hi Em- hope things improve soon! Emily has been enjoying the new environment in Oregon, and the new community connections she's made through a whole-foods buying cooperative she started last year. Gary Van Guilder has been a busy man: he's been nominated vice president of the Minnesota Chapter, American Institute of Professional Geologists, chair of the Minnesota Mapping Advisory Panel, and received a certificate of merit from AIPG in 1995 for committee involvement. Gary also opened a new business, Fossilitis, Inc., which provides geologic information and educational services for students. Good luck on the new business, Gary! Craig McCaa visited campus for reunion this June.

Last winter he traveled to one of the few remaining communist countries to visit relatives of his Vietnamese foster brothers. "At the Saigon airport," he writes, I was detained at the 'Cultural Morality Desk' while police watched a video of my infant nephew crawling around on a rug. Luckily, he had been on his best behavior during the taping- I was allowed to enter the country." Whew. Sharon Frank Wichman is celebrating spring: "We can go outside again! After a very long North Dakota winter, Nathan, 4, and Brenden, 2, and I can watch spring unfold. I've also been teaching in a more 'organized' setting at a local environmental learning center and in an after-school science program."

**1987.** Kristin Hazard received a JD from Lewis and Clark Law School with a certificate in environmental law a year ago May. She writes "I am clerking for an appellate judge for two years and hope to go on to a job in environmental enforcement." From Chris Carlson: "I have been back at the Wisconsin DNR for almost a year. My time is nearly 100% devoted to the review of a proposed massive sulfide zinc-copper-lead mine in the northern part of the state. My role is as the coordinator of the groundwater modeling review process and the lead on the tailings facility review. I expect to be involved in this project for the next year and a half or more before final permit decisions are made. On the side I am trying to maintain my in-



*Carolyn Carr '88 and Jonathan Sellman married in May in the Twin Cities. Some of their friends at the reception included Sue Savanick '89, Peter Sauer '88, Holly Ewing '89, Carol Ormand '89, Kathy James '86, Marilyn Yohe '88, Paul Gover '88, Sarah Anthony '88, Laura Vick (Tim's daughter), Nancy Newman '81, Tom McCabe '86, Andrea Earley '90, Jessica Braun-Ferris '92 and her partner Crystaline, Mary Ann Cunningham '86 and Michelle Stolow '88.*

volvement in the Indiana University Geologic Field Station. I am hoping to be able to teach the new environmental geology portion of Option II again this summer. I am also working toward completion of my PhD in hydro. Data analysis and writing should yield a journal article by the end of the year. Hopefully the thesis can be done by the end of '97." Jeff Strasser writes "After 9 years (yikes!) at Lehigh University I will FINALLY wrap up my dissertation this spring! I've had the good fortune to spend the past 3 years working on a wide variety of research projects at the Cold Regions Research and Engineering Laboratory in New Hampshire and Alaska. Jodie, my wife, is also a geologist, and she occasionally runs into Carleton alums in Alaska (You can't get away from them!). This fall we will move to the Quad Cities area of IL/IA, and I'll be teaching geology at Augustana College. I plan to remain active in glaciological research in Alaska, although I look forward to branching into Quaternary studies in the midwest again." Mike Macicak has big news: "We had a baby! Jesse R. Macicak, born 7/23/95. He's tall, thin, has red hair (!) and is a big Los Lobos fan. He's already been to see a Los Lobos concert, as well as Jonathan Richman (twice), Iggy Pop and countless others. He'll probably grow up hating music just to rebel!" Mike's band is doing well, he says, and hopes to release a CD this fall. Hi to Jennifer Carey, who is an editorial assistant for Mountain Press Publishing in Missoula, MT. Mountain press publishes the Roadside Geology series,

so it's a great environment. For anyone who isn't familiar with them, the Roadside Geology series make wonderful gifts for your relatives who are interested in nature or who do a lot of road trips. Jennifer writes, "I got way into mountain biking last year but have since managed to pinch a nerve in my knee... I saw Chris Brick '79 several times at the knee doc's as she was rehabbing a blown out knee too." Yes, those Carleton geo connections run deep...

**1988.** Laura Sloan Ongaro and her husband, Todd, "have moved back to Ann Arbor so he can attend the U of M for a joint degree in Natural Resources and Business management. I work as a physical therapist at the U of M medical center- a great place to work. We both love the outdoors, camping, hiking, and bird watching." Laura added she spent a happy weekend with Kari Paulson and her sister in

Chicago in March. Melissa Johnson Storck sends this: "What's new? Those lifetime milestones just keep piling up. As Don and I celebrated our first wedding anniversary, we were in the midst of buying a beautiful solar contemporary home on 5 acres. We'll move in at the end of June, which will give us 2 1/2 months to get settled before the baby comes. It will be a busy summer!" Good luck in the new digs and the family business, Melissa!

**1989.** Rowland Cromwell says "Krista and I made our first big investment in Seattle when we bought a house last summer. It's nice not having to send change-of-address forms every six months! Still enjoying life as a traveling consultant, but I have yet to land a job back in Minnesota so I can visit Carleton again." We miss you, Rowland! From Ben Edwards: "The newest, most exciting thing in our lives is Teagan Elizabeth Felknor-Edwards. Teagan arrived during working hours on Oct. 25, 1995 and thus just recently celebrated her 6 month B-day. She's now weighs about 16.5 lbs and is 26 inches tall. She's got one tooth poking out of her lower gum and loves to chew on everything she can get into her mouth (especially the phone cord!). Kim is back to work at the lab where exciting kimberlite / diamond exploration is always happening...all the Canadians thought she was crazy not to take the full 6 month maternity leave. But home life was just not exciting enough (besides she still gets 16 hours of Teagan a day..). I am closing in on finishing my Ph.D.

at the University of British Columbia - hopefully I'll be done within the next 6 months. Then I'll start a one year postdoc at U.B.C. working on crustal xenoliths from volcanoes in the Northern Cordillera as part of the supporting geoscience program for LITHOPROBE (a nationwide Canadian geophysical survey). And I guess I'll have to start looking for a job now..." David Lewis plans to begin a masters program at UC-Davis in international agriculture development this fall, and his wife Denise is in a nurse practitioner program at UC-San Francisco. When she wrote, Holly Ewing was "finishing my teaching responsibilities for spring quarter, planning my summer field and lab work, trying to get my desk cleared, and getting ready to ride to Chicago. I feel as though I am in two different worlds: one with gardens and bicycles and one with graduate school. Right now the gardens and bicycle rides seem more like life than graduate school, so I am looking forward to riding my bike to Chicago with 1700 other people (470 miles, 6 days). Should be an AMAZING thing. Right now, though, I have to return to the world of graduate school." Karen Merritt spent part of last winter on a trip with the Sea Education Assn. "It was long and rough and by the end I was just glad to come home. I'm working two jobs now, one at the landscape nursery by day and one baking by night. Work continues on our house- we built a deck and have just finished roofing it over. Living in a work-in-progress means never wondering how to spend your free time!" Karen has been enjoying living in Maine and feeling settled; last fall she wrote, "I am for the first time more deeply seduced by the notion of sitting still than the twitching desire to keep traveling on." Jeff Bartlett visited the Geology Department last fall and donated some excellent fossils specimens, some of which were extremely old and rare; thanks, Jeff! Jeff has been working for the Potomac Museum Group in Robbinsdale, MN. Kari Paulson is hoping to finish her masters in the fall. She says, "I'm still living with Morgan Cowles and enjoying life in the beautiful Pacific Northwest. Took a great hillslope geomorph class this spring that brought back many happy memories of the Carleton Geo dept., especially field trips..." Thanks, Kari. Too bad we can't tum back the clock and run it again, right? Or maybe it's just as well...



Karina Lee Ward, daughter of Hillary (Liller) '89 and James Ward of Gooding, Idaho, born last September 15.

1990. Sharon Stern, newly outfitted in her 1996 Carleton Geology t-shirt, writes that she's in the fourth year of her PhD program at Kansas, "The bitter years, as some would call them. I'm planning to take next year off and am currently seeking a science teaching job in a private high school. The PhD will probably get finished eventually, it just may take a while." Keep plugging, Sharon, you can do it! Meanwhile, in another note, "The job search is finally over! I accepted a job teaching high school math and chemistry at the St. Francis High School in Louisville, KY, today! Wheee!!" Andy Garrett was getting ready for his first set of board exams at Dartmouth medical school in June. "I start rotations then, and I'll graduate in 1998. I will be heading up to Betner, Alaska in October or December for family practice. I've still been working with the helo service up here and kept my medic license just for kicks. I'm still thinking about emergency medicine or family practice, but don't have to decide for a while yet."

Andy, check the back of this magazine for listings of who else might be up in Alaska- good luck! Rebecca Arenson is now living in Lincoln City, Oregon. "I have completed my coast to coast migration, now living on the Pacific coast after a couple of years in eastern and western Oregon. I've started a new job teaching at an alternative high school- it's really rewarding. Lots of personal/job/moving changes lately, some sad, some OK. I hope to get my new garden in

the ground soon." Hope the new home, job and garden all work out well for you, Rebecca! Andrea Earley has parlayed her fiddle playing into a trip to Europe! "The Cloggers are going to France as is the band, so yes, I am going too!! I cannot wait to go. We leave July 15, fly to Paris, and then head immediately to the Alps region. We will perform there for a week or so, move down to the Mediterranean Coast, over to the Pyrenees, back to the coast, and voila - a month will have gone by. We will be performing pretty much every day, sometimes as the only group in town, and sometimes as participants in a couple of International Music and Dance Festivals. My sister Meredith is going along as one of our 'roadies', and she & I are going to travel for 2 1/2 weeks after the tour is over. I am really excited to be traveling again, and I have never been to Europe, so it should be great. We have friends in London, Amsterdam, and Copenhagen to visit, and we want to get to Ireland." Mark Newcomb

writes he "made a second attempt on an 8,000 meter peak, this time Goshersbrum (hope the spelling is correct- Tim) I in Pakistan. Wind and bad weather turned us back at 7,000 meters. Visited Sikkim in February to explore the potential for skiing and ice climbing, but found very little. Will return to China in the fall. Feeling a dearth of academic challenge right now, though the future seems to point in that direction." Drew Cromwell and Kate Moodie are living in Redondo Beach, California. Drew says, "Kate is working in public affairs for the J.Paul Getty Trust and I am flying the Really Orange HH-65 Dolphin. Seen lots of gray whales, dolphins, one gigantic blue whale, sea lions, seals, pilot whales, BAD boaters and scuba divers who do not pay attention to dive tables. Kate is in the thick of LA's art/museum scene." Steve Helgen moved to Boulder, CO last year after several years in Missoula, MT. When he wrote last summer he was a staff geochemist for a consulting firm in Boulder.

**1991.** Becky Lang writes that she was to defend her MS thesis at the U. of Washington this spring and spend the summer teaching field camp in Montana for the last time. "I've been teaching intro geology at a community college all year and hope to continue with that next year." Eric Baer is to be congratulated on landing a tenure-track position at Citrus College in Glendora, CA, starting this fall. Eric finished his PhD last August. Eric, I saw Richard at Dacie's at reunion brunch yesterday- Tim

**1992.** Fer Horn reports from her desk at the College of Human Ecology at the University of Minnesota, "A new job, my first permanent one after graduation! It's an interesting situation- a primarily female staff

and faculty and I'm the first female computer support person they've ever had. You wouldn't think it would make that much difference, but the users seem to think so. Being appreciated like that makes running around spastically all day worth it." Fer, I can't speak to the gender issue very well, but I know for a quite a while you were our secret weapon in the User Services area. Your good work and ability to listen and get things done would make you appreciated regardless of gender, I think. Hi from Patty Weston, who says she's "finally playing some chamber music as orals loom in June (I feel a bit like Nero really). KC (Patty's office partner) and Erich are welcome friends in the department. LA still feels a bit like Disneyland, but it can be entertaining." (Hi Patty from Tim.) I just heard from KC that Patty and her advisor have received a new NSF grant- good work Patty! Clifford Blizzard has begun a PhD in geology at Cornell, but he says "I've gotten really interested in education outreach opportunities lately. One afternoon a week I teach a 4th grade class about the Ice Age geology of Upstate New York. I've also been giving numerous Department and area tours for kids as young as 4! I'm minoring in education, and I can't wait to teach someday." Clifford planned to stay in Ithaca during the summer to begin research on the Patagonian ice fields using satellite radar imagery. Erik Stokstad has finished his science journalism program at U.C. Santa Cruz. "Now I have to leave the surf and redwoods. No job yet, but I've got an internship with New Scientist magazine until December (New Scientist, King's Reach Tower, Stamford St, London, SE1 9LS) and I'm looking for good stories." Hope you have a great experience in England, Erik. Christina Vosen Ostendorf writes that she enjoyed seeing a all the Carleton folks at GSA in New Orleans last fall, and visiting the French Quarter with Maria Panfil. "I am now working as program coordinator at the First United Methodist Church in Miles City and have even found ways to sneak in use of



We wish a warm welcome to Timothy Connor Dooley, born to Butch and Brett Dooley on February 7. At left is Tim's prenatal baby sonogram, in contrast to his post-partum picture at right (orange rock hammer for scale). Brett says, "Other than preferring that he sleep from 2 to 4 a.m. we couldn't ask him to be a better baby."



my earth science skills. Cathy O'Reilly '94 is staying the weekend- car troubles." Aw, Christina, she probably would have visited anyway... Christina and Theodore Ostendorf were married last July in Miles City. Jill Baum is still working for New York City. "Last year I got to experience record drought, blizzards and flooding. Now just awaiting an earthquake..." Jill says she enjoys teaching the geology of the Catskills to Elderhostel groups. Jon Nauert and Jessamyn sent a nice Yule card last winter; he said "My first quarter of teaching went well... I learned a lot, and by the end of the quarter things were going rather smoothly. Jessamyn has found a part time job, and we're both enjoying Ellensburg."

1993. Anu Gupta finished her master's this spring and, contrary to rumors, plans to go on to do her PhD at Columbia. "I went onto the roof of my New York city apartment building to look at the comet one night. The wind blew and the door slammed shut, so I got locked onto the roof. I started pounding and yelling (I thought if I don't make lot of noise I'm never going to get off this roof). Two minutes later five policemen come running up the stairs, (our building is a seven story walk-up) panting, they kicked the roof door in. I smile sheepishly and say, 'hi, I'm just looking at the comet'. 'Oh, is that all', says one of the policemen. 'So where is it anyway?' says another. So I ended up showing 5 panting policemen the comet. They didn't even give me a hard time for locking myself onto the roof." Eric Jensen spent the past few years "skipping around the country,

going where the geology is good. Presently, I am a paraprof at Colorado College for Eiler Henrickson's last class before retirement. This summer I will be doing research in Cripple Creek, CO, for my PhD and working as an exploration geologist, and next fall I will join Reed Krider at the University of Arizona where I will be studying the geochemistry of the Cripple Creek deposit." Maria Panfil was in Northfield for Julie Williams' funeral, and it was great to see her but also so sad. Maria and Kate Jesdale put together a nice collage of pictures of Julie and friends

the morning of the Carleton memorial service, and then gave it to Julie's family up in St. Cloud. Thanks, Maria- that was neat! Maria, having passed her masters thesis defense, was planning on a trip to Mexico to visit the field area she worked in last year, and then do a little traveling with a special guy. On her card she says, "I've just made the big decision to move to Seattle and go to the U of W- I am excited! Hopefully volcanoes and geomorphology will figure in my future." Joyce Wilson was married this April. She writes, "Ken and I met while I was in St. Louis on a Pew fellowship at Wash. U.'s earth and planetary



*Joyce Wilson and Ken Johnson married April 20 in a weekend-long celebration with music, folk dancing, and nature hikes. The couple met at Washington University in 1992 while Joyce was working on a summer fellowship. Congratulations and best wishes to the new family from the Geology Department!*

sciences dept. in the summer of 1992, so there's a bit of a geological angle there..." They celebrated with a weekend of music and dance in the countryside of northeastern Missouri; best wishes to you both from the Geo Dept! Joan Ramage planned to go to the Greek Island of Thera/Santorini for an archaeology and geology field project in June. "I'll be exploring (of course!) and trying to date the controversial Minoan eruption (c. 3000 years ago) based on radiocarbon wiggle matching and/or dendrochronology. The rest of the time I am pursuing a Ph.D. in Geological Sciences at Cornell University." That wiggle matching sounds a little risqué Joan, be sure to keep things under control... Liz Salomon had an operation on her intestinal tract this spring to remove what has been troubling her for several years. Liz, I hope the operation has paid off and you are doing better now. She writes, "I moved back to Boston two years ago. I didn't really expect to

stick around but I quickly fell in love with my old stomping ground and a beautiful woman named Amanda and I've really been solidifying my roots ever since. Amanda and I moved in to a fabulous tree house-esque apartment in Cambridge last summer and adopted a kitten we've named Zoe and we make a beautiful little family, I must say ... I was teaching special ed. last year. Then, I got this fantastic (yet VERY challenging) job working for GLAD (Gay & Lesbian Advocates & Defenders) -- a legal services organization which does impact litigation and educa-

## Alum News

tion and outreach for gays, lesbians, bisexuals and people with HIV. I was working as a litigation assistant (AKA: girl Friday) for the directors of GLAD's Civil Rights and AIDS Law Projects and then landed myself in the hospital. This fall I will be going to get my Masters in Education at Harvard Grad. School of Education in Educational Social Policy and hope to work as an educational consultant/within state government programs to promote safe educational environments for Gay and Lesbian and other 'minority' youth (Massachusetts was the first state in the nation to institute a governmentally mandated program to protect queer youth in its schools: The Governor's Commission on Gay and Lesbian Youth and the Safe

Wisconsin Dells, though." Guests at their wedding last summer included Starr Johnson, Julia Daly, Ben Surpless, Reed Krider and Eric Jensen. For anyone who hasn't been there, the Dells are scenic but they rival Wall Drug and Las Vegas for development tackiness... Liz says she's seen Myong Kong '94 and Rowan Littell '95 around the Geology Department. **Starr Johnson** is "still living in Boise and loving it! Josh and I have split and I'm enjoying life in Idaho with good friends and two kittens. I'm much happier and healthier than I have been in a long time. Don't see many Carleton folks out here- you guys are missing out, Idaho is GORGEOUS!!" **Emily Darby** just finished a year in Chicago honing her typing and filing skills. "I loved

the city, especially the food! However, I am off to Bozeman, MT to start my first year of medical school through the WAMI program (I get my degree at U-Wash). I am very much looking forward to never filing again!" Good luck at med school, Emily! This is very difficult, but your faithful Newsletter scribe will type in what **Julie Williams** says on the postcard she sent us in May: "I am contentedly living in the Green Mountains of Vermont, but I keep a few Mexican pesos in my pocket in case I decide to do some international adventuring tomorrow. This summer I will be working for a non-profit organization dedicated to the sound management of the Lake Champlain watershed. I'm super psyched! I also plan to spend as much time as possible on the water and in the forests, where I am most happy." We love you Julie, go in peace. For

the benefit of anyone who might be reading this section before the Departmental News, Julie and her friend Lollie Winans were murdered on a camping trip on the Appalachian Trail in Virginia in late May. From **Naomi Lubick**: "I am living and working in Oakland and on the Peninsula.

It's amazing how much of my life that covers in those few words. I ran into a woman on the BART one day who's a PhD student at Arizona, or was it New Mexico? doing geothermal stuff. She says they have a great new geomorph program starting up. It made me tempted... but now I am still thinking about grad school--I got rejected, by the way, from all the pro-



*Rob Wortheimer is helping people in Niger develop and protect their water supplies as one of his Peace Corps projects. Other projects include teaching about the use and safe handling of fertilizers and pesticides. Sometimes it has been a frustrating experience. Here Rob and fellow volunteer Lisa operate a human-powered pump to lift water from a well.*

School Project)." Wow. Good luck on everything Liz; take care of yourself and keep in touch! **Mike and Britta Gustavson-Unger** have been legally married for a year now, but they planned a celebratory ceremony and party at a resort near Tofte on Lake Superior's North Shore for this July. While your Newsletter correspondent was unable to attend, I'm sure I speak for the whole department and community in wishing Mike and Britta the best of luck and health for many years. There can't be a more dramatic setting for a wedding ceremony than the North Shore!

**1994.** **Liz Symchych King** writes she's "enjoying the humbling experience of graduate school at Madison... Andy and I are sorry we didn't honeymoon in the

grams I applied to---in English, and now I am thinking about teaching math and science and literature at the high school level... sigh. when do I figure out what I want?" Keep plugging, Naomi, something will work out. Aron Clymer has turned in his MS Thesis to Walter Alvarez here at UC Berkeley. "I'm so psyched! I bought a VW Jetta, and I'm packing' up and moving to Minneapolis. There I hope to land a decent job in the environmental field (whatever that means) and have a real life for a while." Beth Pratt planned to be in Denali National Park in Alaska this summer as a guide. Come November, she says, she's heading back to Antarctica for another season on the ice. In May, Liz Butler wrote that she was moving to Alaska to work in a bike/youth hostel. Before that she had moved from the farm in Maine to DC and been a bike messenger. As the car disappeared off down the road she hollered out the window: "Call my Mom! Get my address and visit!"

1995. Trish Gillespie worked for the Institute for Corporate Environmental Management at the University of Houston for the past year, but has been accepted in the Teach For America program and will be doing that for the next couple of years. "My tentative assignment is to teach Special Education in Phoenix, Arizona. I am extremely excited about it!" Trish planned to spend the summer in Houston teaching summer school. Good luck in Phoenix, Trish! Roy Luck writes that he is plugging through grad school and trying to raise funding for field work in Sierra Madre Oriental, Mexico, for spring 1997. "In Mexico I will be collecting kinematic data (balanced cross sections, principal strain orientations, vertical axis rotations) for the first phase of my doctorate project. I'm looking forward to an internship with Mobil Exploration, Inc. this summer in Houston." Frankie Ridolfi sez: "Hey Geobuddies! I'm enjoying the 90° temps out here in Arizona. I've been working at the National Observatory on Kitt Peak, running their public programs and handling the press and media. (Shhh- don't tell them I'm really a geologist!) Saw Comet Hyakutake in all its glory from the mountain last month. Starting flying lessons again at 'Snoopy's' flight school... I wonder if we'll train by sitting on red dog houses!" Cindy Alm intern-taught at the Stanley British Primary School in Denver this year. She says, "I'm both loving and being exhausted by teaching elementary school. In this one year, I've had experience teaching every grade level from kindergarten to

fifth grade, public and private. I like them all-- MOST DAYS! I've also caught every childhood sickness you can think of. Most importantly, Ofori and I are engaged to be married early spring of next year!" Congratulations and good luck from the Geo Dept! And remember, you shouldn't judge teaching by your first year (rule 1 of beginning teaching). Jay Stetzel spent last summer guiding sea kayaking trips for Trek and Trail (a Bayfield, Wis., outfitter) in the Apostle Islands of Lake Superior. Also, he says, "I have been working with at-risk youth at the Robert M. Cooper 4-H Leadership Center as well as facilitating youth and adults on ropes courses. With these activities, I've worked on building self-esteem, teamwork, trust and communication with people and in the process learned a lot about myself." Derek Murrow has been a staff



*Trish, Cindy and Kate hit the mountain pass on snowshoes!*

geoscientist at Stone Environmental in Montpelier, VT, this year, but he took time out in June to be a very supportive helper for Julie Williams' family at the time of Julie's death. He did far more than most people are aware and he deserves a lot of credit for his stamina and supportiveness. Thanks, Derek! Others who returned for Julie's funeral included Kate Jesdale, Maria Panfil, Sarah Rezny, Andy King, Myong Sun Kong, and Miranda Lescaze. Tony Moore is "just working, lifting, and trying to keep myself busy with all of this free time." He's managing a Brookstone store in a Mall near the Twin Cities. Kate Jesdale is teaching outdoor education in Vermont. "I sneak in lessons on geology whenever I can, and they love it! Mostly, though, the focus is on how they work well in a group. It's exciting, fun, and tiring. But, as

## Alum News

usual, I am not looking too far ahead, and have no idea what I'll do in the fall. You can send me job ideas anytime. hee hee." Rowan Littell has spent the past year taking classes as a "special" student at the UW-Madison and it has paid off. "I'll be starting graduate school in the Water Resources Management program this fall. In a couple of years I should have a masters and be more employable... I've also been doing a fair amount of volunteer work with the local branch of The Nature Conservancy, working with, among others, Nancy Braker ('81, Bio). And I'm now engaged to Jennifer "Jenizie" Ziebarth ('94, Math) -- the event will hopefully be a simple outdoors affair sometime next summer." "This is Frankie Ridolfi in AZ. It recently came to my attention that a heroic young lad in our fine geology department used a slide of three boot-wearing bare-bodied rock mongers for his comps talk. I heartily approve, nay, I COMMEND this exemplary act of pride, and hereby and hitherforth enthusiastically endorse the permission of myself and

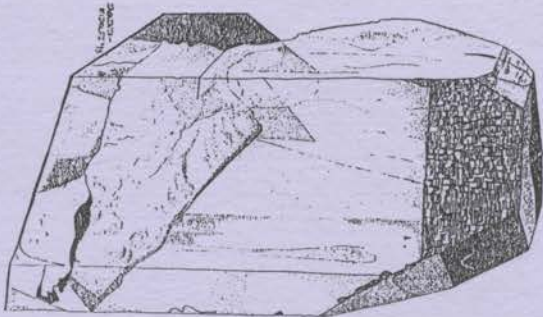
all other persons glorified (or simply shown) in said photo, to be used as you deem fit (or not totally offensive) in any publication or flyer, ESPECIALLY that of the Geo. Dept. Newsletter! Yeah!" A great try, Frankie; maybe another time. The picture showed most all of Frankie, Aron Clymer and Scott Propson as they posed in artistic arabesques on the ice of a frozen pond in Wisconsin... We got this funny message in a beer bottle that floated in on the tide: "I'm brewing beer for a living and still playing lots of frisbee. Alaska rocks! I will be here though the end of summer '97, so I've got a place to stay and tasty brews for anyone heading up this way." Signed, Bryn Perkins... See 1993 for news of Mike Unger's wedding... And, Steve Surbaugh and Kate Ferguson tied the knot on schedule in December in Long Grove Community Church in Illinois. They spent the winter being buried by snow in their trailer home in the woods up on the Sawbill Trail in northern Minnesota.

*And now... even Tim and Betty get a vacation. See ya later, folks!*

*From left, it's Jean and Tim Vick with Betty and Mike Bray near the shore of Lake Vermillion.*



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