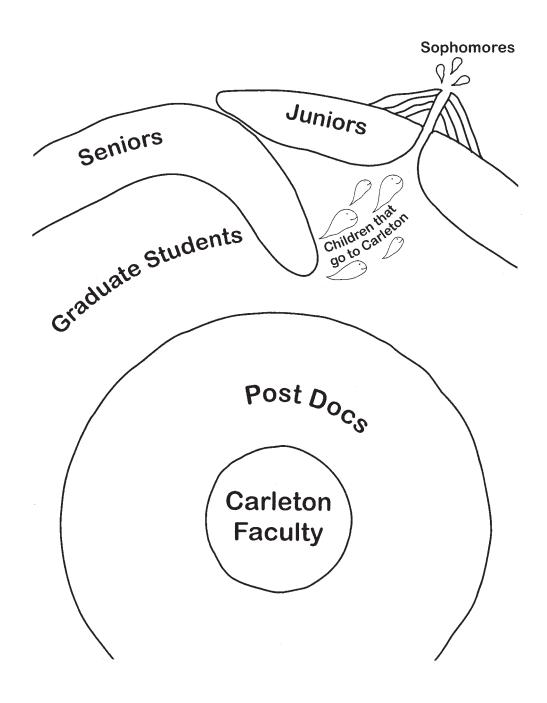
Carleton Geology Newsletter

Volume XXXI 2006



The cover drawing is an alternative Geology T-shirt design by Lee Finley-Blasi '06. This design didn't win the popularity contest among the geology majors, but clearly it is a great design which many alums will relate to so we had some shirts printed up anyway. The shirts are available by mail from Tim Vick.

The Carleton Geology Newsletter is edited by Timothy Vick.

Photo Submissions:

Pictures submitted to the Newsletter can be either in traditional print format or electronic, but electronic pictures should be medium to high resolution in order to reproduce well on paper. The file size of electronic pictures should be several hundred KB or more. Web-formatted pictures of less than 100KB generally will not reproduce well on paper.

If you have a change of address or other correction to our address list you may edit it yourself and make sure your listing is done the way you prefer at www.carleton.edu/alumni/directory/

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Northfield, MN 55057
(507) 646-4195
E-mail: addresses@carleton.edu

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Department of Geology Carleton College Northfield, Minnesota 55057

July 6, 2006

Dear Alumni, Friends and Parents,

Greetings from Northfield! Another academic year has passed, and we're glad to report on the many events and achievements that have happened in the Geo Department since the last Newsletter. Within these pages (that once again have been brought into existence by the good Mr. Vick) you will see what a lively and exciting place we have here.

June is especially a time of celebration in the Department. Within the span of one week, we get to bask in the glow of the accomplishments of our graduating seniors (and meet their families!), and then a flock of old friends comes back to visit during reunion weekend. These times make us reflect on what a exceptional group of people Carleton Geo Majors really are. Our students truly are the brightest students on the face of the planet, and *once* a Geo Major, *always* a Geo Major at heart. The graduating Geo Seniors for 2006 were only seven to ten strong (depending on how you count them), but they were a fun and impressive bunch. Their comps were outstanding, as usual, and I encourage you to check out the titles of their projects. The rising senior and junior classes are back up to typical levels, with about 25 students in each year, so the next few years promise to be hectic ones. This summer, a record number of our rising seniors secured research internships with universities and federal laboratories. Also of note, our strong record of educating women earth scientists was prominently featured in the Chronicle of Higher Education this year. It is clear that one of our greatest strengths is the continued focus on field and cooperative learning in our curriculum, and you'll see lots of examples of this within the pages of this Newsletter.

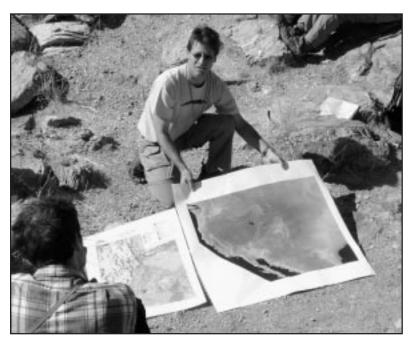
We celebrated Cam's tenure this year! Bereket and Freweyni are eagerly expecting daughter number three in September! Sarah R. has fully taken over Administrative Assistant activities and is bossing us all around. Mary continues to divide her time between Geo, ENTS, Archeology, administrative duties, etc. etc. etc.. Tim is more Timmish than ever. Sadly, Qing leaves us this year, so we had a potluck at Cam and Karen's house to send him off and thank him for all of his hard work; it was a jolly but sad occassion, and Tim took the opportunity to smother him in Geo T-Shirts (order yours now!). Oh, and some more faculty news... guess who's coming back to teach. He'll be most welcome, and most *undoubtedly* rusty (you guessed it, Shelby!). So next year, those of you alums from previous generations who really have no idea who Bereket or Cam or Clint are, will see an old familiar face on these pages as Shelby re-institutes the freshman field seminar this coming Fall! And yes, Betty and Mike, Ed and Cynnie, the Jeans Vick and Boardman, and even Eiler, are still 'round here and abouts, and occasionally pop in.

So, as you can see, the Department and its inhabitants are much the same as they have always been. We are fortunate here, in this small place, this little world, this precious stone set amid the tawny prairie, this other Eden, demi-paradise, this happy breed of women and men, this blessed plot, this Department, this College, this Carleton.

Yours in perpetual servitude,

Clint

DEPARTMENTAL NEWS



Cam Davidson, on the Utah field trip last fall

Cam Davidson Awarded Tenure

We are extremely pleased to announce that Cameron Davidson, who has been teaching Mineralogy, Petrology, Structural Geology, Environmental and Science Policy, Introductory Geology, and the Italy Program for the past several years, has been awarded tenure by the college.

Cam earned his B.S. in Geology and Geophysics at the University of Wisconsin - Madison and his Masters and Ph.D. at Princeton. Cam actually came to us from Beloit College in Wisconsin where he taught for seven years and was tenured. His fields of specialization are metamorphic petrology, structural geology and tectonics, and his current research interests include the metamorphic and structural evolution of the middle and deep crust during mountain building and the tectonic evolution of southern and southeastern Alaska and northern British Columbia.

Among his current professional activities, Cam is on the editorial board for the journal Geology, published by the Geological Society of America, and is the Distinguished Lecture Series Coordinator for the Mineralogical Society of America.

Carleton Science Departments: "A Hothouse for Female Scientists"

The Chronicle Of Higher Education, a weekly tabloid for the higher education industry, recently ran an article about why Carleton has been more successful than many other schools at graduating women students who go on to earn Ph.D.s in science

Their article said,

"At a time when higher education is growing more concerned about the small number of women pursuing advanced degrees and academic careers in science, Carleton is a hothouse for female chemists, geologists, and physicists.

"Although Carleton's undergraduate enrollment is minuscule compared with that at universities like Minnesota-Twin Cities, North Carolina at Chapel Hill, and Wisconsin at Madison, it produces more women who go on to earn their doctorates in the physical sciences than do any of those institutions.

"Carleton has even managed to send on more women for advanced degrees in the physical sciences than either Dartmouth College or Princeton University — both of which graduate double the number of women that Carleton does.

"'We don't lose women along the B.A.-to-Ph.D. pipeline,' says Mary Savina, a professor of geology at Carleton. 'Our women carry on. We show them what real work in the profession is like.'"

The full text of the article is available on the Geology Department web site. Look under "About the Department" and click on "Articles," and then the "Hothouse" title.

Workshop On Quantitative Literacy To Be Held At Carleton

A workshop on infusing quantitative literacy into introductory earth science courses will be held at Carleton June 26-28.

Introductory courses can demonstrate the quantitative aspects of geoscience while increasing the quantitative literacy of a large population of students, many of whom will take no further science courses.

continued on page 6





Missouri Trip Benefits From New Rock Exposures

Our spring departmental field trip to Missouri this year featured a new wrinkle, enabled by a nasty accident but turning out better than we ever could have hoped.

In December, the upper reservoir of the Taum Sauk power project in Missouri overflowed and breached the wall of the reservoir, sending 1.3 billion gallons of water rushing down the mountain. While the ensuing flood heavily damaged Johnson Shut-Ins State Park and made that rhyolite exposure inaccessible to us this year, the flood scoured a channel over 200 yards wide down the side of the mountain, exposing the bedrock for more than a half mile (photo at left).

The exposure on the flank of the mountain, now the best igneous outcrop in Missouri, represents an unparalleled opportunity to see a complete geologic section of the Precambrian igneous rocks of the St. Francois Mountains, ranging from rhyolitic ash flow volcanics to the fine porphyritic granite that intrudes them to the coarse volcanic sediments at the base.

Overall the trip was a great success. Robb Jacobson '79 led us on a canoe-borne (but very rainy – we got about two inches of rain that afternoon) examination of gravel deposits in the Jacks Fork River (lower left photo). For the first time in about 20 years we were able to visit the historic Pilot Knob iron mine to see the iron-impregnated volcanic rocks there.

Other stops included the dike swarm at Silver Mines Campground (photo at right) and the Great Unconformity near Taum Sauk Power Station (below), where Shelby led the discussion and in the background you can see the Cambrian sediments overlying the Precambrian granites. Photos by Tim Vick and Cam Davidson.





This workshop will help faculty increase the quantitative component of their introductory geoscience courses. Workshop activities will include participation in discussions, creation of introductory exercises and model syllabi, poster and plenary sessions, panels of expert faculty and presentations by participants about effective strategies.

The workshop is open to faculty in the United States teaching entry-level geoscience students from all types of institutions. Prior to the workshop, participants will be asked to submit an activity from their introductory course that incorporates quantitative skills; this activity will be discussed and modified during the workshop. Materials generated at the workshop will be published on the Teaching Quantitative Skills website housed at SERC (Carleton College).

The workshop goals include discussing the roles introductory geoscience courses can play in developing students' quantitative literacy, the challenges of increasing the quantitative component of geoscience courses including overcoming math anxiety and teaching students with a wide variety of quantitative skills, demonstrating ways in which faculty have effectively incorporated quantitative activities in introductory courses, generating strategies for reinforcement of quantitative skills using multiple activities throughout the course, and sharing mechanisms for assessing quantitative skills and literacy.

The workshop will be led by Cathy Manduca of Carleton College, Eric Baer '91 of Highline Community College, Seattle, Washington, and Jen Wenner '92 of the University of Wisconsin - Oshkosh, Oshkosh, WI. The workshop is funded by the National Science Foundation.

Soils Class Visits Farms And Implement Dealer

[Reprinted from The Kenyon Leader]

Geology 258, the Geology of Soils, is a class that is taught only once every three years at Carleton College in Northfield, and this year the students took a field trip to the Isaacson Implement dealership in Nerstrand and to two area farms to obtain a firsthand look at what they have been learning from their textbooks.

According to Mary Savina, McBride chair of Geology and Environmental Studies, the trip served several purposes for the students. In addition to meeting with an expert from the University of Minnesota Extension Service, Brad Carlson, they were able to speak with farmers from a practical standpoint.

"This helps them understand that concepts like

'soil structure' have real significance to crop growth and soil erosion," Savina said. "[They] got immersed in a world where they see the interconnections among farm equipment, farm economy, soil fertility, crop choices, animal agriculture and other parts of the day-to-day farm life."

The class visited area farmers John Bonde and Mark Bauer, whose farms are located near Nerstrand. The two farmers spoke with the students about equipment, nutrient management and fertilizer, soil erosion and compaction, soil health, soil types, soil conservation structures, drainage and tiling.

"It's hard, from outside of agriculture, to get a sense for the kinds of decisions that must be made each week of the year and the consequences of those decisions. Students invariably come away from these trips much more knowledgeable," Savina explained, adding that one student humbly said he didn't realize how much the farmers do every day.

This was the first time that Savina brought her students, who come from all over the country and but usually not from farming backgrounds, to the Nerstrand area, as other farm sites in the past have been closer to Northfield and Faribault.

"Brad and I have worked closely on making these field trips for several years," she added. "Brad made all the arrangements with Isaacson's and the farmers for our visits. I'm immensely appreciative of him. This kind of experience can't be done in a classroom."

While at Isaacson Implement, the students were able see the various types of equipment commonly used by farmers of today.

New Duncan Stewart Fellows Named

Each spring, the geology faculty faces the difficult task of selecting a few students to be Duncan Stewart Fellows. The Duncan Stewart Fellowship was established in 1976 by Daniel Gainey, class of 1949, in honor of Duncan Stewart, professor of geology at Carleton for nearly 25 years.

We select the Stewart Fellows based on a combination of excellence in scholarship, a high level of intellectual curiosity, potential for scientific growth, and involvement in departmental activities. As we make this selection, we realize how fortunate we are to have so many talented, interesting, and impressive students within the department.

We are pleased to announce that Mark Dyson, William Guenthner and Kendra Murray, all class of '07, will be the 2006-07 Duncan Stewart Fellows. Mark, Willie and Kendra will extend the number of Stewart Fellows to 86. Congratulations and best wishes to you!



Kate and Megan tending the Lyman Lakes data buoy.

Water Quality Studies This Summer

Two students, Kate Meyer '09 and Megan Ward '08, are working in the Geology Department this summer under the direction of Bereket Haileab to develop water quality measurement techniques and new ideas for teaching environmental science in geology classes. They are working within the context of the Carleton Interdisciplinary Science and Math Initiative, funded partly by the Howard Hughes Medical Institute.

One of the tools they are experimenting with is a new data collecting buoy now floating on Upper Lyman Lake, recently purchased on an NSF grant. A string of temperature sensors, spaced at intervals, is suspended beneath the buoy, continuously taking the water temperatures and relaying them by radio signal to a computer in the geology lab in Mudd. Eventually we hope to have the data available on a web page.

Kate and Megan will be working on other water projects as well. They plan to collect water samples from various Rice County lakes and streams and analyze them for nutrients and pollutants.

In the past several years members of Bereket's Introductory Geology classes have collected and analyzed samples from local surface waters. One of the goals of this summer's project is to compile those data and integrate them with newly collected data to discern trends over time and assess the present state of water quality. Bereket hopes they will be able to present their results at the national Geological Society of America meeting next fall in Philadelphia.

Carleton Educators Present at Geological Society of America Annual Meeting

Cathryn Manduca, director of Carleton's Science Education Resource Center (SERC), John McDaris, a geoscience assistant in SERC, and Associate Professor of Geology Bereket Haileab presented research reports at the Geological Society of America's 117th annual meeting in Salt Lake City from October 16 through 19.

Manduca presented two projects titled, "Surveying the Landscape: How Do We Teach Undergraduate Geoscience Courses" and "Observing and Assessing

Student Learning: A Workshop Project." Both are the result of "On The Cutting Edge", a professional development program sponsored by the National Association of Geoscience Teachers and funded by the National Science Foundation. "Surveying" explains that although professors continue to teach by lecture, they increasing utilize interactive elements such as demonstrations and discussions, and have moved away from tests, focusing instead on problem sets, oral presentations or papers as assessment tools. "Observing" used a multidisciplinary approach with 42 experts in cognition, education, assessment, and geoscience education identifying the best assessment tools for geoscience students.

McDaris presented "The 2004 Indian Ocean Tsunami: Using a Disaster as a Teachable Moment". His study examined the effects that a Web site about the tsunami had on instruction in geology classes and how other such real life events can influence structure and material in geology classes.

Bereket Haileab co-authored a paper entitled "Tephrostratigraphy of the Okote Complex, Omo-Turkana Basin, Kenya and Ethiopia." Other authors on the paper included Francis Brown of the University of Utah and Ian McDougall of the Australian National University Research School of Earth Sciences in Canberra, Australia.

Five Nominated To Sigma Xi

We also congratulate the following senior Geology Majors who were recently invited to be Associate Members in Sigma Xi, the Scientific Research Society: Rachel Brown, Kelsey Dyck, Lee Finley-Blasi, Daniel Jones, and Rebekah Lundquist. Sigma Xi is an honor society for scientists. Each year a few students are nominated as associate members based on their promise as scientific researchers and demonstrated research ability on comps projects and other independent research. Sigma Xi has over 100,000 members. Members and associate members receive American Scientist, a bimonthly journal. Nationally, Sigma Xi sponsors research awards and conferences. The Carleton chapter of Sigma Xi sponsors a visiting lecturer each year and other occasional events.

Congratulations also to Gloria Jimenez '07 who has been named the winner of the highest award for the Association for Women Geoscientists Minority Geoscience Scholarship. The award is the highest of three minority awards and carries a stipend of \$3,000.

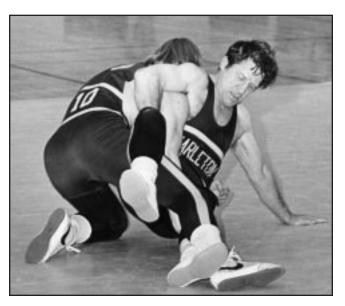
David Chapman Is Bernstein Geologist-In-Residence

Should we wait for greater certainty about global warming, or should we take steps immediately to stabilize the climate change that may be occurring? Dr. David S. Chapman of the University of Utah addressed this dilemma in his presentation "Global Warming: Just Hot Air?" when he visited Carleton as this year's Bernstein Geologist-in-Residence in May.

Professor of geology and geophysics at the University of Utah, and dean of the university's graduate school, Dr. Chapman said that global trends suggest that allowing "business as usual" on planet earth is a risky path. In his presentation, Dr. Chapman outlined research into how human activities are substantially increasing the atmospheric concentrations of greenhouse gases – principally carbon dioxide and methane – to levels far above those that have existed for the past 200,000 years. "We do not know all the details of our complex climate system sufficiently well to predict the exact consequence of greenhouse gas increases on global temperature," he said.

In another talk, Dr. Chapman spoke on "The Geothermics of Climate Change: View from the Underground." Temperature-depth profiles measured in boreholes contain a temporal record of past changes in surface ground temperature and provide valuable constraints on climatic variations over the last few centuries.

The Parnassus Foundation, which supports the Bernstein Geologist-in-Residence program, was established by Raphael Bernstein, a Carleton parent and past trustee, and his family to support scholarly work and a distinguished lecture series in the Carleton College geology department.



Eiler wrestling a challenger in the 1970s.

Eiler Henrickson '43 Honored For His Wrestling Career

Congratulations to Eiler Henrickson '43, a Carleton geology professor from 1946 until 1987, on his selection for a Lifetime of Service Award from the Minnesota Chapter of the National Wrestling Hall of Fame! The presentation of the award was at the Minnesota Chapter Hall of Fame Banquet on April 22, 2006, in Owatonna.

The National Wrestling Hall of Fame and Museum in Stillwater, Oklahoma, preserves the heritage of the sport of Greco-Roman wrestling, celebrates new achievements, and encourages young people to aspire to lofty goals.

Many people remember the days when Eiler coached Carleton's wrestlers. A favorite tradition he maintained was to challenge all comers to wrestle him in front of the crowd during the half-time of varsity basketball games. A strong, experienced and wily athlete, he never lost a match.

Eiler grew up in Deerwood, Minnesota, on the Iron Range, and at Carleton was a natural history major in the class of 1943. An extraordinary athlete, he won nine letters in football, wrestling and track. He never lost a dual race in track, and set Carleton records in the mile and two-mile runs. He was undefeated in dual meets for three years in wrestling; in the 1942-43 season he served as both captain and coach. A center and linebacker in football, he often played a full game and ran in the half-time cross country meet. Eiler was Carleton's wrestling coach from 1946 until 1958.

In the 1948 Olympic wrestling trials, Eiler went through the district, regional and national elimination tournaments without a defeat, failing to gain a place on the Olympic team only because of the archaic "black mark" system which penalized a wrestler for winning "only" by decision. He defeated four former national champions during the trials.

Eiler served as a first lieutenant in the US Army and as a geologist for the US Geological Survey during World War II. He joined the Carleton faculty in 1946 as a geologist and wrestling coach, earning his Ph.D. in geology from the University of Minnesota in 1956. He was chair of the Geology Department for many years before retiring from Carleton in 1987 to become chair of the geology department at Colorado College for a decade.

In 1949 Eiler won national recognition for the discovery of uranium deposits in Upper Michigan while he was consulting for the Jones and Laughlin Co. and the Atomic Energy Commission. Other geology and archaeology field work over the years took him to Alaska, Scotland, Norway and Greece.

Patrick O'Brien Speaks On Continental Collision And Mountain Building

Dr. Patrick O'Brien, Chair of Petrology at the Universitaet Potsdam in Potsdam, Germany, presented two lectures in the Geology Department in February while he was touring the United States as a Distinguished Lecturer for the Mineralogical Society of America.

His lecture titles were "From microscopic to macroscopic: how what we see in the microscope can be used to explain the formation of the Himalaya" and "History written in stone: rocks as good, bad and indifferent eyewitnesses of geological processes."

Dr. O'Brien's research area is deciphering processes occurring during continental collision and associated mountain building. High mountains such as the Himalayas, Rockies or Andes are an impressive demonstration of the power of the processes acting during collision of the lithospheric plates on the earth's surface. Geophysical evidence indicates crustal rock thickness greater than 60 km in these regions – much more than the normally expected 30-40 km found in continental interiors.

William Moseley Speaks On Poverty's Impact On Ecology

William Moseley, Assistant Professor, Department of Geography, Macalester College, spoke in the Geology Department in May on "Poverty-Environment Interactions and the Political Ecology of Cotton Production in Mali." Many researchers in geography, development and economics believe that the poor and hungry are most affected by environmental change, in part because they often must destroy their immediate environment in order to survive. Dr. Moseley's talk examined this hypothesis in the cotton-producing area of Sahelian Mali. His work pays particular attention to the proximate and ultimate causes of soil degradation, the interactions between the food economies of relatively rich and poor households, and the links between national policy and local production strategies. Moseley (a Carleton grad) was a visiting professor at Carleton in spring term, funded by a Mellon grant to Carleton and Macalester colleges.

Other Talks In Our Department This Year

Among other talks this year, Dr. Michael Evans of The University of Arizona spoke to the Paleontology class about dynamical paleoclimatology with examples from tropical dendrochronology and oxygen isotopes as tools to study the El Nino/Southern Oscillation.

Also speaking in the Paleontology class was David Fox of the University of Minnesota who spoke about the extinction of large terrestrial mammals at the end of the last ice age.

Carl Tape '01, Seismological Laboratory, California Institute of Technology: "Global Seismology, From the Great Sumatra Earthquake to the Mantle."

Lauren Chetel '02, University of Wisconsin-Madison: "Provenance and Basin Analysis: Stories from Around North America."

Scott Bair, Ohio State University: "Beyond the Landmark 'A Civil Action' Trial: What the Judge, Jury and John Travolta Didn't Know."

Cari Johnson '96, University of Utah: "Tectonics, Sedimentation, and Intraplate Deformation: the last 250 Million Years in Southern Mongolia."

Gordon Grant, U.S. Forest Service: "Out, Out, Dam Spot! The Geomorphic Response of Rivers to Dams and Their Removal."

Carleton Network For Lesbian, Gay, Bisexual And Transgender Geology and Natural History Alums

The Carleton Network For Lesbian, Gay, Bisexual and Transgender Geology And Natural History Alums provides students and alums with career information, fellowship and support. It was founded in 1990 and now has 41 members coast to coast.

The network has the twin objectives of helping

reduce isolation among alums and working toward a more open, accepting and informative environment on campus for students in geology and related fields.

The network consists of a confidential list of names and addresses, circulated only to members of the network, maintained by Marilyn Yohe '88, Dan Spencer '79, and Tim Vick (Geology Department staff member). Inquiries about joining may be addressed to any of them.

LGBT folks might also be interested in the general alumni group called Out After Carleton. We are happy to provide contact information for them as well.

Geology Department T-shirts Available By Mail

We have a supply of geology T-shirts available that can be purchased by mail. The cost is \$10 plus \$4 postage payable to Carleton College.

The 2006 shirt is dark blue with white ink. On the front it says "Carleton Geology 2006," and on the back it says "The Dark Crystal... Trial By Stone" with a picture of a quartz crystal. All sizes are available.

There is also a timeless (and priceless!) special shirt





for families with multiple generations attending Carleton. The shirt features a diagram of the interior of the Earth with the core labeled Carleton Faculty, and the layers going upwards toward the surface being Post Docs, Graduate Students, Seniors, Juniors and Sophomores; the blebs of magma (which melted off the subducting plate) rising toward the surface are "Children that go to Carleton." It is cardinal red with white ink. All sizes are available.

The 2005 shirt is sold out.

The 2004 shirt is an exciting "OSHA" orange with blue ink, the same as we have been painting our rock hammers. The front patch has a take-off on a hammer and sickle shaped from a hand lens and hammer, and the back design says "Oh I'm sorry... am I intruding?" It is 100% cotton, with S and XL available.

The 2003 shirt is sold out.

The 2002 shirt is light blue with black ink, with a picture of a hand pointing to a trilobite and saying in Latin, "This is my favorite animal." L and XL are available. SPE-CIAL clearance sale price on the 2002 shirt of \$5 per shirt plus mailing cost.

Email Tim Vick at tvick (plus @carleton.edu) or give him a phone call to find out whether your size is in stock.

Fall Field Trip Goes to Utah For GSA Meeting

Last fall the annual Geological Society of America convention fell on the same weekend as our mid-term break, so the fall field trip went to Utah to take advantage of the GSA meetings. Besides spending a whole day at GSA, we had three days of exceptional fieldwork with the 40 students on the trip.

We spent a day exploring the relict shoreline features of glacial Lake Bonneville including the dramatic Stockton Bar (opposite page upper photo). The bar is an enormous barrier bar and spit complex whose top is hundreds of feet above the valley floor. Here, Mary Savina leads our discussion on the top of the bar.

Josh Walker, a geologist with the Kennecott Utah Copper Corporation, gave us a tour of the gigantic Bingham Canyon copper mine, the largest copper mine on Earth (opposite page lower photo). We visited both the open pit and the ore concentrating plant.

The photo below was taken during a day of exploring the Alta Stock near Salt Lake City under the guidance of Dr. John Bowman of the University of Utah. Here, Dr. Bowman discusses the petrology of a rock with Rebecca Lundquist '06. Photos by Tim Vick and Kevin Uno '01.



2006 Awards

Mortar Board Kelsey Dyck Phi Beta Kappa Dan Jones Sigma Xi Rachel Brown Kelsey Dyck Lee Finley-Blasi Daniel Jones Rebekah Lundquist

Class of 1963 Fellowship

Ross Mitchell

Farmclub Summer Gardening Internship

Katherine Bovee

Initiative for Service Internships in International

Development Andy Lorenz **Duncan Stewart Fellowship**

Mark Dyson William Guenthner Kendra Murray

Senior Projects – 2006

Graduating senior geology majors, their hometowns and titles of integrative exercise ("comps") projects:

Rachel Brown, Northfield, MN, "A Cyclostratigraphic Analysis of the Eocene-Oligocene Boundary GSSP, Massignano, Italy

Margaret Doheny-Skubic, Oak Park, IL, "Characterizing Groundwater Basin Flow in a Regolith-Covered, Mantled Karst Terrain in Northwest Arkansas"

Kelsey Dyck, Bluffton, OH, "High-resolution d¹⁸ O, d¹³C and taphonomy records from *Acropora cer*vicornis coral and implications for mid-Holocene climate: Las Clavellinas, Dominican Republic"

Lee Finley-Blasi, Littleton, CO, "U-Pb dating of Detrital Zircon from the Fond du Lac and Hinckley Formations of Northern Minnesota"

Daniel S. Jones, Corvallis, OR,

"Geomicrobiology of highly acidic, pendulous biofilms ("snottites") from the Frasassi Caves, Italy"

Rebekah Lundquist, Pelican Rapids, MN, "Provenance analysis of the Marquette Range Supergroup sedimentary rocks from northwestern Wisconsin and western Michigan using U-Pb isotope geochemistry on detrital zircons by LA-ICP-MS"

Grant Rozier, Alma, MI, "Geology of the Alkaline Pyroclastic flows of the Johnson Valley Reservoir, Fish Lake Plateau, South-Central Utah"

Emily Schwing, Salt Lake City, UT, "The Influence of Land Use on Carbon and Nitrogen Accumulation in Prairie Soils within the Cheyenne River Watershed, Custer and Pennington Counties, South Dakota"

Marisa Sowles, North Yarmouth, ME, "Assessing Phosphorous Transportation and the High Risk Runoff Areas, The Cannon River Watershed, Southeastern MN"

Class of 2007

Lauren Andrews Sarah Bergman Keith Christianson Nathaniel Dixon Mark Dyson Margaret English John Gibbons William Guenthner Jennifer Heathcote Kelly Hereid Gloria Iimenez John Kracum Andrew Lorenz Ross Mitchell Kendra Murray Selena Pang Donald Penman Nicholas Riordan Megan Rohrssen Ellen Root Susan Schnur Daniel Shapiro Christina Spence Cliff Swanson Carl Ulberg Sarina Yospin

Bella Vista, CA Saint Paul, MN Beverly Hills, MI Foster, RI Cannon Falls, MN Friday Harbor, WA Hurley, WI Oak Park, IL Whitefish Bay, WI Wildwood, MO Saint Paul, MN Chicago, IL Birmingham, MI New Fairfeld, CT Fly Creek, NY Wailuku, HI New York, NY Anchorage, AK Marengo, IA Minneapolis, MN Switzerland Bronx, NY Tacoma, WA Los Alamitos, CA Seattle, WA Newton, MA

Class of 2008

Karen Aydinian Michael Barrett Katherine Bovee Karin Brown Daniel Callahan Matthew Dettinger **Jacob Gold West** Ethan Hyland Hannah Kinzie Calvin Lieu Tyler Mackey Zachary McGuire Cicely Miltich Marc Monbouquette Dorene Nakata John Nowinski Frances Reid Elizabeth Ritz Samuel Roberts Perry Spector Lydia Staisch Clara Tsang

Spring, TX Walla Walla, WA Henderson, MN Madison, WI Centerville, GA Washington, PA Chester, PA Poland, ME Evanston, IL Hong Kong McFarland, WI Fanwood, NI Cohasset, MN Omaha, NE Waipahu, HI Black River Falls, WI Newport, OR Madison, WI Leverett, MA Saint Louis, MO Saint Louis, MO Hong Kong

Biogeoscience Down Under, or, We're Off to See the Beaches of Oz

(A student's—eye view of the Carleton geology/biology off-campus seminar in Australia)

by Gloria Jimenez, '07

I'm sure the first few days of the Australia Biogeoscience Program (taught by geologist Clint Cowan and biologist Phil Camill) were illustriously educational, but, honestly, my memories of them are rather hazy. I attribute this to the effect of gathering thirty-two Carleton students in one hotel in a foreign city which names its suburbs Dee Why and Curl Curl, whose city parks are populated by gigantic bats and flocks of cockatoos, where a bad situation is said to have "gone pear-shaped"...

My experience Down Under began at 8 a.m. on December 31, 2005 as I navigated Kingsford Smith International Airport trying to not to be bitter about losing my good night's sleep somewhere over the Pacific. By the next day, two spectacular fireworks shows and one set of dress sandal-induced blisters later, I was starting to wonder whether Australia was entirely populated by borderline-nudist surfer trash or whether that was just the public holiday. Certainly it seemed like the entire city had turned out the night before and gotten enthusiastically smashed, and now they were all wandering the beach as if the 41° C (110° F) heat were nothing.

In short, it was easy for us students to see why the country's nicknamed "Oz."

I think our general, giddy impression of the country after those first days can be summarized by my reaction upon first receiving Australia's multicolored dollars from an ATM: "Like Monopoly money! Too silly to be real." Like good Carls, we had spent the beginning of the program (dedicated to "getting over jet lag") eagerly exploring Australian culture. We went museum-hopping, consumed large quantities of dim sum in Chinatown, and attempted to use public transportation. We dared each other to eat Vegemite, which looks like something you'd scrape off the bottom of the oven and smells worse, and learned that the surprisingly prevalent Speedo-type men's swimsuits are called "budgie smugglers" in Australia (this is funnier once you realize that budgie is Aussie-speak for parrot). Our bemusement increased after we attended our first lectures, which featured tidbits such as how Uluru (Ayers Rock) exists because it's harder than the stuff around it, and the phrase "Land of Gondwanaland" (coined by a professor who several people independently dubbed "Scabbers" after a character in the third Harry Potter movie).

But finally we were off to school, work, and Beauty Point, Tasmania, on the way taking advantage of our total domination of the plane by playing telephone. For the next two weeks we were to live at the Australian Maritime College (AMC), enjoying Tasmania's lovely Mediterranean climate, gorgeous scenery and the "bloody great hole in the ozone layer" (according to our native coordinator Rob Elvish). Our usual days proceeded with getting up before 7 a.m. and mucking about the Tamar Estuary. This could mean anything from sailing in the 40-foot M/V Pinduro and learning Australian sailor profanity to sampling thigh-deep in an intertidal mudflat to driving around the estuary and jumping out at random jetties with water bottles, YSI water chemistry meters and secchi disks. Later in the day, we'd analyze our samples and watch the underwater video footage collected by the day's boat group, as well as play Frisbee on the AMC football field and havoc with their Internet connection (causing the occasional "kerfuffle" among our authority figures).

Generally, we looked to the locals like the circus had come to town, and we enjoyed every minute of it. We made Carleton's debut on Tasmanian TV, pretending to sample things and mostly refraining from faking Texan accents. We also got to work with AMC researchers Dave Maynard and John Gibbons, who everyone (in awe) agreed were basically pirates transplanted into an honest scientific living. Aside from knowing everything about the Tamar Estuary, they taught us important phrases such as "let's f**k this puppy," (a crude equivalent to "let's do this thing") and its natural extension, "the puppy's getting away!"

Tassie, as it's affectionately called, set the bar pretty high for our next stop at Coffs Harbor and the Solitary Islands Marine Park. Coffs gave us our first taste of Australia's very tropical north with mangroves, palm trees, intrepid National Marine Science Center researchers who used Brillo pads in their experiments, and a set of mildewy little cabins to inhabit. Also, as usual, we managed to make a spectacle of ourselves by descending upon the local grocery store en masse in order to concoct our own meals, and later exploring the small-town Australia club scene. Our daily activities tended to consist of roughly equal proportions of science and beach time (these often overlapped, too): we disturbed sunbathers and surfers alike by pulling out our sampling gear in the middle of the sand. We also went on our first scuba diving excursions (apparently a somewhat hair-raising process for our professors), where we cooed over coral growth morphologies and wobbegongs (sharks which looked like rolled-up Persian carpets, fringe and all).

Next, we zoomed through Brisbane and were off to North Stradbroke Island, a gargantuan lump of sand off the coast of Brisbane. Our time at "Straddie" taught us an object lesson in respecting Aussie marine life, which continually foiled our efforts to do science: we chickened out from snorkeling at one point after learning that a shark had recently killed someone at the same place, and at a different site, we snorkeled about one hundred meters from the shore before conceding the field to an overabundance of stinging bluebottle jellyfish. Once again, therefore, we dedicated significant amounts of time to lounging on beaches.

Our next stop at did a great deal to re-endear us to Aussie wildlife, though. After a 3-hour catamaran ride through 30-knot winds and 3-meter swells (the boat was aptly termed the "Chunder Cat" after the Aussie verb for vomit), we finally stumbled out onto what looked like a postcard, complete with turquoise waters, white sand, and clear skies. One of the first things we noticed at Heron Island was the abundance of birds, from the black-capped noddies that lined all of the trees and threatened to decorate anyone below, to the lovably peculiar mutton birds. Aside from their general inability to land, which resulted in their smacking into anything in their way, the mutton birds would spend all night huddling together and making moaning noises which fell short of creepy and instead achieved pathetic (we decided they sounded like baby werewolves).

Heron also boasted hordes of other, equally captivating wildlife. We marveled at corals on our frequent reef walks and snorkeling excursions, and ruined ourselves to dive in cold U.S. lakes with some truly amazing scuba trips. We melted while indescribably cute baby turtles motored their way down the beach, and ruined our vision by watching mother turtles dig their nests in the dark. We used bioluminescent dinoflagellates as war paint, and captured cat sharks (so named, I think, for their size, squishy quality, and the fact that they can only be petted in one direction).

By the time the program was winding down—at a yummy Greek restaurant in Brisbane, where we spent most of the time engaged in a limerick game from one of our professors' college drinking days —it had begun to seem completely normal to be in a land where you have to specify if you want ice cream in your milkshake. It no longer bothered us to call fries chips and chips crisps, half of us had slurred out "good on you" at least once, and we no longer whipped out cameras every time we saw a mangrove or turtle. What can I say? Our Oz was more brown than emerald, and the program involved more beaches than yellow brick roads, but it had started to feel like home.



Our program's only shark attack involved Sarina Yospin '07 and a cat shark like this one. The vicious creature apparently didn't like being picked up, and doubled back to bite her arm (apparently it took quite a bit of flailing to dislodge it), leaving her with what looked like a hickey and quite the fish tale. (photo by Phil Camill)



Smiling for the camera on our final night in Oz. (photo by Susan Schnur '07)

NEWS FROM ALUMS

Faculty

Eiler Henrickson '43 wrote that he had back surgery on March 13 and said, "I'm currently recuperating at Northfield Care Center. Hope to go home soon! I am to be inducted into the National Wrestling Hall of Fame on April 22nd and I'm looking forward to that occasion." (See the story about Eiler's award in the Departmental News section of the Newsletter.)

Ed and Cynnie Buchwald sent a nice note saying, "It is hard to believe that another year has gone by. Retirement continues to be kind to us. Cynnie and I have had a chance to travel to Salt Spring Island in British Columbia to see Charles and Amy, to South Carolina to see Julie and Chris, and to Massachusetts to see Adam, Nancy and Theo.

"Although Theo is only seventeen-months old he already has a fine appreciation for his Grampa's model trains. Cynnie and I enjoyed his visit not long ago despite our being exhausted by him; where do parents get the energy to have toddlers?

"Cynnie and I continue to volunteer with the National Park Service at Agate Fossil Beds National Monument. We received a grant from the Parks as Classrooms Program to create curricular materials for children living in remote parts of western Nebraska. With a population density of 0.7 people per square mile the children are either home schooled or attending very small one-room schools. We are creating materials to help teach investigative science and natural history.

"I hope you have had a chance to see the nice things that were written about the Geology Department in the May 5, 2006, issue of *The Chronicle of Higher Education*. It describes the Geology Department as 'a mother lode of female Ph.D.s.'

"I would like to remind you of how much fun it is to see you at reunion weekend. In retirement I have had much more time for such things and love to hear the stories of your lives. Please come visit."

Ed Buchwald

<u>Alums</u>

1937. Allan Matthews has updated his self-published book, "Sovereigns Peacefully Take Charge," proposing 35 progressive amendments to the U.S. constitution by ballot initiative and referendum.

1938. Mary Hill French writes that she's "looking forward to a Russian river trip from Moscow to St. Petersburg (and a chance to see friends there along the way) in August. More immediate will be editing on the meteorite impact paper that Bevan is currently working on."

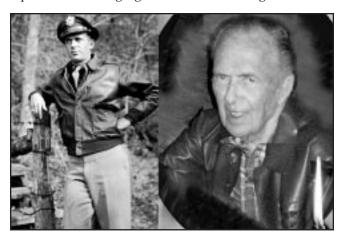
<u>1942.</u> Charles Edwards expressed concern about today's shortage of geologists, as he said, "in almost every category. The oil companies in some cases are

hiring geologists still in school. Salaries are the highest in history for entry level people. CARLS – make hay while the sun shines!" He added that the federal Mineral Management Service is also now hiring entry level geologists. **Ethel (Dode) Wonson** says she's "doing well but I have moved to a senior residence and hope that it is just temporary." She asks people to continue to use her Hopkins address for correspondence.

1945. Dick McCarthy is having trouble with macular degeneration. He is legally blind, but still is doing pottery. "I use a magnifying glass and balance scale to mix glazes and I'm trying different formulas and firing sequences."

1947. Jo Finck Berg writes that her husband, Robert Berg, is in a skilled nursing facility in Bryon, Texas. Georganna Dean Dickson is "happily settled here at a Continuing Care Residence Community (CCRC). I'm close enough to Princeton University to attend some lectures as well as lectures here at Meadow Lakes by retired professors who are also residents. Keeps this old brain working!"

1949. Jim Dorman sent a note of concern about the potential for a disastrous earthquake on the New Madrid fault zone recently. He said, "The New Madrid seismic zone is an area just north of Memphis which every week senses a magnitude 1-2 earthquake, occasional larger ones as well. Eight years after retiring, I am trying to move Memphis City Schools to pull its head from the sand - that is, to acknowledge that a really big New Madrid earthquake could leave MCS homeless and, in the worst case, kill hundreds or thousands as 50-100 year old school buildings collapse. Acknowledging also means deciding to do



Here's wishing a happy 90th birthday on September 10 to Jerry Kyle '37! After college, Jerry entered the Air Force, became a bomber pilot, and was sent to South America to use his geological experience mapping the Amazon River during World War II. More recently, he retired from Exxon Oil and now has written an illustrated autobiography entitled Rearview which can be found at: http://users2.ev1.net/~jmkyle/WebRearView/RearView.htm

something about it."

1954. Pat Bickford began a new job as Science Editor for Books at GSA in January. He writes, "I'll set up an editorial office and have an editorial assistant in June. I continue active research, publishing three papers in 2005, one (GSA Bulletin, February) in 2006, and another in press. I will have a poster presentation at the Rocky Mountain GSA in May, and I have begun a new zircon study of rhyolites from India! Betsy and I are well, busy and happy!"

1955. Joe Mancuso wrote in April that he's "Enjoying retirement traveling, playing golf, and occasionally attending geology meetings and field trips. In May I will attend the 52nd annual meeting of the Institute on Lake Superior Geology in Sault Ste Marie, Ontario. I and a few others (Dick Buchheit) have been regular attendees since the first meeting in Minneapolis in 1955. Eiler took the class to Minneapolis for that meeting."

1956. We are sad to note the death of **Bob Scheevel** at home on May 23 after fighting prostate cancer for several years. Richard Buchheit spent October 2005 through April 2006 in Dove Creek, Colorado, and he had a nice visit with Bob Scheevel in May before Bob died. The Geology Department is honored that Dick plans to donate his ore and mineral collection to the Geology Department to help build up our collections for student study. Dick wrote that he planned to visit the Department during his class' 50th reunion in June. **1957. Joseph Riva** writes, "I retired from the Library of Congress 10 years ago after 22 years on the Hill as a specialist in earth sciences in the Science Policy Division of the Congressional Research Service. Prior to that, I worked for the Smithsonian Institution, the U.S. Geological Survey (as a senior geologist) and as a petroleum geologist in the oil industry. I have authored or coauthored some 225 publications and a dozen books (including the fossil fuels sections of Encyclopedia Britannica) and served on 2 committees of the National Assembly of Science. Currently, I enjoy travel with my wife (50 state and 35 countries on 5 continents), and bird and geology watching, but most of all I enjoy playing with my 1-year-old grandson."

1958. Bill Hollweg writes he's "still enjoying West Texas. We're not back in a boom period. Kids and grandkids are doing fine. Texas, especially the western area, is really working hard on wind energy programs as well as unconventional oil and gas."
1959. Norris Jones writes that he attended a "minireunion" of the Class of '59 in Baton Rouge in March. He reports, "No other geologists there but had great fun in spite of that little drawback. Cajun food/music/dancing, day in New Orleans (wow!), speaker/dinner at LSU Faculty Club, museums, state capitol, swamp tour, and an excellent brunch at John and Susan Wilder's, the organizers of the whole thing. In the mean time, my son (Charlie) and I are working

on the 6th ed. of our Lab Manual for Physical Geology (McGraw-Hill), so it's not all party."

1960. Rene Fournier says he's keeping busy with Condor although we are saddened to report that his wife Marian passed away in March. They were married 38 years.

1961. Jeff Hanor sent a nice note saying he has started a new project with the Minerals Management Service (MMS). "They are conducting a study of the potential methane hydrate resource in the Gulf of Mexico basin (GOM), and I am working out the spatial variations in subseafloor temperature and formation water salinity, both of which affect hydrate stability. This work should provide some insight into the dynamics of heat and solute transport in ultra deep water GOM sediments. Baton Rouge, where I live, is starting to settle down after Katrina. Our population increased by a quarter million in a week, and we had an additional 3000 students enrolled at LSU for the Fall 2005 semester."

1962. John Lufkin writes that he "Started my own publishing company, Golden Publishers. I plan to publish several geology texts next year. Guidebook to Geology of the Black Hills coming out later this summer. Will teach at DU next fall—geology of national parks along with mineralogy and petrology at CU-Denver." (John, good luck with your new enterprise! We'll be taking our fall field trip to the Black Hills in October; any chance we could get a copy of your book? -Tim.)

1963. Wendell Duffield has a new book in print, "From Piglets to Prep School." It's a memoir of his early teen years, growing up in small town Minnesota. Unanticipated events sweep him off to a fancy New England prep school. Next, of course, comes Carleton. This book may not sound of interest to a geology student/grad, but the Pleistocene geology of Duff's hometown and a bit of related archaeology are cleverly worked into the story. Duff also managed to recently get a real geology research paper into print in the March/April 2006 issue of the GSA Bulletin, some evidence that he hasn't completely abandoned rocks for his second career as an obscure author. Duff and his wife Anne '64 continue to split their year between Flagstaff, Arizona, and Hayward, Wisconsin. Anne is beginning to murmur about spending all year in the Upper Midwest ... maybe Duluth, she says. Duff is still chilled by the idea of living through Minnesota winters of the sort he experienced during his piglet raising days.

1966. Bruce Langhus was asked to go to China in October to teach a workshop on coal bed methane. Beth Schwarzman writes, "Gary and I will spend the summer sailing our sailboat from southern Denmark's sandy shores north along the coast of Norway and out to the Faroes – areas where there's close to 100% exposure. Should be good. Best to all."

1971. Royston (Roy) Kruse writes, "I continue to

work with the Billy Graham Evangelistic Association as an international representative although I recently moved back to the Twin Cities after 2 years in Asheville, N.C." **Jane Willard** is co-chair of the American Institute of Professional Geologists annual meeting to be held this year in St. Paul Sept. 22-23. She says, "I invite you all to come. Visit our website at www.aipg2006.org." Mark Reed at the University of Oregon is involved in a fascinating sounding enterprise: "In one current project, which I share with an international group of geoscientists, we are drilling a 4 to 5 km-deep geothermal well in Iceland to investigate the potential for producing supercritical steam for electricity generation. My role is to model the geochemistry of the water-rock system to understand the possible well scale precipitates and potential for corrosive fluids, then to interpret the geochemical aspects of what we actually find in the ground. Drilling into active fluids (we hope) at 500 degrees C at the magmatic/hydrothermal interface will give us a direct look at a space we have speculated about for decades, but never touched directly."

<u>1973.</u> Dick Pautsch says he's "Trying to visit every county in the U.S. " Sounds like a great expedition; good luck with it, Dick!

1976. Leah Haworth Evison writes that her family "is moving back to Chicago this summer so we are in the midst of house-selling (anybody moving to DC?). Daughter Liz is off to college in the fall and still undecided about where, though Carleton is on the list.

Jan Tullis '65 Is Honored For Career Contributions In Structural Geology

February 9, 2006 - The Geological Society of America Division of Structural Geology and Tectonics has awarded Jan Tullis '65 its Career Contribution Award for 2005. The presentation was at the annual meeting of the GSA in October.

In her citation for the award, nominator Jane Selverstone said, "One experiment at a time, Jan's work over the last 35 years has quantified relationships between stress, strain rate, pressure, temperature, chemical environment, deformation mechanisms, flow laws, and deformation microstructures in common crustal materials.

"Much of what we know today about crustal rheology and fabric development is built on a foundation of Jan's experiments.

"In addition to influencing the field through her own work, Jan has played an invaluable role as a mentor to many young scientists from the U.S. and abroad, and as a dedicated advisor to legions of Brown University students."

Jan also was awarded Brown University's Presidential Citation for contributions to teaching, including advising and research. She writes, "I spend more of my time these days doing teaching and advising – I love that 'job!'"

Looking forward to seeing **Barb Rossing** back in Chicago and Carolanne Curtis (biology grad) in Sweden this summer." Leah, it was really neat seeing you and Liz this past spring – hopefully she'll choose Carleton so you'll have more excuses to visit! **Philipp Muessig** writes he has "new activities to keep me out of trouble—a team of us here will take over the Wonders of Technology building of the State Fair to showcase renewable energy technologies; and we're





Dave Gambill '77 sends word from Takoma Park, MD that he and his wife, Susan, adopted a daughter in February 2005; she was 10 months old and then living in Arkhangelsk, Russia. Now he writes, "She just turned two and is an absolute delight. Susan's psychotherapy practice continues to grow. I left Conservation

International to work pro bono as Director of Development for ACAP (formerly WildAid) to help stop the illegal wildlife trade in China. We're running the largest conservation education program in history in Asia, reaching about 1 billion people (yes, billion) a week with public service announcements that feature international celebrities like Jackie Chan, Ang Lee, and Yao Ming. You can view examples of our psa's on the website www.wildaid.org, under the ACAP program. I continue to do Aikido and garden, when I can find time between playing with and picking up after our daughter. I'm working from home these days, which greatly decreases my stress and increases my time with my family. I love it." The wheelbarrow picture shows David and Mileva gardening this past May at their house in Calif on a short visit there, where they hope to live in the future. The other picture shows the whole family - David, Susan and Mileva, Christmas 2005.

planning a 'peak oil' road show for local government." **Will Maze** is still at ExxonMobil Exploration Co. He writes that he's continuing with Middle East geology, and has made a number of trips there. "Having a 15-month old boy at home makes for a big change around the house!"

1977. The highlight of the year for **Bruce K. Nelson** was leading a geology trip down the Colorado River through the Grand Canyon for 13 days. "It was my first time through and it was everything everyone raves about - and more. Anyone who was a geology major has to put a Grand Canyon river trip in the top 5 things to do in their life. No exageration." <u>1978.</u> Steve Ingebritsen has received two new hip joints and there is a 2nd edition of his book, "Groundwater in Geologic Processes" (Cambridge University Press) out; he's been named a Fellow of the American Geophysical Union (Congratulations Steve!), and his niece Sarah is going to be a junior at Carleton this fall (probably a political science/international relations major). Craig Banister reports "a good year. Not overworking myself which I was prone to do. Still going home in the spring and fall to the family farm to help with planting and harvesting. Colorado is nice this time of year." Wes Danskin has been teaching water management in Jordan a couple of months each year, "a great adventure!" 1979. Judy Lungren is working less and fiddling more. Judy says, "The River City Ramblers old-time string band had our first weekend-long contra-dance gig in January 2006 in Bozeman, MT. Got married to Rick Noll on 6/29/04. Visited a friend of Rick's, **Rob Alexander '83** (Carleton geology alum), several times in Houston." Marie Del Toro sent word that she had a great spring in Portland coaching her son's track team (3rd and 4th graders). "We had 32 kids go out for the team and we enjoyed getting to know all of them and encouraging them to try new events. Was my Carleton track career really 25+ years ago?" Mark Helpenstell writes that he's "Still at Boeing (can it really be 20 years?!) Sons are in college, single again, traveling, skiing, and diving. I finally made it to the summit of Rainier last summer! Anybody visiting Whidbey Island? Look me up! Anybody in Wichita? I seem to be there a lot these days!" Dan Spencer and his partner Pat had another eventful and productive year. Son Kyle is an engineering student at Montana State and daughter Laurel is a sophomore in high school. Dan taught a course entitled "Introduction to Environmental Regulation" and led a seminar in Nicaragua to examine issues around environmental justice, human rights and sustainable development. 1980. Elizabeth Hughes Weide (Libba Huntley) writes, "Kat and Will are a delight as young adults and I'm graduating in May 2006 with a M.S. in Counseling. I'll be teaching college success classes this summer in the Educational Opportunity Program (EOP) at California State University, Sacramento. I

plan to start a private practice focused on life and career transitions and I'll continue to teach at the local colleges. In August, my husband George and I are going to Iceland—graduation trip!" Reid Fisher writes, "Same good stuff: kids, music, geology, in no particular order. Vicariously re-experiencing kindergarten has been a blast. Our two girls, age 6, are indoctrinated to recognize landslides, I'm afraid." Vicki Hansen and John Goodge are doing well and have celebrated their fourth year up on the North Shore; their son Casey is now in 8th grade and daughter Berit is in 6th. They're loving the gardening and outdoor recreational opportunities of the Duluth and northern Minnesota area. John spent a month in Antarctica this past winter.

1981. John Hankins says his "nest will be empty this September when daughter #2 heads off to Macalaster College. We were successful in our quest to get her to apply to a small liberal arts college in the Midwest, it was just the wrong one! Beth and I are headed to Alaska in July for a 1200-mile bike odyssey. Hope to see Jeff Mow." Gary Walvatne writes that he "learned a few weeks ago that I passed the California-Specific examination for geologist licensure. By the time this newsletter goes out, I'll be a state-licensed geologist along the 'Left Coast' (WA, OR, CA). TechLaw is going through a major reorganization, splitting into different firms under a holding company to ease USEPA's concerns regarding conflict of interest — I'm transitioning to the environmental management systems (EMS) group at TLI Solutions, where I'll work with commercial and government clients on a more holistic perspective of environmental, economic, and social responsibilities. Next week I celebrate 19 years in the same (albeit sold, merged, reorged, renamed) consulting practice." Heyo Van Iten recently had a paper, featuring the Carleton College and Clermont Historical Museum Brainard fossiliferous limestone slabs and entitled "Possible taphonomic bias in the preservation of phosphatic macro-invertebrates in the uppermost Maquoketa Formation (Upper Ordovician) of Northeastern Iowa (North-Central USA)," accepted for publication in the Journal of Taphonomy. Next he was off to Vermont and Ontario to look for Ordovician and Silurian conulariids and explore the Taconic overthrust belt and the Lake Superior shorelines.

1983. Marcia Bjornerud writes, "My book, 'Reading the Rocks: The Autobiography of the Earth' (2005, Perseus/Basic) is coming out in paperback this fall. If you've ever had trouble explaining to friends or family members why you like rocks so much, let me immodestly recommend my book as a gift for them. Four and a half billion years for about \$10 – what a bargain!" Let's see, that's 4.5 million years per penny... Yes, it is a bargain! We got a nice note from Kurt Neher; he said, "It has been a long time since I sent anything in to the Geology Newsletter. I am still

enjoying my work with Occidental Petroleum, and am in the process of moving once again. Luisa, Christian (17 years), Alex (13 years), and I are moving to Bakersfield, CA from Quito, Ecuador. Bakersfield is a different place, but at least we have the mountains nearby. We decided to allow the boys to finish out their school year in Quito which means more miles on my frequent flyer program. If anyone happens to be passing through beautiful Bakersfield, stop by and visit." Keith Knudsen writes he's "still at the California Geological Survey, working on earthquake hazards. Our San Francisco office moved to the Menlo Park campus of the USGS this Fall, so I'm enjoying increased interactions with folks in the junior, federal survey. Much of my free time over the last couple of years has been spent working with the Northern California Chapter of the Earthquake Engineering Research Institute (www.quake06.org). We have been capitalizing on all of the attention being paid to the 100th anniversary of the 1906 earthquake and working to make Northern CA more earthquake resilient. Family is doing great; we are still in Albany, an approximately 1-square-mile city north of Berkeley. Visitors are welcome." Amy Sager Patton was elected to the Ashland School Board last spring. "It's been an interesting opportunity to immerse myself in all aspects of public education-among these supporting green-fuel buses, green school buildings & IPM for playgrounds," she says.

1984. Chris Foley is finding it challenging keeping up with his three children, "the oldest of which is starting to look at colleges! Geesh! I am a board director for an orphanage in Haiti that we support and continue to care for critically ill and injured children in the Pediatric ICU at the Children's Hospital of the King's Daughters." Carolyn White writes "I moved on to a job with the local government trying to infuse natural channel design, wild flowers and trees into Houston area flood damage reduction projects—great challenge! Busy with Jasper (9.5) and Corinna (5). Lots of

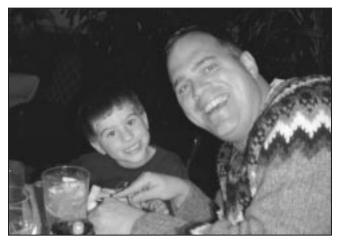
fun with music (Jasper- viola; Corinna- cello). Still renovating our old house in Houston and trying to get to the UP each summer for more fun. Hope all's well!" **Meg David** wrote last summer, "I'm back from Sydney and now work for the San Francisco Estuary Institute. Just spent two weeks sampling on the Bay. Aside from the sea sickness and almost going overboard, it was great!" Pipestone Vinyards, owned by **Jeff Pipes** and **Florence Wong '84**, was featured on the Southern California PBS station KCET program "Road Trip" in January. Host Huell Howser and crew visited in October to shoot a segment on Paso Robles and agro-tourism. The program showcases Pipestone Vineyards and focused on Wong's unique use of Feng Shui to create an organic balance in the vineyard and winery. The program aired via satellite on PBS stations throughout California and the West. Christine **Smith Siddoway** is spending the summer at Columbia University this year, and she writes, "Antarctica continues to be the main focus of my geology endeavors — particularly since I am between Antarctic field seasons on a 3-year grant, but also due to a fair amount of 'service' to the US Antarctic program: running a workshop; on the organizing committee for the next 'Antarctica Geology Olympics' a.k.a. 'ISAES 2007' to be held in Santa Barbara, CA. I'll get in to the fray with two illustrious Carleton women in the coming year - Fawna Korhonen '97 will join my field expedition to Marie Byrd Land (ANT) this year, and **Megan Anderson '98** will fill the new tenure-track faculty position at Colorado College."

1985. Peter Cole writes that he's "added MLIS to my name recently and I'm promoting ESC services and World Language collections at my library branch. Stop by and help me manage the Korean, Russian, and Vietnamese materials!" Kristin Grady Mitchell says her kids are growing. Ben is 11 and Katie is 7. I still love being home with the kids. "I spend most of my time in the car, volunteering at school and church,

Christine Siddoway '84 sent this picture last November, saying, "There's been a Carleton reunion in Antarctica, and here is a photo to prove it! Joel Mayron '85 flies for the NY Air National Guard. John Goodge '80 and I are here doing field work. Although an outdoor environment Antarctic shot wasn't possible, at least we got a picture of all three of us in McMurdo— and here it is!"



and taking the kids to lessons, appointments, etc." Glen Carleton writes, "My 5-year-old twin girls are a joy—they are becoming more complex and interesting people every day it seems. All four of us are simultaneously dreading and excited about kindergarten next year. We enjoy our large yard and next-door neighbors with similar-age children. Our ongoing efforts to spruce up (renovate is too strong a word) our 140year-old house are slowly yielding results. We enjoy swimming in and puttering about on the Delaware River. I may learn to fish someday and take advantage of having an anadromous fish population swimming by my front yard, but it's not looking good for this year. I'm having a great time doing groundwater-flow modeling at the USGS. Interesting projects and new software (USGS SEAWAT code) have made work interesting and enjoyable. I feel lucky but anxious—this is not a good decade to be in government. However, water is getting scarcer, so there will continue to be at least some demand for groundwater hydrology, so I'm cautiously optimistic. Enjoyed reunion last year and hope to be back in 4 years." Congratulations to Jon Parshall on the publication of his book "Shattered Sword: The Untold Story of the Battle of Midway." Jon coauthored the book with Anthony Tully. According to the book jacket, "Many consider the Battle of Midway to have turned the tide of the Pacific War. It is without question one of the most famous battles in history. Shattered Sword offers a new interpretation of this great naval engagement and makes extensive use of Japanese primary sources." Brad Werrell plans on "finishing family practice residency July 2006. Whew! Working like the Dickens himself—now moments away from publication of an educational software collection. Attempting to purchase a medical practice in Fairbanks, AK. We'll see. Stepdaughter Sara is a fresh-



man at Carleton. Wife Jen (Rothwell) is well, sons

Harrison (7) and Kenneth (5) are quite vigorous!"

Bill Dewey sent a nice note saying, "I was honored at

our 20th reunion last June to get a service award from

Bill Dewey '85 and his son Liam – "Note that he has my smile!"

Carleton, and even more honored to be able to share this award with my classmate Tunie (Andrea) Howland '85. My wife Cristine '92 and our kids, Alex(andra) who is seven and Liam who is four are all well. Cristine is working for a documentary film distributor and was able to go to Cannes, France for a week earlier this month for 'work.' Carleton angle her new job was cemented for me when my classmate Emily Stevens, herself a documentary film maker, spoke highly of the the film makers Cristine's firm, Roco Films, represents. My firm last month joined an affiliation of like firms, United Benefit Advisors, http://benefits.com/index2.html. We were 'nominated' by a colleague I have known for 21 years whose daughter, Amber Shields, is a sophomore at Carleton! We believe that this UBA affiliation is a way for smaller firms such as ours to compete with the large, national firms. I have gained weight since graduating. My goal to be svelte was not achieved at my 20th reunion as I initially intended. On New Years Eve day I attended my first Weight Watchers class and am happy to report that I am -18.8 pounds YTD. My goal is to lose another 20 and to be about 185 - still 20 pounds over my fighting weight when at

Carleton." **1986.** Mary-Russell Roberson announces the publication of "Exploring the Geology of the Carolinas: A Field Guide to Favorite Places from Chimney Rock to Charleston" by her and Kevin Stewart (UNC Geology professor) by UNC Press in January 2007. Congratulations MR, we hope it sells millions! Got a call from John Bernstein recently; John was building a sand box for his children and was looking for information about different types of sand. He also sent a note for the newsletter, saying "We added a fourth to our brood. Quincy Alexandra was born on Easter morning. Her older siblings: Sydney (8), Paige (5), and Oliver (3) mostly fight over whose turn it is to hold the baby. They are all great with her though Oliver occasionally mistakes her for a rugby ball. I am still working at Sit Investment Associates, an asset manager in Minneapolis. I occasionally get to put my geology major to use, at least tangentially, when analyzing oil & gas exploration companies." **1987.** We got a nice letter from **Chris Carlson** recently. He said, "The past year has been one of major changes for my wife, Martha Anderson ('87 physics), and I. Nearly a year ago, after accepting new jobs with different USDA agencies, we relocated

ly. He said, "The past year has been one of major changes for my wife, Martha Anderson ('87 - physics), and I. Nearly a year ago, after accepting new jobs with different USDA agencies, we relocated from Madison, WI, to the Washington, DC, area, purchased a house in excess of 3x more costly than our old house (right at the peak of the DC housing market), and had our first child on November 28 (Niklas Alexander Carlson). The way we figured it, we might as well have gotten it all taken care of in 2005. The transition to DC from Madison (God's Country) has been a bit rocky. Congestion, long commutes, service and sales people with no concept of service and no

regard for their customers, etc, etc. We are looking forward to getting out to the wonderful cultural opportunities in the area, all of the historical sites, and experiencing the coast and the Blue Ridge this Spring and Summer. In June 2005, I began working for the US Forest Service as the first ever national ground water program leader. In this position, it is my responsibility to finalize internal agency policy on ground water resource management and introduce that policy to the regions and forests/grasslands. My primary goal is to convince technical staff and decision makers that ground water deserves consideration along with the other recognized forest/grassland resources during project and permit evaluations. Luckily for me and this fledgling ground water program, there are many folks in the upper echelons within the agency that recognize that water and the availability of high-quality supplies for human use has the potential to be the single most significant resource issue for the agency in its second century since the agency manages the headwaters and recharge areas of many locally and regionally important stream and aquifer systems across the country. DC is definitely a great place to visit. Hope to see you here sometime soon." A card last summer from Mike Macicak said he was heading up to Alaska for Craig McCaa's wedding in Fairbanks. Mike added, "We are still sweating it out in Austin, Texas watching the kids grow up way too fast, and I'm still playing rock and roll. Come on down and visit!" Kristin **Hazard Hamilton** writes that her twin boys, Finn and Liam, turn one in June.

1988. Carolyn Carr has been busy with her 1 year old daughter, Sylvia, and she's "doing small bits of professional work mainly in our South Minneapolis neighborhood. This includes working with volunteers to help restore the vegetation along the Mississippi River Gorge, and encouraging homeowners to plant rain gardens using native plants." Sean Weekes has his first child on the way – a boy due June 28th – but he writes they "still can't agree on a name. Otherwise, hair is going gray, but it's all still there. Life goes on..."

1989. Carol Ormand sent a note via passenger pigeon recently: "Johnboy and I got married in August, at Pinewoods camp in MA, during English and American dance and music week. It was, and continues to be, a blast. I'm doing contract work, about half time, for Carleton's Science Education Resource Center. Check out my pages for Early Career Geoscientists:

http://serc.carleton.edu/NAGTWorkshops/earlycareer/index.html I'm studying architectural drafting, thinking about whether I'd like to switch careers to design science buildings for colleges/universities. The main impetus for that is a desire not to have to move to where the jobs are, so academia is probably not in my future. (John and I live with his Dad, so

that my father in law can stay at home for as long as possible.) We live just southeast of Madison, which has a weekly Tuesday night contra dance with an open band. I am often the only melody instrument player — it's really pushing me to play better and faster! My fiddling is coming along.' Congratulations to **Ben Edwards** who recently received tenure in the Geology Department at Dickinson College. Good job, Ben. Ben also wrote, "We're moving to the UK this June, where I am going to take over the directorship of Dickinson's program for science students at the University of East Anglia for the next two years. So if you know of any Carleton alums traveling to the UK in the next two years, please ask them to stop by Norwich and visit! Kim and the girls are looking forward to gloomy British Isles weather, with lots of football...and we'll be back to our cozy home in Carlisle in August 2008 (anyone looking to rent a house in central PA for the next two years???). I'm also starting my first NSF-funded project this summer in northern BC, using volcanic deposits to constrain paleoclimate and hopefully the location of the Cordilleran Ice Sheet at about 1 Ma. We'll have a big crew, including two Dickinson undergraduates along with graduate students from the University of Pittsburgh, where my co-PI is based." We had a really nice visit with Holly Ewing a few weeks back when she visited Carleton. I'll let her explain: "I am in my second whirlwind year in the Environmental Studies Program at Bates College and I was lucky enough to be back on campus for a few days as a part of a team from Bates visiting Carleton to learn some about how Carleton is handling issues of diversity on many fronts. We learned a lot as a team and I got to meet some of the new members of Carleton's Geo Department. I was lucky enough to have dinner with Carolyn Carr (and Jonathan and little Sylvia Rose) when I was passing through." Over the past year **Sonja Wolter** has continued traversing the globe, focusing mostly on the extreme southern hemisphere. She was at Palmer Station in Antarctica last winter and took a jaunt (science cruise) up around Chile and Argentina. Among her observations, she wrote (while crossing the Drake Passage on the icebreaker Laurence M. Gould), "While spending my two winters at Palmer, I always felt sorry for the poor sods who had to cross the Drake Passage, only spend a couple days on station, and then have to go right over the Drake Passage again. Now that I am an office drone, however, I thought that potentially throwing up for a couple days would be a decent exchange for some time away from my usual meetings, phone calls and excel spreadsheets. I think I was right. Well, I haven't thrown up yet, and there's still time for that, but I'm still going to suggest that I was right." Karen Merritt writes, "Who knew this would take so long? I'm almost finished with what has been a fascinating Ph.D. project. The degree is

Environmental Engineering and the question was what happens to industrial Hg pollution when you discharge it into an estuary (short answer: nothing good). It's almost time to go find one of those things I had before going back to school...what was that called...oh yeah—a JOB! It'll be great to be done." Joseph Walser says "Radha and I had a baby girl on April 1, 2006. We named her Tara after an Indian goddess who protects ocean travelers (among other things)."

1990. Mark Newcomb reports he's going back to school at the University of Wyoming for undergrad studies in economics. **Rebecca Arenson** moved to Seattle in early Fall 2005. She writes, "It's great to be back at the Pacific NW and in a more relaxed environment (and out of the DC rat race). I talked my office into letting me transfer to our Seattle office and into a more science-focused position. All in all, a good year." Andy Garrett sent a nice note saying, "It's an exciting job transition time for me- I am going to be starting this summer at Columbia University's National Center for Disaster Preparedness as their Director of Disaster Response and Pediatric Programs. It's a 2 track position that is a major switch for me after practicing Pediatric Emergency Medicine clinically for the past 3 years. I am excited to move into a more public health/advocacy/policy position - something I've been looking to do for a year now. This past year I was fortunate to be involved in disaster medical response to Nias, Indonesia after the tsunami and 2nd huge earthquake. Then of course there was Hurricane Katrina - I was the Chief Medical Officer of FEMA's MA-2 DMAT medical team that was one of the firstin groups to the New Orleans Airport. Both were overwhelming experiences, and ones that have strongly motivated me to stay working in Disaster Medicine for my career. It is a huge bonus to have a background in geology and a crazy lifelong obsession with natural disasters. Jennifer is doing well, still practicing about 20% of her time as a neonatal hospitalist in Boston, and the rest as the Clinical Product Manager at PatientKeeper, Inc., a medical technical company that develops physician productivity software for PDA's. Kids? None yet, but finally seriously thinking about it..." Drew Cromwell writes, "I just got off active duty with the Coast Guard and have returned to reserve status. I served as the Homeland Security Chief for the Ports of Los Angeles & Long Beach since being recalled after 9/11. My departure from active duty was delayed 6 months due to the Hurricane Katrina Response; I served as the air operations director for pollution response. Unfortunately, I'm not returning to flying for the airlines." **1991.** We note with sadness the death of **Derek**

Brooks, who died of cancer at home on June 2. After earning a masters in geology at the University of Wyoming and a law degree at Washington and Lee Law School, Derek had worked for the law firm of Hinkle, Hensley, Shanor and Martin in Roswell, New Mexico since 1999.

1992. Sean Kempke writes, "Life by the lake has been good recently. Ivy finished law school and we are enjoying our new house in Duluth. We have two dogs now (both without tails) from a local shelter (Agnes) and from the Katrina aftermath (Nola). We're also expecting a new family member in August (hopefully also without a tail!). Residency has been great despite the hours and we look forward to seeing anyone passing through Duluth!" Congratulations and best wishes to Patty Weston and Aaron Noble who were married in November of 2004 in Seattle. Since their wedding they've done quite a bit of traveling including Argentina, the Italian Alps and Mexico. Aaron teaches high school physics and Patty is a geologist and project manager on environmental clean-up projects.

1993. Ben Surpless – Congratulations! He writes, "Kathy and I just had a baby girl! Kayla Rose was born on April 14, 2006, weighed 8lbs 15 oz and was 21" long at birth. Mom and Kayla are doing great!"



Liz Salomon '93 (Natural History) writes: "2004 was a remarkable year for me and my partner Amanda.... We bought our first home (a teeny Victorian cottage in Somerville, MA) in January, we were legally married in May, and we learned that I was pregnant with twins in August! Our beautiful daughter and son, Adeline Rose ('Adi') and Elijandro Gavriel ('Gavi') Escamilla-Salomon, were born on April 4, 2005 and life has never been the same. We are LOVING our new life as Moms and spend the small amounts of spare time we have working (she as a Victim Advocate and Chef and me as a HIV Researcher and Yoga Teacher) and trying to have a quiet moment together. Life is wild, but wonderful. Please come visit if you're ever in town!"

Welcome to Kayla Rose. **Dave Lund** writes, "I'm now living in Pasadena with my wife Kate, daughter Etta, and dog Max. We moved out here from Woods Hole for a postdoc at Caltech. After many years in the ocean, I evolved and now study paleoclimate archives on land (I'm using stalagmites from Borneo to reconstruct long-term changes in El Niño). Our daughter is just over a year old and keeping us entertained as she explores her world. Pasadena is a nice place, with

Massachusetts Parks Program Director Jill Baum '92 received the Brenda Cercone Award at this year's Excellence Awards Ceremony, which followed the Passion for Service Award she received in 2005. Both are awarded to those who give their all to what they believe in. That definitely describes Jill.

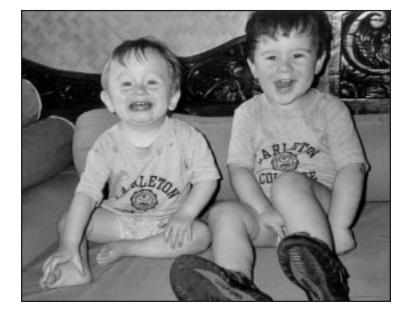
Joining an SCA summer trail crew in 1987 in Idaho while in high school, she said, "That changed the way I looked at the world. I knew I needed to be outside and connected to the land. I majored in geology in college, which is about as close as you can get to the land, and I went camping all the time." She went on to lead eight high school trail crews and has spent the last five years directing first the Adirondacks Corps and now the Massachusetts Parks Corps.

SCA Massachusetts Parks AmeriCorps, led by Jill, engages its members in a variety of high level spring and summer trail crew activities, following the winter focus in local schools. They work with rock and timber to repair and relocate trails and create watershed protection and erosion control. They are on duty for ten days then have four days free to enjoy the area — to hike in New Hampshire's White Mountains, visit Northampton and the five-college area, or explore southeastern Vermont.

every other corner. And since we're in southern CA (or SoCal as its called around here), we're trying to learn how to surf. So far, things do not look promising." **1994.** Naomi Lubick, a reporter and writer for Geotimes magazine for the past several years, recently had an article published in Nature (good work, Naomi!) on how the 1906 San Francisco earthquake catalyzed new studies and made seismology a national priority. Recently she's started a new job writing for ACS' Environmental Science & Technology. She says, "I'll be missing seismology stories, but this new job is going to be quite interesting! Plus I still get to go to AGU." Frankie Ridolfi has started a filmmaking program at Boston University Center for Digital Imaging Arts in January. He says, "No idea where this is headed, but having fun so far. Also getting back to flying hoping to get my private pilot's license by fall." Myonsun Kong is relieved and happy that her husband William received tenure in the Colgate University geology department this year – congratulations William! When Myongsun wrote in January she was suffering a bit of cabin fever, looking forward to the tulips coming up in her garden... hopefully by now they are up and beautiful. Richard Kay and his family were caught by Hurricane Katrina in New Orleans; they were reported to have food, water and provisions and were canoeing people out of the overwhelmingly flooded 9th ward and surrounding area. 1995. Dan and Trish Turner-Gillespie report from Portland, Oregon that Dan is working as a hydrologist with the Department of Environmental Quality and Trish is a school psychologist at a middle school. "We have a son, Quentin, who turns 3 in May, and another son Samuel, born in March." [This really should be in '94 and '96 so I'm going to split the difference]: Kristin Ulstad and Scott Propson show up in Northfield from time to time. And Kristin, thanks

mountains a few minutes away and a taqueria on

Aron Clymer '94 writes, "My wife Larry and I have TWO 2-year ODs at the moment! Matthew (at left in the picture) just turned two, and Ethan will be three in a couple of weeks. So they are both only 16 years away from being freshman Carleton geology majors! We adopted Matthew when he turned one year - he was in the foster system in our county since birth. I'm in Berkeley's evening program getting my MBA, courtesy of the Carleton Loren Business Fellowship, and building some software for a residential solar photovoltaic system installer on the side. Larry is a pediatric physical therapist working for John Muir Medical Center. So, suffice it to say, life is splendidly hectic right now. We all live in Walnut Creek, 15 miles east of San Francisco. Visitors are encouraged and always welcome!"



for your holiday card! They are living in St. Paul and ran the Twin Cities Marathon last year... Kristin is a nurse at the University of Minnesota Hospital in the solid organ transplant section, and Scott is doing computer security for a local company. **Kate Jesdale** reports she's still loving teaching 7th and 8th grade science in Vermont. She says, "I've bought a house, I love living in Burlington, too!"

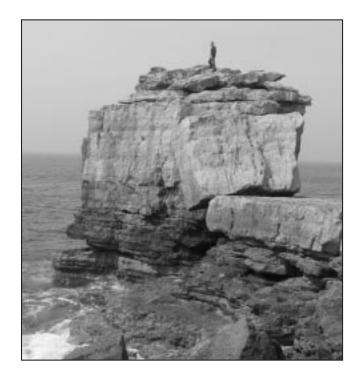
1996. Karissa Baker is still living in St. Paul and teaching high school Earth Science. "This year's big news is that my husband BJ and I welcomed our son, Theodore (Theo) Baker Bonin on Feb. 27, 2006. Life with a new baby is amazing and exhausting and certainly puts life in perspective!" Congratulations Karissa – yes parenthood is something new and wonderful! Stephanie Phippen and Dan Feiveson ('97) are still in Colorado. "...all's well and the exciting news is that we're expecting a baby boy literally any day now. Hello to all." Karen Gran writes she's "back in Minnesota again! Rik got a job at UMD, so we moved the family to Duluth this fall. I finished up my Ph.D. at the Univ. of Washington in December and just started working for NCED (National Center for Earth-Surface Dynamics) at the U of M, Twin Cities campus. Right now, I'm coordinating and developing curricula for a new graduate program in stream restoration. Alex is a happy 2? year old, who loves shoveling snow and throwing rocks into Lake Superior." Andrea Stein Figueroa last year completed her master's degree in geology at California State University, Fullerton, on quaternary geology of the Sierra Nevada Mountains.

1997. Thankfully, David McGee can report, "Our house took three feet of water after Katrina, but Rachel and I have come though things remarkably unscathed. We're currently enjoying a last spring in New Orleans before heading to New York this summer where I'll continue my Ph.D. at Columbia." Laura Veirs '97 was featured in a November 16 SF

(San Francisco) Weekly interview titled "Cheers for Veirs" and a November 14 Los Angeles Daily News article titled "Laura Veirs is blazing like 'Meteors' " about her new compact disc and her touring schedule. "Year of Meteors," Laura's fifth album, was reviewed in the October 20 issue of Rolling Stone magazine and received three out of four stars. The reviewer called it "a folk-schooled reverie with a dark undercurrent... [Veirs] reps for sensitive smart girls everywhere." The song "Spelunking" was named the Key Track. Go Laura! Kim Knight writes she's "heading to Chicago for a post-doc in chemistry at University of Chicago / Argonne National Laboratory in July so I'll be in the neighborhood!" Josh Feinberg had some good news: "Although I still can't quite believe it, the University of Minnesota offered to hire me as an Assistant Professor. I'll be joining the Geology & Geophysics Department in Minneapolis in November of 2007. Until then, I'll be finishing up a postdoc position here in Cambridge, England. My research focuses on two subdisciplines: rock magnetism/paleomagnetism and mineral texture studies (e.g. what can we learn from preferential alignment of minerals)." **1998. Pete Moore** says he's back in school for hopefully the last time. He adds he's "Planning to poke some holes in a Swedish glacier, hoping to find a Ph.D. down there before too long. Still commuting during fall term to Grinnell College to teach their intro geology class." Allison Payne reported in from the far corners of the world. She writes, "I was in South America for three years, doing Peace Corps in Bolivia and traveling. The last three years I've been a nomad, working as a park ranger in Katmai NP, Alaska, in the summers, amid the brown bears and the volcanoes, and spending my winters in Mexico doing the music thing, gardening, surfing and eating free-range beef tacos. I can't complain. I decided to settle down for a while, so I can form a serious band and make friends I don't have to say goodbye to so



Lindsay Schoenbohm '97 teaches at Ohio State University. This picture was taken last summer on her trip to the Pamir Mountains in China. Two years ago she also traveled in South America on the Puna plateau (Andes) in NW Argentina. You can find her web site through the Carleton Geology web site.





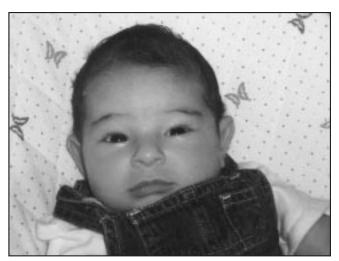
Brian Klawiter '98 writes, "Having left the U.S. Forest Service, I'm now a self-employed building contractor in Duluth. I'm still doing a little archaeology on the side but mostly I'm doing construction and renovation work, anything from stained glass to log cabins. Here's a photo of me working on rebuilding an 1880's log schoolhouse."

often, and I figured grad school was a good excuse to be in one place for a while. So this fall I'll be starting a masters in volcanology at the University of Alaska, Fairbanks. And I'm blessed with doing my research in the remote wilderness park where I've been working, at the site of the 20th century's largest eruption. I am truly thrilled." Three Carleton College alumni— Deb Cussen, Chase Sparling-Beckley '04, and Miranda Roth '04—played for Team USA in Ultimate at the 2005 World Games in Duisburg, Germany. They went undefeated against the best co-ed nationals teams in the world, bringing home the gold medal on July 24 against Australia. Alex Nord '01 was an alter-

Aaron McDaniel '98 visited a nice geologic feature on the very tip of the south coast of Portland, England while he was visiting some friends (fellow geologists and geographers) that he met in graduate school. He writes, "Speaking of grad school, I am now the proud owner of a shiny newish MS in Geography (GIS/Remote Sensing) from the University of Utah. I lived in Salt Lake City from 2003 to 2005 while in school for my Geography Master's and I ran into a few geo Carls. One was Cari Johnson '96, now on the faculty in the Department of Geology there. I also ran into Bert Granburg '90 who works at the *Utah Automated Geographic Reference Center (AGRC).* I'm now in Washington, D.C. working in geospatial technology, specifically in imagery and raster data. I'm really digging it out here and I plan on staying for a little while. I'm still getting in the usual trouble (fast cars and motorbikes), and life is good. I don't do so much on the geology front these days in an 'official' capacity (one of our clients is the USGS, however), but I do find myself being the handy 'guy who knows about rocks' when I'm out hiking with friends. Still, the crossover between geography and geology keeps me in the earth science realm and I am really enjoying my new career."

nate for the team and is pictured in the Wikipedia

page defining Ultimate Frisbee. Asked what's new, Pete Erickson writes, "Lots! Laura Veirs '97 and I split up and I'm pondering school, career change, and/or a move-seems like everything's aligning for something new... But I'm still living with **George Oliver '97** and he's building a soundproof band room in the basement so if only we can convince Miles Mercer '98 to move out here we can reunite our band and rock the GEO picnic in 2007." The news from Megan **Anderson** is that she finished her dissertation in July and "after two months getting in a few last canyoneering trips in Arizona, I headed out to California where I'm currently a postdoc at the USGS. I'm doing a structural modeling project in the Seattle, WA, area that is aimed at better understanding active crustal faults in the Puget lowland. A web page describing the project is at: http://geology.usgs.gov/postdoc/profiles/anderson_megan.html. The other exciting news is that I was offered and accepted a tenure-track position at Colorado College! I'll be starting in January 2007. I'm sure you will be seeing me in the Keck schedule in the coming years!" Congratulations Meg!!! 1999. Alison Anders writes, "It's been a big year! I finished my Ph.D. at the University of Washington in July and started a postdoc at Yale in October. Got married in Australia in December. Lately, we've been working on the 2-body academic couple problem and interviewing for jobs together. Also, looking forward to a BWCA trip this summer!" Congratulations on everything Alison – let us know how things work out for you – Tim. Greetings arrived recently from **Heidi** Guetschow and Noah Finnegan. Heidi is finishing her first year of law school at Cornell University.



Welcome to Maya Abigail Chalom, born August 7, 2005 to Alison (A.J.) Chalom '99 and her husband Adam. Congratulations A.J. and Adam!



Last December Anna Nelson '00 sent this nice picture of her and her fiancé JB Laloë. She wrote, "The picture was taken two weeks ago on Cape Cod, when IB and I were at home for Thanksgiving. This is where he proposed - it was soo beautiful! I started working for the British Antarctic Survey (in Cambridge UK) in August, after finishing my PhD at Cambridge last summer. This is a permanent post and I am super excited about it." Anna is a glacial sedimentologist for the British Antarctic Survey and this past winter was in Antarctica, camping on James Ross Island for two months and collecting rocks. She's also playing frisbee on the Great Britain national team and loving it. She said, "I can't believe I've been here for 4 years and am on a contract for another 5! Cows, colleges and contentment? I've got pubs, pints, and punting!" JB is in his final year of his PhD studying physics, also in Cambridge. He was training for a marathon in April. They plan to be in Cambridge for at least the next 5 years.



Last summer **Kevin Jacobs '01** hiked the Pacific Crest Trail from Mexico to Canada. Kevin writes, "I have reached the conclusion, geologically and otherwise, that I love the West Coast. Everywhere I look, the vistas amaze me and the wilderness areas are second to none. The trail is well graded so I can hike big miles and still nap in every meadow and swim in every lake. 2,600 miles later, I'm skinnier, sorer, and happier for my troubles."

Noah is finishing his Ph.D. in the fall from University of Washington and will be starting a post-doc at Cornell in the department of Earth and Atmospheric Sciences in November. "We are getting married on June 10, 2006 on Block Island, RI. This summer, we're looking forward to a trip to Alaska and six weeks in Paris, France." Congratulations, and best wishes from the Geo Dept.!! Got a card last summer from Mike Rhodes saying he'd finished his M.D. and was working in the hospitals as a resident. Chuck McCallum writes that he finished library school last year. He says, "Apart from having no connection to either libraries or geology, it seems to be going well." Chuck is living in Roxbury, MA.

2000. Deb Goodwin has been sailing with the Outward Bound and high school Semester at Sea programs this past year. "I'm excited to begin grad school in Oceanography at UNH this fall, with a research focus in remote sensing and the long term goal of teaching," she writes. **Anders Matney** is starting a master's program in architecture this summer at the University of Minnesota. **Erica Wallstrom** writes she's "graduating from Castleton State College this May with my master's. This September I will start my new job as an earth science and chemistry teacher at Rutland High School in Vermont. Loving the Green Mountains and hoping to do a lot of skiing this winter." Good luck with your new job Erica! Alex Barron will be back at Carleton next year teaching Ecosystem Ecology, Environmental Chemistry, and Global Change Biology. He says, "I'll be finishing up my Ph.D. at the same time so send good vibes (and, if possible, sleep)." Got a postcard from Anna Nelson last fall saying, "Greetings from the Drake Passage! I'm lecturing on a cruise ship this season and loving it! Went to Palmer Station (in Antarctica) last week and had hurricane conditions crossing the Drake. Amazing times." [For another take (but a similar opinion) on crossing the Drake Channel see Sonja Wolter's entry in the class of '89.] Also, Anna is engaged (see picture).

2001. Kate Anders writes that "We bought our first house, a cute little place in South Minneapolis. I've also taken a job doing my hobby – teaching dog training classes for a local humane society and LOVE it. Still playing Ultimate every summer in a local league and plan to run my 1st marathon in early October!" Congratulations to **Cindy** and **Ofori Pearson** on the birth of their daughter Miranda Carol on New Year's Day of this year! They say, "Life is chaotic, but good with a 2? year old and a baby. Ofori is now working for the USGS in Denver, CO." Carl Tape says, "I'm in my 3rd year of a Ph.D. in seismology. In October 2005 I made it back to Carleton for the first time since graduation and gave a physics-geo talk: 'Global Seismology: from the Great Sumatra Earthquake to the Mantle.' (Of course, there was the alumni soccer match, too.) I'm looking forward to a dept trip to

Tian Shan (western China) this summer." From Anne **Sawyer**: "Well, after almost three years of working on my master's in Snow Hydrology at CSU, I needed a break (and some money!) I'm going to spend the summer as a Park Ranger in Denali, AK doing talks, programs, guided hikes, and the like. Then, it's back to Ft. Collins and Colorado State to finish my eternal master's project (NOT my fault!)" Anne's also been on a frisbee team in Colorado in her spare time. Peter McAuliffe wrote last summer that he was acting as project manager managing commercial construction projects. He said, "Work is going well. I'm getting married to Jenny Houghton, a fellow Carleton student, in August 2005. She's the best and I am overjoyed to be getting married. Life is good." Congratulations Pete! Laura Cleaveland writes "I'm finishing up my third year in grad school at Brown, where I have been studying paleoclimatology/paleoceanography. I had a great time this fall as a teaching assistant on the Italy program with a really great group of '06s and '07s. I hope everyone is doing well. Look me up if you're in the Providence, RI area. " **Jamie Levine** has been living in Seattle for the last year, "but sadly not doing any geology so I'm going back to the University of Texas at Austin for my Ph.D. I'll be looking at the structural role of migmatites in orogenic belts!" Congratulations and best wishes to Matthias (Alex) Kirch and Quiana De'nae Perkins have announced their wedding date of Saturday, Aug. 12, 2006! Information is available at www.theknot.com/ourwedding/quianaperkins&matt hiaskirch. "The first year of grad school went smoothly. Quiana graduated with an M.Ed. in Recreation, Park and Leisure Studies in May. I'm also working full time this summer for Hennepin County, doing public health assessment." Alex is working on a masters in Health Services Research, Policy and Administration from the Health Policy and Management Division of the School of Public Health at the U of Minnesota. "Way too wordy," he says, "basically it is the public health major for people who like data and statistics."

<u>2002.</u> Liz Clark says she "finally finished my master's this spring and have moved to sunny California." Congratulations Liz!

2003. Tiffany Larsen writes that she is planning to start grad school this fall at UVM in Burlington, VT, to get a master's in geology. "I'll be studying the effects ski resorts have on the local watersheds. I'm excited to get on the slopes to do research! =)" Hmmm, sounds like a nice deal Tiff! Nico Davies sent a note saying, "Things in Bristol are busy as always. I am now in my final stages of my Ph.D. thesis and my chemistry program finishes in October. I am starting to aim towards a job somewhere in the medical industry, but am open to anything life has to offer really, particularly if it would involve horses. I have been playing a lot of piano lately, mostly Chopin

and Beethoven, which makes me get home quite late, but balances me. My landlady has interesting projects going on in the house and I am very happy not to get involved as she has her own ways of doing things, sometimes with catastrophic consequences such as distributing four kilos of rat poison around the kitchen, etc. Spring has moved into Somerset and the beauty of the landscape never fails to inspire me. Best wishes to you all, Nico." **Devin McPhillips** writes he's "more or less finished with my first year of graduate school in Tectonics. Hopefully I'll get some field work in BC this summer. In January, I made my first trip back to MN and had a blast skiing with Carls up in the BWCA."

2004. Gabe Nelson is heading off to grad school in Nova Scotia to study phosphorites and iron formations. Good luck with it Gabe, and hope you enjoy the beautiful Maritimes.

2005. Keep up with **Callen Hyland** who is traveling and exploring in New Zealand by tuning in to her blog at http://callen-hyland.livejournal.com . Last year **Will Gallin** worked the summer at the Sevellita National Wildlife Refuge in New Mexico, then moved to New York to start a program in urban planning at Columbia University.



Gabe Nelson '04, Alan Carroll '80 and Mike Smith '99 gazed at a distant outcrop of the Green River Formation trying to make sense of it in this picture taken in Wyoming last summer by Amalia Doebbert '03. Gabe writes that he was a field assistant for Alan's graduate students, Mike, Amalia, and Lauren Chetel '02. He continued, "Right now I'm trying to hammer out the proposal for my masters work. The working title is 'Chemical and physical paleoceanographic constraints on Paleoproterozoic phosphorite accumulation, Baraga Group, MI, USA.' I just got a contract from Kennecott Exploration to work in Northern Michigan, logging core and field mapping, which compliments and overlaps with the field work for my masters work nicely. Things are going well, and I'm learning a ton. Recently Kristin Bergmann and Kristin O'Connell gave me a visit, and in a week or two **David Auerbach** is coming up as well."

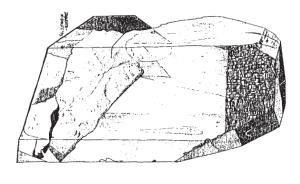


Bess Koffman '04 writes she "Just got back from three months in Antarctica and three months in Peru. Now off to the high desert for a summer of plant research and postwildfire vegetation rehab. I took up the fiddle this fall and I'm hoping to be in one place long enough to get some instruction! If you're out in Nevada drop me a line!" In the top picture are Bess and her brother Toby at Palmer Station in Antarctica. The lower picture shows Bess doing the traditional jump off the pier in honor of the departure of the research icebreaker Laurence M. Gould (named after Carleton Geology Department founder and past college president Larry Gould) from Palmer Station. The icebergs in the water obviously didn't phase her.



Lisa Kanner, Annaliese Eipert, Kristin O'Connell and Sarah Margoles (all '04) went on a huge bike trip from Seattle to San Francisco last fall. Kristin wrote, "It was fantastic. 1100 miles! One of the highlights was Sarah's wearing a reflective sash that said 'Miss Reno' on it. Everyone kept asking if she was really Miss Reno! It was hilarious." Now Kristin is at UC-Davis.

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