

2013 GEOLOGY DEPARTMENT NEWSLETTER



Evolution of the Earth class and members of the Geology Club on the Spring Break Trip 2013.

FOLLOW OUR BLOG!

The geology department has a blog - follow our field trips, research projects, and other misadventures at geology.blog.gustavus.edu

JOIN OUR BLOG!

We'll happily include alumni news in our blog - send updates to Laura Triplett: ltriplet@gustavus.edu

VISIT US!

If you're in the neighborhood, stop in and chat. If you've got some interesting work going on, we'll sign you up for a formal or informal talk. Contact Jim Welsh or Laura Triplett:
welsh@gustavus.edu
ltriplet@gustavus.edu

Thanks again to Joe Carlson, who helps the news keep coming.

WELCOME

Greetings once again Gustie geology alumni and friends. I apologize for making this document more like an Occasional Paper than an Annual Newsletter. In fact, I am in fear of being lapped by my next news request! You can see that I continue to procrastinate, perhaps even more so in my retirement. One excuse for the delay was an attempt to locate the email addresses of lost alums, a search that turned out to be a complete bust. I continue to fret over the loss of folks who move and change addresses or unsubscribe, although I can understand how this document could be considered inbox clutter along with solicitations from Nigerian Princes. Again, I really enjoyed reading all of your contributions. Along with these we offer some news of Geology Department events, faculty news, and profiles of graduating seniors.

Best wishes, Joe Carlson



DEPARTMENTAL NEWS

Hello from the low floor of Nobel Hall! It's been an exciting year for Geology, and we can't believe the summer is nearly over. We've been full to the brim this year – in spring, we had 21 declared geology majors, from first-years to seniors. Seven graduated, and are now off to their next adventures. Have a look at the “new graduates” section of the newsletter to meet the Class of 2012. As these things typically go, we've got a smaller rising senior class, but they're excited to be entering their final year at Gustavus.

We definitely had a lot of scientific fun in 2012-13. The academic year kicked off with the Nobel Conference: Our Global Ocean. Laura and Julie were both involved with the conference and also participated in a new experiment – an upper-level, interdisciplinary course focused on the conference theme. With seven faculty and thirty students, in five programs/departments, it was a bit of happy chaos. It must have worked all right, though, because this year's conference also has an associated course. We had plenty of opportunity to interact with the Rydell Fellow this year. Bill Fitzgerald, who studies mercury cycling, came to campus several times to meet with students and faculty, give talks, participate in the Nobel Conference, and hang out in Nobel Hall. We really benefitted from his presence on campus, all year long. A couple of stand-out, interdisciplinary talks reinforced our notion that geology is actually at the center of the universe: The Gustavus chapter of Sigma Xi invited Rikk Kvitek to give its biannual lecture, and James White spoke to the campus about glaciers and climate change. Both of these interdisciplinary lectures had very strong geology themes and were well-attended by our department.

The geology spring break field trip, led by Julie, took 19 students to the Southern Appalachians. The trip visited igneous, metamorphic, and sedimentary rocks in Kentucky, Alabama, Georgia, Virginia, and North Carolina, as students explored the geologic record of the opening and closing of the Iapetus Ocean, followed by the development of the southern Coastal Plain. Jim will lead the 2014 trip – destination to be determined.

The summers continue to be busy and full of activity. Laura is now in the second year of her NSF grant to study the effects of invasive grasses on river systems. Julie, who was awarded tenure this year, started on sabbatical in June and has started a few new research threads with some field work this summer. Once again, we've converted the Principles Lab to a research space for the summer; there's just not enough room in the regular lab spaces for all the activity. We acquired a particle size analyzer this summer as well as a gently-used x-ray diffractometer – we'll share custody with the Physics Department, since it's too big to live in Nobel Hall.

While Julie is on sabbatical, Jim has once again taken up Chair duties. We also welcome Dr. Hilary Christensen, who comes to us from the Carnegie Institution of Washington where she has been working on stable isotopes and tooth micro-wear patterns in early Cenozoic mammals. She'll be teaching Principles, Paleontology, Evolution of the Earth, Geology Seminar, and a January term course on something paleontological. Read more about Hilary in her newsletter profile.

Keep the news coming in – we love to hear from you. As always, if you're in town, come by and visit. Give a talk, even if it's just telling our current students what you're up to. Looking for employees? Let us know and we'll pass along the information to our students. Have a great year!



NEWS FROM CURRENT FACULTY

JULIE BARTLEY

Happy Summer! As always, the three months of summer flew by much too fast. It's nice, though, to take a breath and think back on the last year – which also went by very fast. Somehow, the school year went by and I find myself on sabbatical. So many projects, so little time!

I co-chaired the Nobel Conference this year, with Joel Carlin of Biology. What an amazing experience, though I needed to sleep for a week when it was all done. As part of that project, Laura and I were part of a seven-faculty, five-program teaching team that offered an interdisciplinary course on the global ocean. No field trip to the ocean, sadly, though we did go to the Sea Life Aquarium.

In January, I offered my first J-term course – Dinosaurs and their Food. What fun! It turns out that if you put the word "dinosaur" in any course title, it will fill instantaneously during registration (I have ideas for the 'mineralogy of dinosaurs' class...). I had a full house of really enthusiastic first- and second- year students. Amidst the usual things you'd expect in such a course, each student prepared dinosaur bone, loaned by the Wyoming Dinosaur Center, so that we had two dozen cleaned and prepped Camarasaurus parts. We displayed the bones during spring semester and they've now gone back to the Dinosaur Center to be displayed there. A trip to the Field Museum completed the experience. We got a behind-the-scenes tour of the vertebrate collection and heard about paleobotany from Kevin Boyce of University of Chicago. Let's do that again!

The spring break field trip this year went to the Southern Appalachians – a bit of a risk, since it's often still snowing in the Blue Ridge at that time of year. No worries though; we had a bit of rain, but no snow. We visited quite a lot of geology, including some classic localities that record the opening of Iapetus, Paleozoic carbonate platforms, and a spectacular example of human-induced erosion.

This summer, I spent some time in the field – first with Amanda Adams ('13), to help us finalize a manuscript based on her thesis work, which constrains the paleotemperature of the Sundance Sea using belemnites. In a second field trip, Sydney Firmin (ES '14) and I motored around the Canadian North Shore looking at middle Proterozoic stromatolites that crop out on some islands just off shore. We were hosted by Ken Storm, a Minneapolis businessman who opened his cabin to us and showed us around the area. Sydney will work this fall to determine the origin of a very strange carbonate unit that we saw.

Now, I'm off to spend my sabbatical year at the University of Minnesota, where they've graciously given me some office space. I'll be collaborating with David Fox, as well as getting going on these new research threads. I'm already missing the excitement of starting a new school but am also enjoying the experience of watching it from afar!

LAURA TRIPLETT

Hello Gustavus alum and friends! As always, another busy year! Last fall, we had another high enrollment Geomorph course, I taught part of the "Nobel: Our Global Ocean" course Julie mentioned in her department news, and I co-taught the second offering of Geochemistry of the Environment with Jeff Jeremiason. Jeff and I are slowly getting that course streamlined, with our main realization being that we really need to just write our own textbook – though neither of us will have time for that in the near future! Anyway, the Geochem enrollment is way up for fall 2013, and we hope to continue recruiting good geology majors out of that course. In spring 2013 I had a full class of Hydrogeology, and shepherded our giant graduating class through their senior thesis work.

This summer, I had four students working in the Nobel labs with me. Emily Ford (Geology '15), Rachel Mohr (Geology '16) and Zach Van Orsdel (Geology '15) worked on my NSF-funded silica project. We returned to



the Platte for another blistering week of fieldwork, and came away with a boatload of sediment samples. That crew also did an excellent job testing some new lab methods and learning to use our new Microtrac particle size analyzer and in-line imager. (For the sediment folks out there: This is a laser diffractometer that can measure particles in the range of 0.5-2000 um, and also takes pictures of particles as samples run! So, within just a couple minutes, we get both the modeled grain size distribution of s samples as well as thousands of images of grains, which we can quickly sort using criteria such as sphericity and size. So powerful! We thank the Environmental Studies Program and the Geology Youngquist fund for making this purchase possible.) My fourth summer researcher, Andrew Choquette (Geology '14), helped my colleagues at Utah State University and University of Minnesota-Duluth to collect water and sediment samples from the Le Sueur River and associated ravines near Mankato. This work is part of the massive ongoing effort to understand sources of sediment that are polluting the Minnesota River and Lake Pepin. As Julie said, my crew and I basically took over almost every room we have in the department to spread out our specimens and sampling buckets; it's quite a challenge to get it all packed back into our small "official" lab spaces to make way for fall classes!

I'm looking forward to another good year, and second Julie's comment: If you are hiring, or if you're passing through St. Peter and could come talk to geology students about whatever earth-related work you've been doing lately, please let us know!

HILARY CHRISTENSEN (VISITING FACULTY)

I am a recent graduate of the University of Chicago, working with Dr. Kevin Boyce on community changes in mammals over the KT boundary in North America. My research interests focus on herbivory, in particular the evolution of this dietary trait in mammals and the physiological and morphological changes required in the process. Current projects include comparative stable isotope analysis of tooth enamel in living and fossil mammals, looking for evidence of dietary niche partitioning in C3 ecosystems.

JIM WELSH

Well—I'm back in the "saddle" again as department chair—though only for this year, while Julie is on sabbatical. I can't believe how nice it has been these last few years, without those chair "duties". I don't have a whole lot to report. You might recall these past few years, that I have often been writing from locations other than St. Peter, essentially following my wife around when possible, to wherever she is working as a travel nurse. At present, I'm in Evanston, WY, returning to a location (and even the same apartment!) that we were in a couple of years ago. Last year, we were in North Carolina. The fun part of these travels for me has been the opportunity to get out and see different local geology. Though it is interesting that most of these locations have ended up being in areas of "thrust tectonics". Evanston is in the Wyoming Overthrust belt. When we were in Vermont, I got a chance to see some Appalachian geology, and that was similar in North Carolina, though not so much rock exposure where we were (mostly in the Raleigh and Goldsboro areas). There is a nice system of bike trails in the Raleigh area, and some exposure of metamorphosed parts of what was once "Africa" along these trails. I did get a chance last summer to spend a few days in the Asheville area, and drove some along the Blue Ridge Highway (for the first time). I can't say I looked at much geology up close—but at least began to get a feel for it, and identified a couple of locations I would like to visit in the future (like the Spruce Pine pegmatite).

My teaching load is pretty much the same: mineralogy, petrology, and structure. I taught an FTS this past fall, with probably the best group of students that I've had in FTS, though sad to say, not likely any geology majors coming out of that group. I'll be teaching Earth Resources again; it's been a while since I was last able to teach that. It's my turn to do the spring break trip this spring; likely back to that old favorite—Big Bend.

It's been two GSA's since the last newsletter. I was able to attend both, most recently in Denver, and in Charlotte the previous year. It was so nice to see some of you at those events, a chance to catch up on "old times". It's always nice to hear, or get a chance to visit when possible, from any of you. Please keep in touch.



NEWS FROM FORMER FACULTY

JOE CARLSON

Greetings, folks. I continue to go along enjoying retirement. I recommend it for everyone! Although I find I have given up many things like climbing mountains or even ladders, it seems it is easy to fritter away time in daily life gardening, fishing, walking, etc. The main thing that keeps me in St. Peter is the College, of course, people and the events. The only travel I have done this year is a road trip to Norman, Oklahoma. Why there of all places, you say. Well, to return Permian fossils collected in OK to their rightful home in the museum there where they will be available for some student's research. By the way, if you happen to be near Norman, visit the Sam Noble Museum. It has a lovely walk through time with great mounted specimens, dinosaurs, dioramas, etc. Marge and I extended the trip over to Memphis and back through the Ozarks, which I had never seen before, all through pretty leaves and scenery. I really have enjoyed reading and assembling your Newsletter contributions.

MARK JOHNSON

It was just yesterday, seeing a remarkable fall-color range in our neighborhood (rare for Sweden--we are just nearly mostly popple-yellow most years--but this year I realized we have some maples!), that I thought to myself--I need a weekend in a boat! I am going through the busiest fall I think I have ever been through. My move to being chair is challenging enough, but my replacement (I have gone from 75% teaching to 25%) won't arrive till spring (don't get me started!), so I am doing double duty in a somewhat contentious department. Plus, as chair of the Geological Society of Sweden (what was I thinking?!), we are hosting the Nordic Geological Winter Meeting in January (it bounces around Norden, landing in some Nordic country every other year, so every tenth year in Sverige, and I get it in my lap). Exciting and challenging, and it will be great conference, but last week, we found out that our conference organizer (abstracts, registration, hotels) has gone bankrupt (!!). So we have had crisis meetings all week to figure out how to salvage the conference. I think we will be able to pull it off, but...

But life is still great in the 'home country.' Despite what I have written, I am surprisingly enjoying my role as department head--Power! I didn't think I was tired of teaching and research, but I am enlivened to do something different. Our Ellen is 11 and the best thing in our lives. We have a cat, two dogs, two rabbits at home and are planning to get hens in the spring. My wife, Kacka, scans the paper for small farms for sale so we can spread out some more, but I resist knowing who would be the hired hand! We got back to the States this summer for a week in Denver, a week in Rocky Mountain NP, and 8 fabulous days in New York. And, no, the glacial striations in Central Park were not the highlight, but it was the streets, the subway, the parks (the High Line!), the buildings, and most of all, the multiplicity of Americans--what a great city!

I am still playing some vibes here in Sweden, and you can hear our quartet on Spotify, if you search for Jerry Johansson Quartet. I got back to Minnesota summer 2012 to do some field work in western Wisconsin. Admittedly, this project was generated mostly by nostalgia of summers in Polk County where the genesis of hummocks and pebble orientations were then my biggest worries. Keith Brugger from UM Morris joined me (as did Jim Welsh for an evening!) to prowl the county roads. Additionally, I got back to our drumlin field in Iceland this past summer.

Finally, we had a short visit at our house here from Joel Pederson, wife Carol (a Snowball Earth geologist) and their son Zane. It was super getting to see Joel again and getting to know his family.

RUSSELL SHAPIRO (FACULTY 2002-2006)

Hi Gusties! After a stint starting a Montessori charter school, I have returned, knee-deep in geology. We are finishing the manuscripts on the Tepee Buttes of Colorado (with Julia Steenberg nee Anderson) and I have begun to submit the backlog of papers on the Biwabik Iron Formation. I am still working to the north and received a two-year NSF grant to study cores through the lower stromatolite interval. Always great to see Gustie grads in the field and at conferences! Let's make the stromatolite the state fossil!!



PROFILES OF THE 2013 GRADUATING CLASS



Matt Illies, Tara Selly, Mike DeLucia, Jake Bruihler, Amanda Adams, Rachel Oien, Zach Wagner, Adam Lund, and Jeff Allen

AMANDA ADAMS (geology) conducted fieldwork in the Bighorn Basin of Wyoming and collected belemnites from the Jurassic-aged Sundance Formation. Her senior thesis, titled "Oxygen Isotopic Analysis of Belemnites: Implications for Water Temperature and Life Habits in the Jurassic Sundance Sea," constrains the paleotemperatures of the largest interior seaway in North America since the Paleozoic. Amanda is working at the Wyoming Dinosaur Center and plans to attend graduate school in 2014.

JEFFREY ALLEN (geology) studied the accumulation of heavy metals in soils near a decommissioned firing range. His thesis is titled "Trace metal concentrations in an abandoned shooting range, Nicollet County, MN." Jeff is working for the South Dakota Geological Survey.

JACOB BRUIHLER'S (geology and environmental studies) thesis project took him to nearby Seven Mile Creek, where he examined the origin of terrace landforms. His thesis, "Geomorphic and sedimentologic origins of a terrace in Seven Mile Creek Park, Nicollet County, Minnesota," involved examining the sedimentology and geomorphology of a landform and also learning to apply Optically Stimulated Luminescence techniques to sediment samples. Jake is attending graduate school at University of Nebraska Lincoln this fall.

MICHAEL DELUCIA (geology) expanded on a project he began as part of a summer job with the Illinois Geological Survey. His thesis, "Analyzing and presenting resistivity data from Emerald Mound archaeology site in an attempt to discover a Mississippian Trail" combined archaeology and geophysics and tapped Mike's GIS skills. Mike is now working for the Illinois Geological Survey.



ADAM LUND (geology and environmental studies) examined the sedimentology of a terrace feature on Seven Mile Creek. His thesis is titled "Identification of a landform in Seven Mile Creek Park, Nicollet County, MN." Adam is currently working in environmental education and service.

MATTHEW ILLIES (geology) collected, sorted, and analyzed conodont distributions from the Decorah Formation (Ordovician) of Iowa and Minnesota. His thesis, "Using conodonts to determine depositional variability within the Decorah Formation of eastern Minnesota and Iowa" determined that conodonts track transgression during the deposition of the Decorah. Matt starts graduate school this fall at the University of North Dakota.

RACHEL OIEN (geology) did her field research in Costa Rica as part of an REU project hosted by Texas A&M. She took over 100 soil cores to determine the soil volume, then used those data to model the water content of the soil in a tropical cloud forest. Her thesis is titled, "Mapping depth to bedrock in a tropical pre-montane wet forest." Rachel is attending graduate school this fall at University of Illinois at Urbana-Champaign.

TARA SELLY (geology) studied the changes that algae experience as they decay, on their way to becoming fossils. Her thesis, "Qualitative and quantitative assessment of taphonomic patterns in modern algae and cyanobacteria: implications for identifying Precambrian microfossils" resulted in a poster at the Geological Society of America annual meeting in Charlotte last year. Tara is attending graduate school this fall at the University of Missouri.

ALUMNI NEWS

WALTER YOUNQUIST '42

Walt writes from Eugene, Oregon that he continues to be concerned with the limitations of resources on this earth. He has a recent article on the realities of fracked wells and expects the second edition of his book, GeoDestinies, to be out any time now. He recently had the honor of being awarded the Pander Medal by the Pander Society, an international association dedicated to the study of conodonts. Do you remember those beautiful and mysterious microfossils from paleo class? At one time Walt was the most active and productive worker on these fossils which are so useful as stratigraphic markers throughout the Paleozoic. And it was Walt who established that the conodont animals survived the great Permian extinctions and lingered on into the Triassic. Another honor Walt has recently received is the establishment of a scholarship fund in his name at the University of Oregon.

JIM HIMANGA '71

Joe, Not sure when I last responded, but we just returned from a visit to the Grand Canyon and Death Valley. Every year when asked about vacation thoughts I list the Grand Canyon, so to humor me I am allowed to visit every 4-5 years. This year Liz went to the bottom by mule, and I spent a few days driving along the rim taking photos. I actually had to restrain myself at one overlook where a tour guide was explaining the fossilized fish spines visible there in the Kaibab Limestone.....

We stayed in Las Vegas on the way to Death Valley. Fed \$1.75 into a slot machine and won \$2.50, cashed, in and walked away winners!

I had been through Death Valley on geologic trips, but this was the first time as a tourist. We ran into three van loads of budding geologists from St Thomas at the Artist's Palette area there. Or maybe they were just there as part of a January term sluff course. They were not nearly as organized or focused as we were on our trip to Arizona and New Mexico for winter term with you back in '71. BTW, when we went boating on Lake Powell to celebrate Y2K, we stayed at the same motel in Flagstaff as on the trip with you. It remains very much the same, I don't think the management or sheets had been changed.

We went to Ecuador and the Galapagos Islands in the fall, and we visited Croatia, Bosnia, Montenegro and Slovenia last spring. We spent the summer in Minnesota leaving behind the heat that permeates Houston behind only to



suffer the mosquitos that dive bombed us endlessly! We specialized in church festivals in central Minnesota, and had many great chicken dinners! Not to mention the cake walks and bingo games.

I still wish I had invested in sand in Wisconsin and Minnesota. I see where the Amtrak passenger traffic is being delayed because of sand and oil shipments :)

WILLIAM BESLOCK '73

Good morning Joe --- It's great that you're enjoying your retirement. I'm a bit semi-retired now and work for a local school district as guest teacher. I have a little time on my hands for this day --- only three math classes that I have to tend to (and a fire drill as well). I'm glad I remembered to wear my coat on this frosty fall morning.

My oldest, my 27 year old daughter, is getting married (in February of next year) in old San Juan. She's known her fiancé for four or five years now. His family is from the St. Paul area and he's a gemologist. Two days before the wedding (on Sat.), we're going to take one of those bioluminescent bay kayaking tours. I was filled in as to what these are like from a fellow church member. Some of the geologic alumni may have taken one of these excursions as well.

My oldest son has his hands full with full time work and full time going to school (Ford Woodhaven assembly and Walsh school of business respectively). I hardly have a chance to get a word in with him edgewise (let alone prepare him a meal).

My youngest son is enjoying 3rd grade and looking forward to pumpkin carving, the Cub Scout farm party, and other Halloween and harvest events.

I'll turn 63 on the trip back from the wedding next year and probably feel the years creeping up a bit as well. I'd like to plan a trip back to MN sometime --- before the years creep too much. Enjoy the autumn.

KEN MCCALL '73

I am sorry I missed you at my 40th reunion last week. You probably do not remember me, but I was the map librarian from 1970 to 1972 working for Dr. Moline. I had not been back to the campus since I graduated in 1973 and I enjoyed wandering around Nobel Hall. The old map library had moved to the opposite corner of the basement, but otherwise it looked the same. I am glad the door was unlocked for me to look around.

I still live in Washington DC and am enjoying my retirement from the civil service. After retirement I went to law school and now I do contract work reading and analyzing document in Japanese for major law firms.

Thank you for the newsletters. I enjoy them.

JAY SCHIED '78

In November of 2011 I took an early retirement buyout from Three Rivers Park District (Metro Area), as they'd overextended themselves and was looking for volunteers to assist with their organization. I relocated to SW Minnesota and have been taking care of my elderly and frail Dad. When time allows I've been giving back to the Lord and my community through various volunteer opportunities: local food shelf; Habitat for Humanity; my church; Red Cross bloodmobile (and in training to become disaster relief worker); city government (on group to improve local lake as community resource); DNR (buckthorn removal); assisting elderly neighbor with yard projects; etc.

JOHN ZAGER '79

I received the Geology Newsletter, it has been a while since I have checked in so I thought that I would send you a quick note. A lot has changed in my career recently. I have moved from Anchorage to Atyrau, Kazakhstan. I know



that you are probably thinking, where in the heck is Atyrau, Kazakstan. Well it is at the north end of the Caspian Sea and straddles the Ural River, it is half in Asia and half in Europe. So I have moved from being the General Manager for Chevron in Alaska to being the GM of Marketing and Transportation for Tengizchevroil, a company 50% owned and operated by Chevron. It is hard to believe that I have been working to 32 years. I sometimes wonder what this job has to do with geology, careers take funny turns sometimes, but it has turned out well. Thanks for your advice many moons ago, that I should be able to make a career out of a geology degree. Sue is here with me and we are well settled in and enjoying the travel benefits of living overseas as empty nesters.

Take care, I hope that all is well at GAC and with all the Geology Department alumni.

JULIE MILLER '81

I have to say I have done so many different jobs since I left GAC, just don't know where to begin. I worked in the Oviedo School of Mines for 2 years as an English teacher/translator trying to see if I could validate my degree and studies in Spain and continue studying. That was back in 1987 and there was absolutely no way, or let's just say it was extremely difficult, I finally achieved the validation in 2010 LOL but let's just say I gave up on the idea of continuing my career as a Geologist. I have spent many years as an English teacher here in Spain in different parts as well as working as a Paralegal for different law firms. My latest job adventures have been with the OHIM which is the European Trademark and Design office located here in Alicante. I have lived in different parts of Spain and have really learned their culture in all the different areas. Now as we are all integrated into Europe, I have expanded my languages to include French and German and what is nice about working in a European Office you actually use them!

I have explored many of the mountain ranges here in Spain as climbing is part of the reason I so much liked Geology. It's curious to see the formations and know what you are really looking at. My last conquest was a mountain on the coast most of the formations here are sedimentary and not the most interesting, it reminds me a lot of our field camp area. Probably the most beautiful mountains I had the pleasure of knowing was the Teide in the Canary Islands, that was interesting. But I guess for the most part, I have never had the pleasure to work as a Geologist due to the difficulty of finding jobs here.

On a personal note, I have been married twice and have one daughter who is now 18 and doing very well. I am very proud of her accomplishments, she is an avid photographer and hopes to study International Relations and Political Science someday. I would have loved for her to go to GAC but that's a bit of a pipe dream.

JIM MILLER '84

Jim is happily slaving away at his business, Juneau Rubber Stamp, Awards, Trophies & Engravings. I have tentative plans to take my sailboat up into Glacier Bay. Global warming has given us our coldest April and May on record... brrr...Anchorage just had snow on May 18th.... Crazy. The big news is my oldest daughter, Sarah Rose has been accepted as a nursing student at Gustavus Adolphus College...yep heard that right...she was accepted at Anchorage, but not till 2015! (Nursing school backlog is amazing) On a lark, I said, why don't you apply at the the ol Alma Matta...and voila! Never would have thunk that....and from what I see GAC isn't her dad's GAC...changes! Rest of the family doing well...haven't heard from any GAC people in some years...alas! (added after the Nag) Big news is that my eldest daughter is now a student at Gustavus. She is in the nursing program as a Junior and lives at Sohre hall. She is a much better student than I was.

SHARON RINGSVEN '88

I'm on the move again. In late March I will be moving to Grand Canyon National Park. I will be the Deputy Chief of Concession working with all the companies that do business within the park. I look forward to being able to explore more of the Grand Canyon geology and biology on my days off. I still have fond memories of backpacking on a J-Term geology trip from Horseshoe Mesa (in snow), down to Phantom Ranch and back up Bright Angel trail circa



1987 with Jim and Mark. Oh-- and following the snowplow from Flagstaff up to the park after a blizzard! I was also fortunate that friends and won the lottery to do another 3-week private raft trip down the Colorado River this coming September. Time to brush up on my canyon geology. In 2015, a river trip on the Amazon River starting in Manaus, Brazil. Other than that-- not much additional news. Have a great 2014!

JOHN C. DANCHERTSEN '90

I was bummed that I missed you when my family and I were up there last month (over spring break). We were looking at GAC for my oldest who will be in 11th grade next year.

I did see Jim. He was busy with a student who had recently suffered a concussion and was struggling. I so would have liked to talk to her and share my story.

ANDREW NICHOLS '91

I, my wife and 6 kids are doing well. I'm still writing at the Minnesota Pollution Control Agency with fellow Gusties Dave Moore, Hans Neve and Dave Fawcett. I still miss your dry humor.

KRISTIN ANDERSON '94

Life in Portland is still good. We have two kids now, 4-year old son Anders and 2-year old daughter Cacee, who are active and delightful. Despite the [hopefully temporary] impairment of my memory and other intellectual faculties brought on by a lack of personal time and sleep, I am loving the family life. The few times I've gotten away, I've brought back rocks as souvenirs for the kids, and they haven't yet voiced disappointment at this, so here's hoping that they may learn to love geology (at best) and/or not think I'm a cheap good-for-nothing parent (at least).

Speaking of rocks, I went to Sedona, Arizona, for a long weekend last fall. The red rocks and blue sky were just what my soul needed, and brought back memories of an awe-inspiring sophomore spring break trip to Capitol Reef National Park.

In job news, I started a new position within the City of Portland which in July. I'm still working in the drinking water realm, but have moved from the Water Quality group into the Resource Protection group. I'm doing work focused on protection of the Bull Run watershed in the Cascade mountains, our primary drinking water source. This includes hydrologic modeling of climate change scenarios, water supply forecasting, environmental water quality, and Endangered Species Act compliance work. I'm pretty excited to be re-engaged with some of my long-standing interests in hydrology and the like. Maybe this would be a good place to say that the drinking water industry would be something for geology and environmental students/grads to consider looking into. There is a large exodus of retirees happening now and into the next decade, and jobs related to source water protection, conservation, water quality, and engineering are common in the field. I sort of stumbled into this field and have been surprised by how continually interesting it is.

DREW TARARA '95

I have very much lost contact with my fellow rockheads, however, I am still playing soccer with the same guys that I played with at GAC.

I am working the same job (although a new downtown Mpls location), have the same wife(Jen Olufson Class of '96), live in the same house in Woodbury, MN with our same dog (13) and our same 4 kids ages 10, 8, 8, and 5.

I hear the campus looks great once again, but seem to lack the time to get down and see for myself. I enjoy seeing the updates. Thank you for sticking with it for all these years.

MARY FINCH '00

I'm changing jobs



On October 21st I'll be joining the Land and Water Unit in Hennepin County's Department of Environmental Services. Part of my job will be assisting my colleagues John Evans and Gil Gabanski with the Environmental Response Fund - a grant program that funds the assessment and cleanup of contaminated sites.

While I've enjoyed Barr Engineering, I'm very excited to try something new that is more focused on brownfields cleanup and redevelopment in the Twin Cities. I don't have my new contact information at the job yet, but will send when I do. For now, use finchmaryc@gmail.com or 612-669-7260 (cell phone) to reach me in the future.

DYLAN BLUMENTRITT '02

Thanks for your continued efforts with this newsletter. It really is fun to see what everyone is up to.

A lot has happened since I last wrote. I was married a year and a half ago (May, 2012) to Erin Martinson and we couldn't be happier. I defended my PhD (successfully) from the University Of Minnesota Department Of Earth Sciences this past summer. I was advised by the same person as your very own Laura Triplett. My defense was quickly followed by a move to northern New York state where I am now the newest addition to the SUNY Potsdam Geology Department. I'm enjoying getting to know a new area and I plan to continue my research on surface processes and riverine/lake sediments. The courses I'm teaching this year include Geomorphology, Hydrology and Hydrogeology, and Environmental Geology. Teaching is a challenge, but has been very rewarding and a lot of fun... so far.

JEFF FORD '02

I'm enrolled at Auburn University, pursuing my Ph.D. in mathematics.

SAM M. JOHNSON '04

Hi Joe! I'm still working in the Assessment and Remediation business unit at Barr Engineering Company, out of our Minneapolis office. My work is focused primarily in remediation activities for large refinery and pipeline clients, and I do get the privilege of working alongside a number of Gusties here at Barr; I'm currently in the middle of a large groundwater modeling project with my old Nobel Hall officemate, Evan Christianson. Things are busy on the work front, and even busier at home. I am living in Maple Grove with my wife Nicole, daughter Nora (3.5), son Sammy (1), and golden retriever Fetch.

OWEN ANFINSON '05

Last summer we added a little boy (Carsten) to our family before leaving Canada. In September we moved to Austin, Tx where I have begun a postdoc at the Jackson School of Geoscience at UT. I am continuing some research in the Arctic while adding the new field area of the Swiss Alps. While I am at the Jackson School one of my primary goals is working with Dr. Daniel Stockli to build a laser ablation (U-Th)/He line so we can more precisely acquire He cooling ages for a host of heavy minerals. I am specifically interested in using this technology on detrital minerals (where the conventional He method has many pitfalls) for provenance analysis. The Jackson School has been great to me so far and we are really enjoying Austin. Miss Gustavus and I hope to visit sometime in the near future.

JULIA (ANDERSON) STEENBERG '06

News: After getting my Master's from Idaho State University in 2008, I've been working at the Minnesota Geological Survey in St. Paul mapping Paleozoic rocks and doing a wide variety of applied groundwater research. Married Erik Steenberg ('04 Gustie) in 2011 and settled down in our first home in Prior Lake, MN.

ELEANOR BASH '07

In August of 2012 I started a new job as support staff in the Earth Science Department at Mount Royal University in Calgary, Alberta. This is a small school by Canadian standards, but 12,000 student it dwarfs Gustavus (I don't



think Canadians know what a small school is). The job has offered many opportunities to reflect on my experience in the geo department, mostly recalling the many field excursions and camping trips. One of the most exciting parts of my job now is to accompany field schools and field trips as a resource and a "safety officer" of sorts. Otherwise, I spend my time exploring the Canadian Rockies and dabbling in teaching high school students about ecology. I'm looking forward to a hike in the early fall to Helen Lake, which has some really excellent stromatolites. You should google it.

JOHN LEAF '09

From this time last year, I have spent another year teaching 6th grade physical science at Minnesota International Middle School. I am currently in the job market for a new teaching job for the upcoming school year. Last year's summer vacation road trip brought me to the west coast, so I'm headed east this summer; New York, Montreal, and Acadia National Park!

gustavus.edu
1-800-GUSTAVUS
St. Peter, MN 56082
800 West College Avenue

