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NEWSLETTER

The primary purpose of the newsletter is to maintain communication with our alumni and friends and to make them aware of the many activities going on within the department. It also gives us the opportunity to bring to your attention the various accomplishments of our faculty, students, and alumni.

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Editor's note

Welcome all. This is the first time I've had the pleasure of editing the Geology Department newsletter, so I hope you'll all bear with me. It really has been fun, and very eye opening, as I read the emails that have come in with news from alumni. It has been a great opportunity to see what our grads are doing, both in and out of the geology field, and I am totally amazed at some of the achievements of the alums. Keep up the good work. I would also like to thank – and apologize to – all the alums who got an email from me asking for information updates to be included in the newsletter that was going to be out before the end of December. Well, here it is the middle of March, and I'm just now finishing it up.

Special Note:

A Geology Department Alumni Reception will be held in conjunction with the 2004 AAPG Annual Meeting this April in Dallas. The event is open to everyone, whether you're attending the AAPG convention or not. It will be held Monday, April 19th from 5:30 to 7:30 in the Cumberland A room of the Hyatt Regency in Dallas.

Peter Kolesar

Message from the Department Head

There is an old Chinese curse "may you live in interesting times." And the last two years at Utah State University certainly have been interesting!

The big news has been budget cuts. Utah, like almost every state in the country, has suffered major revenue shortfalls for two years running. And, as in every state, these shortfalls have been passed along as budget cuts to all state agencies. Higher Education has not been immune to these cuts, which have been structured to preserve public education (primary and secondary), public safety, and mandated programs. Utah State University suffered roughly \$12M dollars in cuts in 2002, and \$6M in cuts in 2003, which have resulted in unit consolidations, staff layoffs, unfilled positions, steep cuts in operating budgets, and ongoing structural deficits that will have to be addressed in the future. This year looks like it will be revenue neutral, so we will get some relief from further cuts (we hope) but are unlikely to see any real increases.

Despite these problems, the last two years have seen the Department of Geology flourish in many areas, thanks in large part to the efforts of our alumni, and to cost-saving efficiencies instituted at the department level. Some of the more important events in the life of our department are listed below; you will be hearing more about some of them later in the newsletter.

1. Our students, both graduate and undergraduate, continue to get good jobs and many undergrads are now continuing on for masters and PhD degrees both here at USU and

- at other universities (e.g., UNLV, BYU, Univ. Utah, ISU, Colorado State, UC Santa Barbara, UTexas- Austin)
- 2. We recruited a Department of Geology Advisory Board, consisting of alumni and employers, to help us attain of goal of being the best geology department in the west for our size. Our first meeting was held in April 2003. One result of this meeting was the decision to initiate a Geology Department Alumni Association membership is free, and it will exist largely to foster better communication among alumni, and between alumni and the department.
- 3. The Department has hosted alumni events, in conjunction with the University of Utah, at the last 2 AAPG meetings, the 2003 GSA meeting, and other places, and we plan to initiate additional alumni-focused events in the future, e.g., alumni outings on annual Fall field trips. See the note from our Advisory Board later in the newsletter.
- 4. Departmental Teaching Excellence Award -- \$15000 in ongoing funds and \$5000 one time monies. The award recognizes the *department* with an overall focus on teaching excellence in all aspects of education.
- 5. New X-ray diffraction, thanks to a generous grant from the Browning Foundation and matching funds from the College and University. The departmental X-ray lab, with new XRD and nearly new XRF, is one of most modern analytical facilities on campus.
- 6. Recruiting: Anadarko and Exxon now both recruit officially at USU. Over the last 2 years, 5 students have received job offers and/or internships from the petroleum industry.
- 7. Two new degree programs have been developed and approved by Board of Trustees: a B.S. and M.S. in Applied Environmental Geoscience. The B.S. offers a broad focus in science; the M.S. can be a one-year terminal degree.
- 8. Our Ph.D. proposal has been approved by Graduate Council and Educational Policy Committee; it is expected to move forward rapidly, and may be in place within the year.
- 9. Finally, the best for last: we have received funding for a full-time equivalent position from the University, which will be split between two permanent 50% positions. Sue Morgan will join us as an Lecturer (finally!!) and Carol Dehler will join us as an Assistant Professor. Sue has been lecturing here for many years on soft-money and we are very happy that she will now be a permanent member of our faculty. Carol received her Ph.D. from the University of New Mexico in 2001; her specialty is sedimentology and low-temperature geochemistry, with emphasis on the mid- to late Precambrian. She will add to our expertise in sedimentology and expand our low-temperature geochemistry group into stable isotope geochemistry.

We are proud of our accomplishments over the last two years, and hope to continue our success in the years to come. We are always happy to hear from you – please write or email – so we can remain in touch.

Best wishes,

John Shervais

Note from the Advisory Board

Advisory Board Created

The Geology Department has created an Advisory Board to help review the program and provide feedback and recommendations for improvement. The Board consists of alumni and representatives from industries that employ graduates of the Department. Current Board members include: Allen Jones, Logan, Utah, Chair; Craig Nelson, Western GeoLogic, LLC, Salt Lake City, Utah, Co-Chair; Francois Gauthier, Anadarko Petroleum Company, Houston, Texas; Greg Jones, Exxon-Mobil, Houston, Texas; Richard Fuller, Sound Environmental Solutions, Houston, Texas; Karen Miller, MWH, Pasadena, California; and Grant Willis, Utah Geological Survey, Salt Lake City, Utah.

The Advisory Board met with Department faculty and students for two days in late April 2003 and identified a number of challenges facing the Department:

- Balancing the emphasis on graduate programs while maintaining the continued excellence of undergraduate major programs,
- More support for graduate students in response to increased tuition costs,
- · Increasing research funding, and
- Continued improvement and modernization of teaching and research equipment.

Some of the recommendations made by the Board included:

- Continued faculty growth to 12 full-time faculty, with the immediate need for at least two new faculty,
- Implementation of a PhD program,
- A fund-raising campaign to provide funding for an endowed faculty chair position and for graduate tuition assistance
- Development of a formal educational co-op program with industry to augment the current internship program,
- Creation of a research institute in a strong research area (for example, Applied Integrated Basin Research), which could provide a platform for additional support for research programs,
- The Department should take an active role in promoting the Geology Club to both majors and non-majors on campus. The club is a great avenue to promote the Department and fellowship among students, as well as to recruit new undergraduate majors. The club could help in organizing lectures, industry interviews, extra curricular field trips, picnics, and other departmental activities,
- Faculty teaching intro-level and general education geology classes should emphasize the high-pay, glamour, and excitement of a career in geology, and blatantly use the class as an undergraduate recruiting tool,
- Upgrading and maintenance of the geology department website and inclusion of an alumni directory to foster networking with alumni,

• Creation of an alumni organization with an annual autumn field-trip program. An annual weekend trip could serve as a department fund-raiser and foster continued relationships between faculty, students, and alumni. This trip could also serve as a significant recruiting tool for potential undergraduate and graduate students. High school seniors, recommended to the Department by their science teachers, would be invited to attend the field trip with an emphasis on recruiting them as undergraduate majors the next fall. Key graduate applicants could also be identified and invited. Trip funding could be through industry sponsorship and paid alumni fees.

Please send your comments and suggestions to Advisory Board to Allen Jones (aallocthon@yahoo.com) or Craig Nelson (<u>craig_nelson@western-geologic.com</u>).

Faculty Notes

Jim Evans: Much has happened in our lives since our last newsletter. Sabbatical in Eugene had its good points and not so good; I did a fair bit of writing, catching up on some of the backlog of papers from various research projects, and did some new work on fault zones. We made some new friends there, and learned a fair bit about topics that were new to me. Life was complicated by Karen being diagnosed with celiac disease, an immune disorder that causes her to reject gluten. After that, my dad was diagnosed with brain cancer, and died in May of 2002. My parents did visit over the Christmas holiday, and he got to see the redwood forests before he died. Eugene was an interesting place to live, both from a cultural and climatological perspective. We were happy to return home.

Geology life moves along. As usual, research projects move forward because of a great bunch of students that I am privleged to work with. We have projects in fault zone structure (of course) with current graduate students Joe Jacobs and Angela Carter; Faults and CO₂ flow problems with Jason Heath and Tony Williams, and fractured coal questions and coal -gas production at Durnkards Wash, Utah, being addressed by Jason Kneedy. By the time you read this, Tony and Jason Heath will have defended. Recent graduate student completions include Dick Heermance, who worked on the Chelungpu fault in Taiwan after its earthquake in 1999, and Torrey Copfer who mapped a quadrangle in the southern Stansbury Range, Utah. Dick is getting his Ph. D. at UC Santa Barbara, and Torrey is working for a water and environmental consulting firm (NRCE) in Ft. Collins, Colorado. The Taiwan project had a great group of undergrads doing research also - Natalie Jorgensen presented her work at a poster session at the US capitol, and Angela Carter and Matt Mosdell also worked on the project.

We continue to work with Zoe Shipton, who is teaching at University of Glasgow, Scotland, on the flow of CO₂-charged fluids at a variety of scales in southeastern Utah, and on earthquake mechanics questions. Another thread of work is analysis of historical seismicity, with historian Dawn Martindale. Dawn combs the historical records of earthquakes that occurred before there were seismographs in the western U. S. in order to determine the location and size of past earthquakes. She has studied an event in 1884 in the Bear Lake valley, and is currently studying the 1857 rupture on the central San Andreas Fault.

I no longer edit the Journal of Structural Geology - a great relief. To take up the spare time, I do more consulting, and have worked on some really cool projects, all of which look to blossom into great research projects. I was able to visit with some of our alumni last fall in Houston (Jill Pachell, Holly and Matt Novak) during a consulting trip, and since I get to Houston occasionally, I hope to do that again.

The family continues to flourish. Erica is now 10, in 4th grade, and reads everything in sight. She developed a love of the oceans when we were in Oregon, and is very observant of nature. Karen is 6, in kindergarten, and continues her exuberant lifestyle. Having two kids in school gives us more homework, and we get to relearn some things from our past. We wish everyone the best, and we always enjoy hearing from friends and alumni!

Don Fiesinger: After serving as interim dean of the College of Science for three years, I was named dean on July 1, 2003. The College of Science has managed to weather various budget cuts over the last two years but it appears that the economy has now stabilized, so my job is not quite so stressful. In geology, not much has changed: I continue to teach optical mineralogy in the fall and mineralogy in the spring. It is my one close link with students and the department. I did manage to get to the national GSA meeting last year in Denver and this year in Seattle, where I enjoyed seeing a number of USU geology graduates. In my role as dean, I've been able to make some other alumni contacts via various USU events and college social activities in Tempe, AZ; Seattle, WA; and Salt Lake City. On the personal side, Janet and I continue to travel to Portland to see our daughters and to the Oregon coast for vacations (great kite flying). We enjoy being grandparents to Linda's twin boys, Andrew and Connor, who are almost 2 years old. Mandy continues to teach in Portland, recently making the switch from 6th grade to 3rd grade.

Peter Kolesar: I've managed to remain relatively busy. I'm the undergrad advisor, which can take up some time, and also am the Associate Dept Head, which can eat up even more time (and I'm the editor of this newsletter). I'm teaching a new class this spring – Intro to Environmental Geoscience – that is the introductory course for the new B.S. in Applied Environmental Geoscience. There are only 26 students in the class this semester, which is a big difference from the Intro Geology class I used to teach in the spring with 150 students. Good thing too, because I get to try out all kinds of things in a small class that I couldn't do in a class of 150. Hopefully the number of students in the class will increase when it's taught again next spring.

Alan Riggs and I continue to milk Devils Hole for all it's worth. We're looking at a third climate/precipitation record now. We also did a little diving during July of 2002 – in Bear Lake of all places. The USGS is using core from the bottom of Bear Lake in a paleoclimate study, and they needed to balance the water budget in the lake. The suspicion was that groundwater was entering the lake in subaqueous springs that were marked at the lake surface by flows of methane bubbles. Alan and I dove on about a dozen of those "springs" and verified that methane was indeed bubbling up through the bottom sediments. Never did find any water, though. And COLD – that's the first time I ever dove in 40° F water, and I hope it's the last. And, contrary to what one might think of the visibility in such a pretty, blue lake, the visibility is terrible.

Joel Pederson: I have been here doing geomorphology in the Geology Department for over four years! Some of you reading this may actually know me! Wow. It has been a good time with good students, great fieldtrips, and excellent geology.

My wife Carol Dehler and I have settled into northern Utah. This last summer we moved from downtown Logan to rural Richmond, UT, which has been a bigger trial than we anticipated. We have learned that log homes are particularly attractive to insects and that the logs can rot all the way through to the inside. Fun! For the past two years, Carol has been filling sabbatical-replacement positions at the Geology Department at Idaho State University in Pocatello, which has not been as inconvenient as it may sound.

Since arriving here, I have had five graduate students and something like the same number of undergraduates do research with me on aspects of the geomorphology of the Interior West. Three of my grad students have defended in the past year. Matt Anders and Paul Petersen did cool research on the long-term and short-term erosion of Grand Canyon, and Isaac Larsen (co-advised by Jack Schmidt over in NR) worked on debris flows in Dinosaur National Monument. Ahh, the rough life of the geomorphology graduate student with spectacular river trips and all. Ron Counts is finishing his mapping-based work in the northeastern Uintas this year, where we found evidence for a big Pleistocene outburst flood event on the Green River. Rob Mackley is in the middle of work on bedrock controls on the Colorado River's incision into the Colorado Plateau. Paul Roberson, Jamie Farrell, James Eddleman, Rob Mackley, and Scott Cragun have all done undergraduate research, presented at meetings, and are now on to bigger and better things in graduate school or geology-related jobs. Now to get all this stuff published, and the next round funded!

The future holds more research in Grand Canyon and elsewhere in the Colorado Plateau, continued pushing of the motor pool vans to their limits on fieldtrips, and steady improvement in my snowboarding skills. Call or email me sometime!

Susanne Janecke: Greetings from Susanne Janecke. The past couple years have been ones of big change in the Janecke-Evans family. We spent a wet, but scientifically rich, sabbatical year in Eugene Oregon in the fall of 2001 and winter of 2002. We are glad to be back in sunny, dry Utah again, and we love seeing nice dry rocks again.

Julie Kickham, Joseph Matoush, Stephanie Carney and Jeff Evans all defended their theses in 2002. This was quite a run! Congratulations graduates for finishing. Steph has stayed on at Utah State and works with Jim in the consulting business, and does complex three-dimensional structural analyses. Steph and I have a paper for GSA Bulletin on a major low angle normal fault system in SE Idaho. Julie and Joey both found excellent positions in the oil patch in Houston, Texas.

I led a field trip to the SE part of the Salmon Basin in August of 2003 for the Tobacco Root Geological Society during a joint meeting with the Belt Symposium. This trip showed off some of the wonderful work that Jim Blankenau did there for his master's thesis. Jim even managed to get away from his busy job to co-lead the trip. Stefan Kirby and my colleague Becky Dorsey (University of Oregon) came to Salmon Idaho for this meeting and we all learned a huge amount on this wonderful field conference.

My research on thrust faults in SW Montana with Betty Skipp and Bill Perry keeps burbling along and I took our work on the road for talks at the Utah Geological Society and the Department of Geology at UN Las Vegas.

Colleague Paul Kink from Idaho State University spent his sabbatical year zapping detrital zircons in Australia on the SHRIMP. Paul was kind enough to collect several samples of interest to our work on supradetachment basins of western Montana. There are many wonderful results, including tales of major fluvial systems that flowed across an Eocene to Oligocene extensional zone at one time but flowed along its axis at other times.

Our kids are doing well. They will be 6 and 10 when you get this newsletter. Karen can no longer eat wheat, rye or barley, but she is quite sensible about it. We now read food labels in our spare time.

I began a new major research project in the Salton trough of southern California during my stay in Eugene. After two "winter" field seasons I can tell that there is a lifetime of work to do there. There are many amazing tectonic and structural problems to resolve along the North American plate boundary. Rates of deformation are head spinning and Quaternary deposits have sustained an incredible amount of deformation in some areas. Second year graduate student Stefan Kirby is working with me, Becky, Dorsey, Gary Axen and Bernie Housen in the Salton Trough. He has mapped highly deformed sediment that is less than a million years old at the top of the section. Alex Steely mapped there for his senior thesis and is continuing on this project for his maser's thesis. Alex is examining a piece of the supradetachment basin that was later shredded by an evolving strike slip fault zone. Fun stuff.

Since I'm late in getting my write up to Peter Kolesar I can add a little information about my latest field work in the Salton Trough in late October of 2003. I spent only 10 days in the field but had a surreal experience (see my "report from the field" below). Next time I'm having a bad day I'll keep this little run of incidents in mind.

The geology was incredible but the associated events were otherworldly. The following transpired during my short field excursion:

- 1) I got stuck in an hour long traffic jam in middle of Mojave Desert, in 100 + heat with a nearly empty gas tank.
- 2) A colleague and I were witness to a motorist who ran off the edge of the highway up to the steep side of the Santa Rosa mountains on a tight hair pin turn. We saw her do a 360° turn on the narrow road, spin out, shoot up a lot of dirt and barely escape going over the edge of a cliff. We got her squared away with official help.
- 3) We were subjected to a record heat wave (over 100 most days) that required long early days, and lots of sweating.
- 4) I lost (and found) a credit card. I was already tired by this point.
- 5) A swarm of Africanized bees took a liking to us and I got stung three times, and Alex Steely was stung once.
- 6) I drove on and off all day from Indio to San Diego for a visit with Tom Rockwell to scan his air photos and talk about rocks. I'm driving fast over the mountain, at night, and near my target only to be turned back by the great San Diego fires that had started the night before. No "road closed" signs were posted in advance. Every road into San

- Diego was closed except for one in the south, and evacuees from the fire at a rest area were the ones to clue me in to the situation.
- 7) Alex gets his truck stranded in the airport parking lot in San Diego while taking the weekend off for a water polo match in Tucson. He was reunited with his vehicle two days later and was lucky to be able to drive out into the desert.
- 8) There was no electricity in Borrego Springs when I finally drove back into town after the long drive back around the mountain from near San Diego. The direct routes were blocked by fires.
- 9) My cell phone stopped working properly and I got the voicemail from Alex telling me where he was and when to expect him back after he had already arrived back at camp in Borrego Springs.
- 10) My trusty truck died in the dark after running perfectly all trip long. After spending the day in the middle of nowhere by myself and driving out in the dark, I had the "good luck" of having the battery die at the Ace Hardware in Borrego Springs, right next door to the service station where the attendant had happened to stay late that night.
- 11) The winds shifted and the fires started heading our way. Alex and I had a great day of geology in the dim light of the smoke-filled valley. All my clothes and maps smelled of wood smoke, and stiff winds blew sand into our dinners.
- 12) There were 5 inches of snow waiting for me back in Logan when I got home. What a trip! Highs of 105° at the beginning and highs of 35° at the end!

I'm sure I forgot something; it was a lot of incidents to keep track of. Many residents of southern California obviously had an even worse time since a couple dozen died in these fires and thousands lost their homes.

Thomas E. Lachmar: I'm still teaching courses on ground water geology and techniques of ground water investigations (formerly hydrogeologic field methods; the recent change in the name and description of the course were prompted by criticisms expressed in student evaluations regarding the paucity of field trips) in the fall and winter/spring semesters, respectively, as well as teaching physical geology each fall.

Six of my former graduate students are now gainfully employed as hydrogeologists. Alan (V.) Jones is still working for the Utah Department of Environmental Quality, while Gregg Hadlock has switched jobs and is now employed by Kleinfelder in their Salt Lake City office. Mike Robinson was working for Charter Oak Environmental Services, Inc., in their Salt Lake City office the last time I heard from him, but I did receive a call from someone working for Raytheon Polar Services this summer who was considering hiring Mike, so he may be working for them now. I have had no contact with Jeff Gadt in several years, but the last time I heard from him he was working for the consulting firm Ecology and Environment in the Kansas City, Missouri area. Also, Barry Myers has finished his master's degree and is now working for Bio-West, Inc., here in Logan. Finally, Keri Murch, who entered the graduate program in the fall of 2001, completed her degree last semester and is now employed by Environmental Resolutions, Inc., in their office in Novato, California. If any of you haven't contacted me for a while, please give me a call or send me an e-mail, as I truly would enjoy hearing from you.

Bill Schieb successfully defended his thesis in December, which is entitled "Hydraulic Testing of the Big Hole Fault, Northern San Rafael Swell, Utah". Jason Heath, who entered the graduate program in the summer of 2001, is wrapping up work on his thesis, which is concerned with determining the sources of ground water and carbon dioxide in wells and springs in the Green River, Utah, area. Last, but certainly not least, Neil Burk, who earned his undergraduate degree at the University of Utah and entered the graduate program here in the fall of 2001, also defended his thesis in December, which is entitled "Geochemistry of Ground Water - Surface Water Interactions and Metals Loading Rates in the North Fork of the American Fork River, Utah, from an Abandoned Silver/Lead Mine."

I've recently received additional funds from Cache County to continue the ground water investigations that started with Mike Robinson's study and continued with Barry Myers'. The latest is a comprehensive survey of springs in the east-central portion of Cache Valley, as the results of both Mike's and Barry's studies suggest that the springs may be the most sensitive indicators of excess pumpage in the valley. Also, Jim Evans and I are continuing the work we started five years ago to study the hydraulic properties of faulted and fractured sedimentary rocks and the feasibility of storing carbon dioxide in such subsurface reservoirs in central Utah. Finally, I participated in a task force last year that prepared a report on water-related activities at USU at the request of President Hall, who has since appropriated funds for such activities, and I'm currently a member of a committee that is designing a field laboratory within the Bear River watershed.

My wife, Barbara, is still doing public defender work for Cache County, and has a rather high-profile case at the moment (a man who swindled a large number of investors out of a lot of money). Our twin daughters, Anne and Elizabeth, are now sixteen years old and are currently in the tenth grade at Logan High School. Meg is thirteen and in the eighth grade at Mount Logan Middle School, and James is nine and in the fourth grade at the Edith Bowen Laboratory School.

As some of you may remember, I successfully climbed Mount McKinley in 1999 along with Scott Wyatt, the former Cache County Attorney. As of the last newsletter, Scott and I were considering climbing Mount Logan (the one in Canada, not the one here in Cache Valley) in 2003, but we each decided to climb another peak in 2002. I climbed Mount Cook in New Zealand during the forced suspension of classes during the Winter Olympics, and Scott climbed Mount Kilimanjaro in Tanzania. However, we are still discussing the possibility of climbing Mount Logan, but just not until 2005.

W. David Liddell: My research interests continue to include both Recent and Cambrian marine communities and environments. Forays into the modern realm have included work on oil platforms in the Gulf of Mexico with funding and logistic support from PEMEX. In the wake of 911, tensions in the GOM oil producing areas were high, resulting in our research boat getting buzzed by a Mexican helicopter gunship and ultimately boarded and impounded. Former USU undergrad Dave Stirling (BA 1989) and grad Bill Avery (Biol PhD 1998) worked on this project with me. MS student Thad Nicholls and I are currently trying to piece together a project looking at anthropogenic (human induced) effects on reefs off the Yucatan Peninsula.

John Shervais, Joel Pederson, Carol Dehler and I led a graduate field trip to the northern Gulf of California over spring break 2004. It was interesting to see a hard rock petrologist like John carrying a shovel rather than a rock hammer as we explored the tidal flats. I am pleased to note that, unlike previous excursions to the Gulf of California, no vans were stuck in the tidal channels at Choya Bay and we didn't loose (or come close to loosing) a single student as the tides reversed in Estero Marua.

My work with Cambrian sequence stratigraphy in the Great Basin continues. Liz Langenburg (MS 2003) completed her thesis on the Cambrian Wheeler Formation, building upon the earlier work of Loren Shneider (MS 2000), and is now working for ExxonMobil in Houston. Ben Kessel is a new grad student this year and will be working on a co-advised project with Brad Ritts and me in China this summer. We will be looking at Cambro-Ordovician sequence stratigrapy in the Ordos Basin, hoping to find some ties with the Great Basin Cambrian and work out the relationships between eustasy, tectonics and sedimentation. Melissa (Mel) Connely completed her MS thesis on the Jurassic Morisson Formation (home to lots of dinosaurs) in 2002 and is now working as a tenure-track instructor at Cody College in WY.

My courses include Geology of the World's Oceans, Sedimentation and Stratigraphy, Paleontology, Paleoecology and Quantitative Methods, as well as assisting with the summer field camp. Our head honcho, John, has generously shared administrative duties with me, appointing me as Graduate Program Director in 2000.

On the home front, lots of changes. I was married in December of 2003. My spouse, Lois, lives and works in Ogden, while I still have a house in Nibley, resulting in lots of commuting time and long distance phone calls. Hopefully, we will eventually settle at a mid point like Brigham City or Mantua. Jessica (seventeen going on thirty) will be going to college next year to major in journalism and is, as yet, undecided as to where that will be. Christine (age fourteen) is a sophomore at Logan High and will help to keep me on my toes while her sister is away at college.

Brad Ritts: Time has flown since the last alumni newsletter! Here in the basin analysis group we've been busy with projects in Asia, Africa, and North America. Most of my personal research continues to be in China. We're working on the Mesozoic growth of eastern and central Asia, and the way that growth influenced formation of sedimentary basins and petroleum systems, as well as the long-term Tertiary structural evolution of the northern edge of Tibet. My first two China students, Adrian Berry and Lynde Nanson, both completed M.S. theses in Inner Mongolia this year. Adrian is now with Anadarko Petroleum in Houston and Lynde has gone on to explore her quantitative side in the Statistics Department at Michigan. Alba Dos Santos also completed her M.S. this year, a subsurface study of the offshore Cabinda margin (Angola), and returned to work with ChevronTexaco. Last but not least, my first student, Andy Taylor, finished his M.S. on the Green River Formation in the Uinta basin in 2002 and also works for Anadarko Petroleum in Houston. These students have been replaced by a new pair this year – Ben Kessel and Scott Friedmann, both of whom plan research in northern China. We plan continued work in China for the next several years, ranging from extensional systems north of Beijing to Himalayan contraction in eastern Tibet – who knows what other projects the future may bring.

John Shervais: I am continuing to settle in and adjust to my responsibilities as Department Head. Departmental administration can be big time sink, and it expands to fill the time available, but I am blessed with about the best administrative assistant in the University so it gets easier all the time. I taught my first summer field module at USU in 2002 in the House Range, and co-led a graduate field trip across the active margin of California with Brad Ritts. I have also been teaching Ig-Met Pet, Advanced Igneous, and graduate seminars.

My research is ramping back up, with new publications in 2002 and 2003, two manuscripts in press at Geological Society of America Bulletin, and two more manuscripts submitted. Completed first MS student at USU, Cam Snow, who is now in PhD program at Stanford Univ working with Gary Ernst in Sierra foothills. After a brief hiatus, I now have four new graduate students with a wide range of interests, working basalts in Idaho, sandstone chemistry in Rocky Mountains, and high grade gneisses in northern Utah. I delivered three invited lectures this year, including the most recent at the Coleman Symposium at Stanford University in December 2003. Finally, new project funded by NSF looking at Archean crustal processes in the Farmington Canyon complex south of Ogden.

On a personal note, my Mother passed away in January of 2003, but I was fortunate to be with her in her final days, along with my brother. We attended a memorial service for her in March at her church in California, where she was honored as a founding member and guiding light in the early days of the congregation. We all miss her greatly.

Bob Oaks: Bob Oaks spent much of the past field season lugging the Worden gravity meter around Cache Valley and parts of adjacent Box Elder County again, with emphasis on major faults along the east basin margins. Same meter that gained fame for Ken Cook years ago at the U of U. Maybe it will bring Bob and Quinn Brown and Brad Lindsay similar luck when the results, based on about 3,000 stations, are published. Bob also consulted for the Bear River Water Conservancy District, on siting several potential water wells along the west face of the Wellsville Mountains, and in getting the U.S. Fish and Wildlife Service off the backs of some ranchers in eastern Curlew Valley in relation to the decline in flow at the five Locomotive Springs farther south, near the Great Salt Lake. That study has been accepted for the UGA Guidebook on groundwater for 2004. Bob and Susanne Janecke continue to collaborate on the Salt Lake Formation in the Cache Valley area, where tracking the southward extent of the Miocene-Oligocene[?] major detachment faults continues.

Jim McCalpin: 2003- Jim McCalpin performed 2 Quaternary fault trenching studies in the Rio Grande Rift, assisted by L.C. Allen Jones (M.S., 1995). It was great eating all that green chili and enjoying the "ay mañana" attitude in El Paso, but it was also good to return to the USA. At Great Sand Dunes National Monument our backhoe cut a perfect archeologic artifact in half, surely a low point in trenching history. For the 3rd summer Jim mapped a STATEMAP quadrangle for the Colorado Geological Survey, this time the Buena Vista East quadrangle, in the northern Rio Grande Rift. He also discovered Quaternary faulting on the Roubideau Creek "fault" on the Uncompahgre Plateau of far western Colorado, and like the Pajarito fault at Los Alamos, New Mexico (another project with Al Jones), it is actually a faulted monocline. Jim fervently wishes that those faults and folds would please stay separate.

Along with Jim Evans, Jim taught Geology 6800 "Field Methods in Neotectonics and Paleoseismology" in Crestone, Colorado in June 2003. USU grad students Angela Isaacs, Joe Jacobs, and Stefan Kirby saw more things than they ever wanted, like mucho fault scarps, plus "Visions of Hell" up at the Hot Springs. In August Jim attended the XVI INQUA Congress in Reno (the first time in USA since 1965) and co-chaired a symposium on "Paleoseismology in the 21st Century". After the Congress Jim and John Caskey (San Francisco State U.) taught a condensed 1-week version of Field Methods in Paleoseismology to 11 foreign nationals, mostly students. After a week in the desert, the casinos, and passing the Mustang Ranch every day, they thought the entire State of Nevada was a Vision of Hell! (apologies to you Nevadans).

In the Fall Jim chaired a session at the annual Association of Engineering Geologists conference in Vail, Colorado, on "Alpine Development and Geohazards", which included his past work on slope instability problems at Colorado ski areas. Jim is now working with Craig Nelson (M.S., 1986) on a subdivision/landslide project in Draper, Utah.

Recent Publications

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Department Notes

Late in the fall semester, 2002, President Hall announced the establishment of an award to recognize departments in the University that had a culture of excellence in teaching. Departments were asked to submit a 2-page preliminary "blurb" about their department. A committee evaluated the submissions and chose a total of six departments to submit a portfolio that documented the department's culture of teaching excellence. The committee also visited classes to do their own evaluations of teaching performance. Be it known to one and all that the Department of Geology was one of the two departments chosen to receive the inaugural award. (Of course everyone remembers that we have always placed a great emphasis on education, right??) The department was honored to sit just behind the stage during graduation 2003 and be introduced to the graduates and their families during the graduation ceremony. The award also had a monetary aspect – the Geology Department gained a \$15,000 addition to its operating budget (basically doubled the budget) and a one time lump sum of \$5,000. Thank you President Hall.

The Geology Department at USU currently has about 30 undergraduate majors (including Composite Teaching Earth Science majors), and has seen an increase in research funding. We have three new degrees in the pipeline as well: a B.S. and an M.S. in Applied Environmental Geoscience and a Ph.D. in Geology. The B.S. and M.S. degrees were approved by the University two years ago, and have been sitting at the Regents office since then, awaiting final approval. The Ph.D. degree is in the final approval stages at USU, and will then enter the queue at the Regents as well.

Carol Dehler has accepted a half-time Assistant Professor position in the department. Carol has been teaching at Idaho State University for the past year and a half; she has taught several classes at Utah State previously, including Field Camp in 2002.

Our department has seen an upswing in companies recruiting our students. We have recently been put on the permanent "to visit" recruiting lists for both ExxonMobil and Anadarko. This is an excellent development, because now our students will have the opportunity to interview with two of the leading petroleum companies in the US. It also doesn't hurt that those companies also donate some significant dollars every year. Companies have realized that our students are top-notch geologists.

The Geol 2500 field trips (490 or 350 trips for the mature alum) are still going strong. About 20 students (and Don and I) paid a close-up and personal call on the igneous and sedimentary rocks at Topaz Mountain, the House Range, and Crystal peak in the Spring of 2002. The Fall 2002 and Spring 2003 trips went to the Snake River Plain under the leadership of John Shervais and Tom Lachmar, respectively; Susanne Janecke led the Fall 2003 trip to investigated a fold-prone supradetachement basin in SW Montana. We also led two graduate student field trips associated with special topic seminars: an active margins trip to northern California in Spring 2002 (Brad Ritts & John Shervais) and an active processes trip to northern Mexico in Spring 2004 (Dave Liddell, John Shervais, and Joel Pederson).

Field camp 2002 was a bit smaller than in 2000, and better than ever. The sed/strat project was shifted from the Bear River-Wellsville-Promontory ranges to the Little Drum Mountains northwest of Delta, where the exposure is outstanding. The igneous rock project examined Mesozoic granite intrusions on the west side of the House Range, while a third project took us to the Snake Range of eastern Nevada to work out the sedimentology and structure of a basin associated with a detachment fault.

The face of the campus continues to change. The new Eccles Science Learning Center, funded by foundation grants and some state money, opened in the spring of 2002. This building is a dedicated teaching building with 500-student lecture hall equipped with the latest teaching equipment and preparation areas dedicated to each department in the College of Science. It's also the home of the Dean of the College of Science. A new library to replace the Merrill Library is under construction adjacent to the Cazier Science and Technology Library. Once the new library is completed, plans call for the razing of the Merrill Library, with a temporary green space occupying its spot. Those who remember taking classes in the engineering building, room EC106, should probably come back to campus relatively soon if they want to see it again. A new engineering building was completed last year, and the old building is scheduled for demolition in the not too distant future. Don't bother looking for the Edith Bowen laboratory school, either. It was demolished and has been replaced by a new complex. Finally, President Hall announced this fall the receipt of a major private donation for the construction of a large recital hall just west of the Fine Arts Center.

Recent degrees

B.S. in 2002

Jared Neal Allen, Quinn Frank Brown, Scott Kellen Carl (CTES), Sage Kurtis Evans, Robert David Mackley, Jeremy Edward Martin, Joel M Peterson, Megan Christensen Peterson, Paul M Roberson, Deborah Stringham, Brent Richardson Waidmann.

M.S. in 2002

Melissa Victoria Connely, Matt Pachell, Betty Ellen Paepke.

B.S. in 2003

Kyle C Andreasen, Tiffany Auman, Lindsay R Burt, Angela Isaacs Carter, Jeffrey S Cooper, Brent Henderson (B.A.), Heidi A Humpherys, James W Johnsen, Natalie Jorgensen, Matthew Mosdell, Juan Navarrete (CTES), Daren Nelson, Maggie Olson, Aaron Peterson, Megan Christensen Peterson (2nd BS in CTES), Julie Sherman, Laura Marie Symmes, Nora Elisabeth Wilson.

M.S. in 2003

Matthew Delbert Anders, Stephanie Carney, Torrey Jay Copfer, Caroline Elliott, Richard Heermance, Julie Kickham, Elizabeth S Langenburg, Isaac Larsen, Joseph Matoush, Keri L Murch, Barry Myers, Paul Peterson, Cameron Snow.

Student Awards, Grants, and Presentations 2002-2003

Department of Geology Awards

Outstanding Graduate Researcher: Paul Peterson
Outstanding Graduate Teaching Assistant: Adrian Berry

Outstanding Graduating Seniors:

Angela Carter Isaacs,

Graduating Senior Outstanding Citizen:

Thomas A Riemondy Scholarship:

Natalie Jorgensen

Kyle Andreasen

Chuks Chimezie

David Rider Memorial Scholarship: Scott Cragun, Alan Hidy

John M. Branch Scholarship: Scott Cragun
J. Stewart Williams Graduate Fellowship: Jason Kneedy

Student Academic Council Geology Student of the Year:

College of Science Undergraduate Research Grant:

Angela Carter Isaacs

Kyle Andreasen, Scott

Cragun, Dustin Keele

Utah Geological Association Field Camp Scholarship:

AAPG Grant-in-Aid:

Utah Geological Survey AASG Summer Internship:

Scott Cragun

Jason Kneedy

W. Scott Cragun

Development Efforts

As states struggle with the competing demands for allocation of resources, limiting taxes, and in our case, K-12 education, the earnings from our endowments and gifts are an increasingly important source of income for programs at all universities. These funds, along with the research grants generated by faculty, are the sources of computers, lab and field equipment, software, books, maps, field trips, visiting lecturers, and other teaching and research related materials that are critical in providing our students with a strong education. Geology alumni have been some of the strongest supporters of their home department in the College of Science, and the faculty and students really appreciate all the support. In addition to the scholarship funds mentioned above, we are working at generating more endowments to benefit the education of students in the department.

Kim Robeson Field Trip Fund – This endowment was started by Jim Evans and Susanne Janecke, and friends and family in memory of Kim Robeson, who received his MS degree in 1998 and died in November of 1998. A portion of the earnings from this fund will be used to fund "other than standard class field trips" such as Geology 490, 350, 250, or 2500 trips, depending on your vintage, and for trips organized by geology student groups. As most geoalum recall, these field trips are where we really learned geology, learned about each other, and, well, lets face it, had fun.

Donald W. Fiesinger Endowment- Tom and Barbara Lachmar in the summer of 2000 started an endowment named for Don. This endowment will fund the Department Outstanding Citizen Award, which was established in the spring of 1992 by then Geology Department Head Don Fiesinger to recognize seniors who have made outstanding contributions to the department's activities and programs. Students are evaluated based

on their participation and contributions to the department's activities and programs as indicated by their initiative, enthusiam, and participation.

The family of L. C. Allen (Al) Jones (BS 89; MS 95) once again were very generous and provided \$40 k as seed money for a new X-ray diffraction unit. YES!!!! We now have a brand new PANalytic (used to be Phillips Electronics) XRD with an automated sample changer and lots of bells and whistles.

In addition, the College of Science recently held a phon-a-thon for fund raising, and we are proud to announce that the Geoalum outpaced all the other departments in the college; despite being the smallest department in the College! Thanks to all!

DONORS

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Donald Carl Laub Kenneth Byron Layton
Dave E Leppert Michael Leschin

Dr David B Loope James A Marquardt Jackline Matosian Patrick H McClellan

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Mr. and Mrs. David A Whitney

Christina Williams J. Greg Yates

Alumni notes

Bill Douglass (BS 1952). I am retired and living in Mexico on the shores of Lake Chapala about 50k south of Guadalajara. I am a retired Petroleum Geologist with most (but not all) of my work experience in the Deep Anadarko Basin of Oklahoma and the Texas panhandle. When I worked for El Paso Natural Gas Company, one of my prospects resulted in the drilling of the 3rd deepest Well in the World, 27,500 TD circa 1973-75. This well resulted in the discovery of major gas reserves in the Morrow, Springer and Atoka reservoirs. Before retirement I directed deep gas exploration for a partnership with Trigg Drilling Company in Oklahoma City--- before forming the partnership of Douglass, Dietz and Daley.

Lots of very interesting volcanic geology of Miocene to Recent age to explore on field trips in the Mountains that surround the Lake Chapala and throughout the states of Jalisco, Colima, and Michoacan in west-central Mexico The Jalisco Area is also a key place to study Plate Tectonics: subduction, ongoing volcanism (Volcan de Colima and Paricutin, earthquakes, tsunamis, fault bounded horsts and grabens, and a major triple junction. The Hydrology of Lake sediments, whereby differential subsidence along faulted aquifers in residential and rural areas due to subsurface water withdrawal has caused major damage to building structures.

I have assisted in an ongoing GPS investigation conducted by a combine of Geophysicists from U. of Wisc. at Madison, Caltech, and UNAM since 1996. We visited the Utah State Campus in July of this summer (2003) ... my wife Ana and son Eduardo, both Mexican nationals, loved Utah, Logan, and Cache Valley. *P. S.* Eduardo who is still in High School was very impressed with Utah State and may end up an Aggie. I hope so.

Robert D. Adamson (BS 1955). Since my retirement for Homestake Mining Company, I have searched the Colorado hills for gold, trout, and for some years elk, deer, pheasants and duck. Have lived in Colorful Colorado for 32 years. Still have fond memories of my time at Utah State. Have 3 children, and 12 grandchildren, and my wife. My oldest son also graduated from Utah State. Hello to old friends who might remember me.

Mike Taylor (BS 1964) reports that after retirement from the USGS in 1995, he took a position as Director of the Santa Fe Trail Museum in Springer, New Mexico. The museum is located in the old Colfax County Courthouse, which was built in 1882. In June of this year he completed a new set of exhibits on the history and cultural heritage of the Santa Fe Trail in New Mexico comprised of 18 graphic panels and a variety of new artifacts. He is now working on a video that deals with aspects of Spanish land grant history in northeastern New Mexico and its effect on Hispanic land rights. The museum has been renamed the Santa Fe Trail National Scenic Byway Interpretive Center. At the dedication in June, Mike was presented with commendations from New Mexico Governor Bill Richardson and Springer Mayor Danny Cruz.

In October 2003, Mike and his wife Julia moved into a new retirement home in Providence, Utah, where they plan to live about nine months of the year, alternating with their home in Springer, where they will continue oral history work. The move will put him closer to the Fife Folklore Collection and other Southwest history holdings of the USU Special Collections Library.

Mike and Julia report that retirement doesn't mean you don't work any more, it merely means you don't get paid for it! However, their new home allows them to sleep late in the mornings and look out their bedroom window at the Paleozoic section in Providence Canyon!

John Woffinden (BS 1969) John is a veteran of the U.S. Air Force, is currently in the Air Force Reserves, and has been a Hydrologist/Water Resource Manager at Dugway Proving Grounds for the past 24.5 years. He has been married to Janet since 1970, and they have 5 children and 7 grandchildren (so far!!). John recently published an article in "The Connector" that concerned his research into removing arsenic from Dugway's only source of drinking water.

Jerry Degraff (MS 1976) It has been a busy year in the Forest Service as usual. I was sort of surprised to realize in September that I had served as a geologist in the Forest Service for 26 years; all on the Sierra National Forest near Fresno, CA except for 3 years on the Fishlake National Forest near Richfield, Utah.

A week ago, I returned from an 11-day assignment as the geology member of the Burned Area Emergency Response team for the Cedar Fire. This was the largest and most destructive of the recent Southern California wildfires. It affected over 338,000 acres near San Diego. The rest of the year has involved the usual resource and mineral management geology on the three national forests I cover; the Sequoia, Sierra, and Stanislaus. In addition to these duties, I also serve as an On-Scene Coordinator for dealing with CERCLA (aka Superfund) response actions on a number of abandoned mine sites on several national Forests in California. It was especially interesting this year because we were having contractors actually do the remedies. At one site, we recontoured and capped arsenic-laden tailings for a 1900s-era gold mine. At another, the work involved excavating and stabilizing mercury-contaminated sediments at an old hydraulic gold mine. Lacking any recent landslides in the Sierras, I satisfied my interest in my favorite geologic topic by finishing editorial work on a GSA publication. "Catastrophic Landslides", the most recent addition to the Reviews in Engineering Geology series, has enough fascinating papers to satisfy even the most landslide-addicted geologist.

Dan Grundvig (**BS 1976**) The geologists might be interested in several projects I've been involved with during the last year. During the 1960's, the U.S. Bureau of Reclamation assisted the Israeli government in the design and construction of the National Water Carrier, which distributes

water from the Sea of Galilee throughout Israel. Since that time, Reclamation has had little involvement with Israel until recently. In March 2001, Nahal Oz Dam in southern Israel failed resulting in significant property losses. Fortunately, there was no life loss. I was asked to evaluate the cause of the failure for Mekorot, the National Water Company of Israel. My investigations showed that the failure was the result of constructing the dam of dispersive soils and upon collapsible loess. During first filling of the reservoir, the foundation settled, cracks developed in the dam and internal erosion of the dam occurred. I'm presently involved in the rehabilitation of this dam as well as construction of a new dam in northern Israel. The new dam will be built upon and of highly plastic (CH- fat) clay, which presents some real engineering geology challenges.

Beth Evans (formerly Partin) (BS 1977) I am teaching 8th grade science and love it. My son Nate graduated from UVa and our other children, Jonathan (14) and Jackie (12) are thriving in school. If you don't hear from Nick - he quit the state to start his own company: Virginia Groundwater LLC. He and his partner run geophysics to find water, then drill for the water. He has had a 100% success rate so far!

Dave Loope (BS 1977) I'm still a geology professor in the Department of Geosciences at University of Nebraska. I do research in the Nebraska Sand Hills, and still get out into southern Utah on a regular basis to study the Paleozoic and Mesozoic eolian sandstones. For the last three years, I've been focused on the paleoclimatic implications of the Navajo Sandstone. My wife Cindy and I have two sons: Kevin is a freshman at Univ. of Wisconsin-Madison, and his brother Garrison is a junior in high school. I have fond memories of faculty and students in USU's Geology Department in the late 70's, and am quite pleased to see that the department continues to flourish.

Steve Rauzi (**BS 1977, MS 1979**) Nothing outstandingly new on my end - still representing (for 15 years now) the oil and gas conservation commission at the Arizona Geological Survey. Life is good but short.

Lynn Jackson (BS 1978) Kathryn and I are still living in Moab, been here with BLM for 22 years now, 3 in Hanksville. As crazy as it can get working for BLM in the rural west I've found a working niche I quite enjoy which involves "brokering" research for BLM in southeast Utah and on the Colorado Plateau in general. The work runs the gamut from identifying research needs and priorities for natural resource related issues, getting together with the research community in USGS and regional universities, getting the proposals worked up to address those needs, getting the funding, overseeing some of the projects, and occasionally getting my hands dirty in the field with the researchers! Pretty much focus strictly on the science needs of BLM which, being behind the scenes work, is often the best spot to be as more and more special interest groups and lobbyists fight and litigate to carve up the west. The drought is throwing an interesting curve ball or two at public lands management! The majority of climate experts are telling us all to get used to it...

Our three girls are pretty much raised, and have been living in Moab for the past couple of years. One grandson who tries to keep me young. Could retire in 5 years, but as long as I'm enjoying what I'm doing I may work until they throw me out. Been a while since I've seen any of the old cohorts from circa 1974-76, if any of you get to Moab, we're in the book, give me a call and we'll throw a couple of cold ones down!

Scott Russell (MS 1980). I worked for Gulf Oil/Chevron/ChevronTexaco for 22 years as a geologist. However, with the last merger I decided to quit the corporate world and join some fellow employees in starting an oil and gas consulting business. I am now the Geologic Manager for Centaur Consulting LLC in Evanston, Wyoming. We have been in business for about a year and a half. Still enjoying life and geology!

Janet de Vries (MS, 1982) and partner Leanne Woodfill went from shorts weather at their home in Casper, WY, to long underwear in New Zealand in July 2003. The geology was spectacular -- fjords and hanging valleys in the mist, volcanic mountains and geysers, glaciers and rainforests. Janet is the Career Center Director at Casper College, where her undergraduate (University of Akron, OH) geology field camp was based in 1979.

Blaine Hanks (**BS 1982**) Still working in the shallow oil fields of NE Oklahoma, and messing around shooting and processing seismic. Want to drill some wells soon for coal seam gas.

Kent Hoffman (BS 1982); Kent is still with the US Bureau of Land Management after 19 years (interesting considering he took the government job in 1984 on an "interim basis until the next oil boom..."). After 16 years of working for BLM in Durango, Colorado, primarily overseeing the development of coal-bed methane in the Northern San Juan Basin, and a short stint in Washington DC, he was selected last summer as BLM Utah Deputy State Director for Lands and Minerals. The position is located in Salt Lake City and he now works on a wide variety of energy and mineral issues--from oil and gas to wind energy, to coal and hard rock mining. He currently lives in Mountain Green (between Ogden and Morgan). He and his wife Juli have seven sons and are happy to be back in Northern Utah again.

Paul G. Jamison (BS 1982) "I'm experiencing the grand daddy of all mid-life crises, having quit my job in public education to dig fossils. Some people just buy a sports car."

Jim Curtin (BS 1983) Hope all is well with you and yours. We are having a reunion with some old geology buddies next Memorial Day weekend 04' in Logan. Matt Davis, Bill Bragdon, Bob Nutt. I think Bill is the only one out of us that is a geologist. Also Gene Luzzietti who has been real successful with Chevron. We are happy campers living in rural Vermont. We just built a house this year and last year. Been sawing our own lumber and doing most of the work ourselves. Time consuming but worth it!! Our kids are Finn 5, and Maeve 3. My wife Jennifer is a nurse and I am a computer consultant with Dartmouth Medical School. Its been a journey since the old USU days but who doesn't have a story to tell!!! Best.

John Katseanes (BS 1983) When I left USU in '83 I never thought I would actual have a career in Geology. But here I am and thanks to the fine education I received at USU I can proudly say "I are a Geologist". Working for major gold mining companies in the Great Basin, I searched the mountains of Nevada, Colorado, Idaho, and California looking for the evasive yellow metal. I have lived in Winnemucca, Reno, and now Elko, NV. Currently, I work for Barrick Gold Exploration where I specialize in using computers. I manage and integrate information from different sources into 3-D models to visualize and interpret data for exploration programs. Recently, I was promoted and will be working with Barrick's international exploration offices. In November, I presented a talk at the Quebec 2003 Exploration symposium. While my job has been stimulating and demanding, my greatest challenge and the most rewarding has been raising my three children with my wife Kate.

Max Steadman (BS 1983). It is good to hear from you. I understand I have a couple of young men in my neighborhood enrolled in the program, i.e., Todd Bradfield & Cory Barton. They seem to be very excited about geology - it's good to see. As for me I work as a Sr. Program manager for Northrop Grumman. Previous to that, I spent 17 years as an engineer and program manager for TRW Inc. I moved back to Logan 5 years ago and commute to HAFB every day. The commute is kind of a pain but living in Cache valley makes it worth it. I need about 5 more years to be retirement eligible so I guess I'll keep it up for a while longer.

I don't know if I ever took the opportunity to thank you, and the rest of the faculty for what you did for me while a student at USU. I learned a lot more than Geology, which has helped me

greatly in my career. I was a non-traditional student and it was nice to have faculty who were willing to help all students not just the traditional ones. Please accept my thanks, I really have appreciated everything you and others did in my behalf. I don't think that I will ever forget that "Cold Oysters Seldom Develop Many Precious Pearls, The Juices Congeal Too Quickly". By the way, I am still looking for that old abandoned mine in Idaho and have gotten a lot closer.

Elio Torrealba (BS 1983) I presently work for the South Coast Air Quality Management District as a compliance officer in the Engineering and Compliance Division. See our website at www.aqmd.gov. I have worked for them for 14 years now, after oil work got too rough for me.

Randy McMullin (BS 1985) I am still working (10 years now) at the Maine Department of Environmental Protection where I work in Solid Waste. I do licensing of all sorts of things including the Beneficial Use of Waste Materials and getting rid of tires. Maine is pretty progressive when it comes to finding new uses of previously landfilled materials. I am never bored here. I also do compliance inspections and enforcement. I get to meet all kinds of lawyers and other outlaws! My spousal unit of 20 years, Ginger (BS Watershed Science 84), just got a MS in Oceanography at the University of New Hampshire, because she wanted to. She also works here at Maine DEP and does ocean current research for the oil spill remediation program. We still live at the beach in a log house in the woods, have no kids or anything, and are planning on taking a 2 month ride out west in my restored 79 VW Westy camper next fall.

Reed Bryce Darley (BS 1986) I work for Harley-Davidson as a Supply Chain Lead (another name for Material Manager) and I have been with the company almost 6 years. I couldn't make enough money so I left Utah for Wisconsin and I reside just North of Milwaukee. Beer and cheese are the favorites here. Maybe the Geology department needs to plan a field trip out here, It is lacking in formations and the area just has glacial remnants around here. My oldest daughter was married in Logan this summer and I actually thought about stopping in and saying Hi to you and Don F.. I have 2 sons on mission s for the Mormon Church, one in Colorado and the other in Sweden. That leaves just 3 kids left at home with me and my wife. It seems like yesterday, that I was going to school and you were teaching me geochemistry. I did have the Dean of the Engineering department give me a call about the Wright Brothers aircraft and that was built with donated Harley-Davidson engines. I pointed him in the right direction for the funding, since it was good publicity.

Mike Neville (BS 1993) I have a couple of items that I would like to include in the newsletter. 1) I will be getting married on April 17th of the coming year to Donette Bailey, a former USU attendee who I've known since the sixth grade. 2) I have started my own business in GIS and GPS applications and solutions. (Contact Pete for the company name and address). I am presently engaged by Mesa County Public Works, Engineering Division developing storm water infrastructure maps and models using the National Hydrograph Dataset.

Daren Rasmussen (BS 1994) I still work for the State Engineer's Office in the State of Utah's Dept of Natural Resources. However, I am no longer doing dam safety work, but am full time administering the Stream Alteration program along with Chuck Williamson. Two of us for the state aren't adequate but, I am enjoying the challenge so far. I reside in Murray Utah. I have been married to Joelle since 1993 and she has a career in Speech-Language Pathology. We have 3 children (8, 6, & 3 years old): Joshua, Kaleb, & Sarah.

Heidi K. Hadley (MS 1996) After 13 years with the USGS Water Resources Division in Salt Lake City, Heidi accepted a job as State Hydrologist for the Bureau of Land Management (BLM) in Utah. It has been 2.5 years and she recently accepted a newly created job as BLM Salinity Coordinator for the Colorado River Basin this past October 2003. Her new hydrogeologic duties include quantification of salt loading from public lands in the basin and creation of new salinity-control projects. Part of Heidi's work is also her focus for a Ph.D. dissertation entitled

Transit Sources of Salinity Loading in the San Rafael River, Colorado River Basin, Utah. Dr. Pete Kolesar, chair of Heidi's M.S. effort, is a member of her Ph.D. committee. She can be contacted at hhadley@uc.usbr.gov for more information.

Krista Morisen (BS 1996) It's been a long seven years since I left the safe confines of the USU Geology Building and headed back to my home state of New York. In that seven years I have thought of everyone there with fond memories and at times miss it there. Yeah, I know I said when I left I wouldn't miss Utah, but I must eat my earlier words and say I do miss USU. What I miss most are the people there. The wonderful faculty who always had time for us lowly undergrads and my fellow undergrads whom are often in my mind. People like Torrey Copfer, Karen Marquardt and others. Well enough of that, let me tell you what I have been up to. When I left USU Geology, I went to work for the Environmental Field on Long Island in New York for four years. Then I decided I needed my Masters and am now currently enrolled in the Master of Science Program at Miami University in Oxford, OH. I have been working hard on my thesis entitled "The Structure and Kinematics of the Lexington and Kentucky River Fault Systems, Kentucky: Implications for Phanerozoic Foreland Basin Development." I recently presented my research at the Geological Society of America meeting in Seattle and received rave reviews. I hope to finish this year and move on to a PhD program studying Geophysics and Seismology.

Mike Leschin (MS 1997) Over the next 2 or 3 years the BLM will be spending over \$900,000 at Cleveland-Lloyd to renovate the visitor center and quarry structures. Deficiencies in the current buildings have developed or become obvious over the years. A request for funding to fix them was put into the budgetary pipeline 3 or 4 years ago. Planning on how to spend the money is now hot and heavy and I am part of it. Building on the plans put together by the Savethe-Quarry Committee. I've been working with our regional paleontologist in the state office, an interpretive specialist out of the Washington D.C. office, engineers out of our Denver Science and Technology Center, and research paleontologists from the University of Utah. Utah State has been involved in this in the form of a visitor survey done this past season by Michael Butkus from the College of Natural Resources. It is a somewhat painful but exciting learning experience. The new and renovated structures and exhibits should be done in time for the quarry's 40th anniversary as a National Natural Landmark in 2006.

Dan Wilcox (BS 1998) Things have changed a lot for me in the last year. My then girlfriend Amy and I went and visited "Nano" Dan Kendrick in Australia and got engaged at the Sydney Opera House and got married in August. She has a boy and a girl ages 10 and 12, respective. I'm still a drug rep for TAP pharmaceuticals and missing the geology/mining world. Hello to all.

Maya Hildebrandt Garcia (BS 1999) I guess I could say hi to everyone from the Class of '98. I am enrolled California State University, Fresno, working towards an M.S. in Hydrogeology. I'm also working at the Department of Transportation, California (Caltrans) as a haz waste consultant in the Environmental Analysis Division. I am assigned to the Hazardous Waste Management Branch, dealing with such scintillating issues as aerially-deposited lead, lead-based paint, bridge sealants, leaking underground storage tanks, weird pesticides and evaporites, and the occasional naturally-occurring asbestos pod. The most exciting part of my job is hovering on the side of freeways with a little white hardhat on. Honestly, does anyone think that a hardhat will help if you're hit by a car doing 85 mph??!!? And there was the time we got stuck on a swing-span bridge while it was swinging - very exciting.

Dennis Wright (BS 1999) and his wife Lorelyn have a little girl named Lindsey and a little boy named Peter. They also have 6 chickens named Don, Jim, Tom, Pete, Dave, and Bob. Dennis is currently employed as the Program Coordinator for the NASA Affiliated Research Center, which is part of the Utah State University Research Foundation. Dennis finished a Master's

degree in Soil Science 3 years ago and would like some more pain, so he is going back for an MBA. He has applied to Northwestern, BYU, and Thunderbird.

Jeri Huish (BS 2001) Joe and I are expecting a new arrival. She's due on April 3rd, 2004, and her name will be Darcy Jo Huish.

Melissa Connely (MS 2002) I would love to say hi to the department and would like to invite them to give me a call or drop a line sometime. Things are going great here in Wyoming. I am in my second year as a Geology Instructor at Casper College (tenure track). I am trying to get a gps/gis program started here and will teach my first class on the subject this spring. I have also starting consulting in the state serving the petroleum and natural gas industry. (I am a paleontological consultant and survey public lands for vertebrate fossil remains prior to construction of things like well pads and pipelines). I have started the process of getting a professional license through the state of Wyoming and have completed the first exam. Next year I should be able to take the second exam and become a certified professional geologist. I am still working on several research projects. A paper will be published soon in the Journal of Paleontology. I am a coauthor with Tidwell and Britt at BYU on some new fossil plants from the Morrison Formation. I am finishing my Pterasaur paper now and plan to present it to SVP in Denver in 2004.

Bob Gubernick (BS, 1983), engineering geologist and lead fish passage engineer for the Tongass National Forest, has been named U.S. Forest Service Engineer of the Year. Bob will receive his award next month during a ceremony in Washington D.C. Gubernick has worked for the Tongass for 20 years, focusing on issues such as water and road interaction, aquatic species studies and canopy penetrating radar. "It is wonderful to know that you can work hard and do innovative work even in a remote forest like the Tongass," he said. "There are a number of people that I work with who have contributed to the success of my program of work and I also look at this as a group award for those involved in the Tongass fish passage program." [abstracted from the Juneau Empire, 24 March 2004].

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