

## JEAN BAHR

After my marathon travel schedule in 2003, I enjoyed a much calmer 2004 with only a few out-of-state trips and even fewer guest lectures. I returned to a regular teaching load, offering my contaminant course in the spring and Hydrogeology in the fall, plus sharing Environmental Geology in spring with **Richard Allen** and in the fall with **Chuck DeMets**. We introduced new technology to that large undergraduate course this year: remote control “clickers” with which the students respond to questions posed during lecture. While learning how to use the technology was a bit of a challenge, I believe it was effective in making the lectures more engaging, and it definitely increased attendance since we awarded part of the course credit based on clicker participation. **Jeff Wilcox**, who served as the TA for the course, gave a talk at the GSA Annual Meeting on our experience.

On the research front, my students continue to work on a wide variety of projects related to both ecosystem hydrogeology and to natural and anthropogenic contaminants. A paper based on former PhD student **Sue Swanson’s** studies of Madison area springs appeared in *Ground Water* and another (with **Kristin Anderson** as a co-author) is in press. Sue’s work provided the basis for current studies in the Mukwonago River watershed being conducted by **Hilary Gittings**. Papers are in press resulting from **Tara Root’s** work on naturally occurring arsenic and **Jeff Wilcox’s** study of a site being developed as an unsewered subdivision. A manuscript is about to go out for review based on the wetland hydrogeology study by **Abby McDermott**. Abby graduated in the summer and has just started a consulting job in DC after an internship at the National Research Council (NRC). In January, we began a new EPA funded study in collaboration with the WI Departments of Natural Resources and Commerce. MS students **Nate Keller** and **Rachel Greve** are involved in this effort to assess the effectiveness of their protocols for “closing” sites with gasoline contaminants based on the assumption that natural attenuation by biodegradation will stabilize and, eventually, shrink existing plumes.

My term as chair of the NRC Everglades committee is ending with the release of a final report in early 2005. Before I had a chance to recover from that, I was enlisted in a new NRC initiative to define a research agenda for Earth Science and Public Health. I was also involved last summer in a workshop for faculty on to how to incorporate health issues in the geoscience curriculum. Held at Chico Hot Springs, MT, the workshop was intellectually stimulating and provided a chance for relaxing conversations with colleagues including UW alumni **Bill Woessner** and **Audrey Rule**.

I enjoyed seeing former students **Ingrid Ekstrom** and **Dawn Chapel** in Seattle (during a brief summer vacation trip) and a number of former students and alumni at the GSA reunion in Denver.



*At the GSA Badger reception: Maddy Schreiber and Jean Bahr, foreground. Ken Bradbury and Lukas Baumgartner are in back.*

## PHIL BROWN

Greetings from frosty, snowy (but I am still biking to work) Madison. Last year was an interesting year for me, my students and my family. Following are a few highlights.

After several years of depressed mineral commodity prices with the resultant sleepiness of the mining industry, 2003 and in particular 2004 saw renewed life in the industry which resulted in **John Marma**, who had completed a MS in the department, deciding to take a job with Newmont in Nevada. He and his family moved to Winnemucca in June and John loves his job as an ore control geologist at the Midas underground gold mine. I visited him a couple of weeks ago and hope to find a new Master’s student to undertake one of several interesting projects that cropped up. Newmont has more than a dozen openings for geologists in Nevada as I write this so the immediate future seems bright for students who are willing to go get dirty and work in the real world of mineral exploration and production. **Stephanie Maes** continues to work on her PhD studying magma flow, recharge and crystallization in layered mafic intrusions with an eye on the formation of nickel and platinum group element concentrations. A major manuscript has been submitted and there is a good chance that a year from now Stephanie will have completed her thesis.

In June-July I again taught three weeks of Field Camp in Park City. The five school consortium continues to draw 40-50 students each summer but the time remaining at the Chateau may be limited to a couple of years and big changes may be coming for camp. Last year I reported here that UW-Madison students were not in general going to field camp for a variety (time, money) of reasons. I am pleased that last year 12 students (nine from Madison, three from UW-Milwaukee) signed up through our department although I doubt that we



*Norlene Emerson and Charlie Byers at GSA.*

will see that many this year. I have agreed to take over the camp directorship for the next few years (I am sharing it this summer) and I hope that we can sustain and regenerate the interest in this traditional but I believe still very important capstone experience for most of our majors in the years to come.

My teaching schedule continues to be full and varied. I taught my introductory ore deposits class in the fall and we took a fun field trip to the Ozarks to visit current and historic lead and iron mines. The combined Earth Materials course continues to be a real challenge to cover the material in one semester—I am thinking about literally “writing the book” so that at least a resource would be available for the way the course has evolved.

A quick update on my family. Jason graduated from Carleton College a year and a half ago and is employed by Epic computer—amazingly enough in Madison. Peter is a junior computer science major at Grinnell College. Although she swore she wouldn't do it, Karin ended up enrolling as a freshman at Carleton, absolutely loves it, and continues to burn several candles at both ends simultaneously. We are happy that our kids continue to do well and certainly know where the paychecks go. Peter and Karin continue to swim successfully and this keeps them lean and TALL, both the boys are substantially taller than I am. Kris continues to be convinced that she has the best job in the world as the librarian at our kids' high school a mile from our house.

I reported last year on our kitchen renovation project and can now report that we still absolutely love the result especially the dark green charnockite counter top from coastal Brazil. I certainly learned a lot about choosing “granite” for a kitchen and would be happy to provide advice if you are considering a similar project.

Hope you have a safe and healthy 2005.

## **CHARLIE BYERS**

In 2004 I was the chair of GSA's History of Geology Division. This was an exceptional learning experience. Division chairs also serve on the Joint Technical Program Committee, which arranges the meeting. The “committee” is a virtual entity, as all the session proposals and abstracts are reviewed via email, under an intimidating timetable. Having seen the complexity of how a GSA meeting is put together, I will never again complain about overlapping sessions. For the HoG Division, I set up and chaired the annual symposium, which focused on one of my pets, the history of the concept of layer-cake stratigraphy. We had talks describing the origins of the idea in the early Nineteenth century, and descriptions of examples of the layer-cake interpretation that flew in the face of the prevailing facies model during the 1950s and 60s. We concluded with presentations on layer-cake stratigraphy in its modern guise, as part of event and sequence stratigraphy. Many authors enjoyed extending the pastry metaphor, with references to frosting, petits-fours, etc. At the Denver meeting I also presided at the HoG luncheon and got to hand out the Division awards.

Last spring I taught Geology 101 for the very first time, sharing the duty with **Brad Singer**. It was fun to revisit topics that I had never tried to organize in a teaching framework or even thought about very much in the decades since I first learned them (What? You mean there's been research in geomorph!). I am currently on sabbatical, converting my Evolution and Extinction course to a web-based format. On the home front we just passed a big milestone, as Wesley J. Byers turned 18. Can't imagine that I have a grown-up kid; does this mean I'm old?

## **ALAN CARROLL**

During 2004 my research group continued to work on a variety of projects related to sedimentary basins, with the largest emphasis on the Green River Formation. Several students finished (or nearly finished) degrees and have accepted new jobs. **Ben Byers** completed his MS on the Gualala basin, and is presently working for the relatively new company EnCana in downtown Denver. **Martin Shields** finished work for his PhD on the East Java Basin, and continues to work for Fusion in Houston. **Marwan Wartes** is close to finishing his PhD, and meanwhile has accepted a position with the Alaska Division of Geological and Geophysical Surveys in Fairbanks. I am eagerly awaiting his final thesis chapters, promised to arrive soon!

I've also taken on several new students. **Lauren Chetel** has begun working on a Green River Formation PhD after finishing her MS with **Toni Simo**. **Amalia Doebbert** has starting working on stable isotopes in the Green River Formation for a MS, in collaboration with Page Chamberlain at Stanford. We've already discovered something surprising, an approximately 6 per mil negative shift in  $\delta^{18}\text{O}$  that coincides