resulting from analysis and modeling of **Maddy Schreiber**'s tracer experiments will appear in the March 2002 issue of *Contaminant Hydrology*. **Ingrid Ekstrom**, a new student who joined my group in the fall, has begun a study to monitor the effects of an air sparging system on redox conditions and intrinsic biodegradation in the downgradient portion of the plume. Our extensive monitoring network at the site provides a unique opportunity to quantify the spatial variability of responses in the plume.

In collaboration with **Madeline Gotkowitz** of the WGNHS, PhD student **Tara Root** and I have begun an investigation of hydrogeologic controls on arsenic contamination of groundwater in southeastern Wisconsin. Projects completed in 2001 include MS theses by **Ann Dansart**, on fossil permafrost features as conduits for preferential recharge and contaminant movement through the unsaturated zone, and by **Kurt Zeiler**, exploring the use of inverse models to deduce the input history from a contaminant source at the Badger Army Ammunitions Plant.

I got an interesting dose of media exposure in 2001. In February, the National Research Council Everglades committee on which I am serving (and now chairing) released a report critiquing a plan for pilot studies for a large-scale aquifer storage and recovery system. I was interviewed by a number of Florida and national newspapers, as well as by reporters for *Science* and *Nature*. Later in the year my photovoltaic roof went into production as the first individual power plant in Madison. As part of a Wisconsin media focus on energy, I was interviewed for public radio and several local TV stations. A short article accompanied by a picture of my roof in the fall issue of *On Wisconsin* prompted emails from alumni in a number of states who are interested in following similar paths toward increased use of renewable energy. My hopes for the coming year are lots of sunny days.

❖ Charles W. Byers

This year turned out to be historical. In the spring I was appointed to serve on the internal review committee for the Department of History of Science. I got to see how we are perceived by our brethren in the humanities. I was amazed to find out how much they *think* about things we just *do*. I suspect they believe we are thinking as well, but I didn't correct the notion. Regarding the history of geology, my paper on E.O. Ulrich's work at Baraboo was published. And in the fall I was selected to be an officer of the History of Geology Division of GSA.

I am also continuing our Ordovician stratigraphic project. Norlene Emerson (PhD student), Toni Simo, Dana Geary, and I presented results from Norlene's dissertation on the Decorah Formation at North-Central GSA (for the upper midwest researchers who want the stratigraphic details) and at GSA in Boston (for the Ordovician arm-wavers). Steve Beyer, a first-year grad, will tackle the Galena sedimentology and bentonites in Iowa for his MS thesis.

I had a hand in the implementation of the new curriculum this year. In the spring I taught the revised Evolution of the Earth, which defers the history of life (covered in the new Geobiology course) and focuses more on tectonics, sedimentology, and global changes in the atmosphere and oceans. In the fall, Nita Sahai and I inaugurated the new Fluids and Sedimentary Processes class, which includes sedimentology, fluid mechanics, water chemistry, groundwater, and diagenesis. We are hoping to turn out well rounded geology majors, ready for the 21st century.

At home we crossed the great divide as Wesley went off to West High School and Jordan to first grade. We are finished with Montessori Children's House preschool after only a decade.

❖ Alan Carroll

2001 was another busy year, during which I juggled several active research projects, extensive travel, and preparations for my tenure review. My principal area of research continues to be the Green River Formation (see "Tectonic and Climatic Record of Eocene Lake Gosiute," page 18). In addition to ongoing work in Wyoming by several graduate students, I am currently supervising undergraduate student thesis projects by Reuben Johnson, Nick Hoel, and Alissa DeVaughn. Colin Walling also began his PhD research on the Phosphoria Formation nearby, in Utah and Idaho. His project involves assessing the contribution of windblown silt to organic-rich "shale" units such as the Meade Peak Member, based on a combination of fieldwork and laboratory studies of quartz grain size, texture, and oxygen isotopic composition. In addition to the potential of these deposits to provide a record of Permian wind patterns, wind-blown iron may have been an important nutrient that helped stimulate primary productivity of the Phosphoria shelf. Undergraduate Ben Bymers has been assisting Colin, and is working on his own senior thesis project to date wind-blown zircon grains using U-Pb.

In late summer I conducted fieldwork in the eastern Java basin with Toni Simo and PhD students Martin Shields and Essam Sharaf. This project aims in part at delineating the structural and stratigraphic evolution of the basin, which has experienced a complex tectonic history related to subduction of the Australian-Indian plate. We are also examining the development of the Miocene/Pliocene unconformity that controls local petroleum accumulations. Java is a very interesting place to conduct geological research, but presents logistical challenges that are similar in many respects to those I