



Stewardship Quarterly

Volume 1, Issue 3

January 2006

Bosque Ecosystem Monitoring Program

Funders

- Middle Rio Grande Bosque Initiative/U.S. Fish and Wildlife Service
- National Science Foundation's Schoolyard Education Program at UNM's Sevilleta Long Term Ecological Research site
- Bosque School
- Seven Bar Foundation
- Good Samaritan Foundation
- PNM Foundation Classroom Innovation Grant
- Albuquerque Community Foundation
- Middle Rio Grande Conservancy District
- U.S. Army Corps of Engineers Bosque Restoration Program
- New Mexico Association of Conservation Districts
- Messengers of Healing Winds Foundation
- U.S. Bureau of Reclamation
- McKee/Crawford Foundation
- Educational Foundation of America

Special points of interest

- * BEMP Student Congress April 28th
- * In-Class Discovery of the Bosque; Christian LeJeune; bemped@unm.edu
- * Bosque Ecology Field Trips; Adam Gebauer; ageba@bosqueschool.org

Molly Madden Honored at NAAEE Conference

This past October, Albuquerque hosted the North American Association of Environmental Educators (NAAEE) annual conference. The conference not only provided an array of presentations and field trips, it also presented an award for the K-12 environmental educator of the year. **The recipient of the 2005 NAAEE award was Molly Madden!**

Molly, along with her students from Rio Grande Elementary, has been monitoring the Belen site since it was added in 1998. In 1997, the Willie Chavez State Park (where the Belen BEMP site is located) was eliminated from the State Parks' system. Molly protested to her state senator, and as a result, was able to help negotiate a transfer of the park to Belen Public Schools for an environmental center. The promise of that center has yet to be realized, but Molly has succeeded in her main goal of keeping the park open and available to the citizens of Belen. Molly says, "Children need to be intimately involved in and aware of their local natural environment. In Belen, that would mean children spending time in the bosque and becoming familiar with its plants, animals, and human history." Molly's having become a BEMP site representative ensures a monthly opportunity for her students to

spend time in the bosque. In talking about her time in the field, Molly says, "In addition to BEMP data collection, we always take weather data, and write in our nature journals. We focus on something different each time for our journaling. We also use activities from the Bosque Education Guide, like the Bosque Bingo."

When asked about receiving national recognition for her work Molly replied, "I feel awkward about the recognition because it is always awkward to be singled out when there are so many teachers doing the same kind of work and doing it better. There are so many local educators who serve as my models because of what they are doing so well." Molly also added, "I would like to say that I think BEMP and programs like it are absolutely essential to the holistic education of our children, especially in this time of reduced emphasis on science and arts and increased emphasis on basic skills and test taking. I am extremely

concerned about the lack of governmental support for environmental education in public schools because if our students do not understand and care about their local environments, there will be more serious problems facing them in the future."

We thank Molly for all her work with BEMP these years, and we congratulate her for a job well done.



Hope for Snow

NEW Website

We are working on a new BEMP website and want it to be useful to everyone involved with BEMP. Some things that we are working on are: making the data more available and usable, facilitating in-class data processing, and creating a place where teachers can post additional activities and students' work. What would you like to be on the new website? Let us know.

Bosque Ecosystem Monitoring Program

Bosque School
4000 Learning Rd NW
Albuquerque, NM 87120
Phone: 505-898-6388
Fax: 505-922-0392

Department of Biology
University of New Mexico
MSC0 03 2020
Albuquerque, NM 87131
Phone: 505-277-0758
Fax: 505-277-6318

**Monitoring Your Bosque
Since 1996**

www.bosqueschool.org
click on BEMP link

Participating School and Student Groups

APS School on Wheels
Bandelier Elementary
Belen High School
Bosque School
Cottonwood Valley Charter
School
Creative Education Preparatory
Institute
Dolores Gonzales Elementary
East Mountain High School
Harrison Middle School
High Desert Home School
Holy Ghost
Hubert H. Humphrey Middle
School
Horizon Academy West
Jimmy Carter Middle School
John F Kennedy Middle School
La Cueva High School
Los Lunas Elementary
Los Ranchos
Montezuma Elementary
Ohkay Owingeh Community
School
Pueblo of Santa Ana
Rio Grande Elementary
Sandia High School
Sierra Vista
South Valley Academy
Wingate Elementary
Tohatchi High School
Tohatchi Middle School
Washington Middle School
Wingate Elementary
Zia Middle School



Pressure Transducers

The Army Corps of Engineers recently purchased and then installed pressure transducers in the center well at ten BEMP sites, most located in Albuquerque. This followed the purchase and installation of a pressure transducer in the center well at the Minnow site in Albuquerque by the U.S. Fish and Wildlife Service. Sites with pressure transducers include: Badger, Bobcat, Diversion, Alameda, Minnow, Calabacillas, Montano, Rio Grande Nature Center, Route 66, Harrison and soon Los Lunas! These pressure transducers obtain a measurement of groundwater depth every 30 minutes and store the data, which can then be downloaded and analyzed. This means we can see what happens to groundwater depths for 24-hour periods. It's like beeping a well every 30 minutes.

Pressure transducers are very expensive pieces of equipment, so we have installed locking caps on the wells with transducers. (The transducer at the Minnow site, however, does not require such a cap.) We will be distributing keys for these caps to each affected site representative. The pressure transducers are attached by wires to the undersides of the locking caps. Please do not tamper with the transducers, aside from beeping the these wells during monthly collections.

To beep a locking cap well, unlock the cap with a key and pull it up just enough so that you can get the beeper inside the well. The wires mentioned above will be tied in a bundled just below the cap. Hold the cap up and away from the well while you are beeping the well and then place the cap back on the well. Please make sure that you lock the cap correctly – have a person double-check someone's job of locking the well!

Reasons to Attend the Student Congress

The 2005 student congress was a great success. Not only did students present findings, give dramatic presentations, and attend field activities, there were also representatives from the U.S. Fish and Wildlife Service (USFWS), Ciudad Soil and Water Conservation District (SWCD) and UNM. Cynthia Abeyta from USFWS brought live silvery minnows and talked about their ecological role in the Rio Grande. Susan Rich from Ciudad SWCD brought the Rolling River Model, which allowed students to create a watershed.

Reasons to attend the 2006 Student Congress:

- See students present findings to their peers
- Mingle with students and teachers from different areas of the state

- Meet professionals who use BEMP data and work in environmental fields
- Learn about other research and work in environmental science
- Find out what scientists are learning from BEMP's student-collected data
- Take part in cool hands-on activities
- Add to the BEMP community

Jen is Looking for Help: This January through March, Jennifer Schuetz will be collecting data on woody debris (fuel load) at all of our BEMP sites. If you and your students are interested in helping, contact her at our UNM office (277-0758) or email her (jschuetz@sevilleta.unm.edu).

Our Mission

The mission of the Bosque Ecosystem Monitoring Program (BEMP) is collaborative long-term ecological monitoring of key abiotic and biotic processes and characteristics to promote continued education, understanding, and stewardship of the riparian ecosystem to scientists, teachers, students, policy makers and the public.