

SUPPLEMENT REQUEST FOR THE SEVILLETA LTER PROGRAM

Dr. James R. Gosz, P.I. Department of Biology, University of New Mexico Supplement to Sevilleta LTER Grant, NSF DEB 0080529 SEVILLETA SCHOOLYARD LTER - BOSQUE ECOSYSTEM MONITORING PROGRAM

I. Results of Prior Support, LTER Schoolyard Supplement 2000 The Sevilleta LTER Schoolyard Program, known locally as the Bosque Ecosystem Monitoring Program (BEMP) was supported by a collaborative funding program that included the Sevilleta LTER Schoolyard Program, the US Fish and Wildlife Service (Bosque Initiative funds) and Albuquerque's Bosque School. Its educational science and outreach goals, as stated in the 1999 Program Description for NSF funding by Gosz, Crawford and Parmenter, remained unchanged as we expanded and adjusted operations to meet internal and external expectations. A summary of these activities follows.

1. The Bosque Internship course had spring and fall enrollments of 17 and 16 students, respectively. A surprising number of graduate students from the UNM College of Education enrolled in the fall. The course was not taught in the summer because our two outreach coordinators were involved in fighting New Mexico's severe summer wildfires. The annual BEMP Student Congress for participating school programs and the annual BEMP Fall Workshop for teachers and interns were held at Bosque School in May and September, respectively.

2. Presentations and/or displays about the LTER Schoolyard/BEMP were made or shown at the La Cueva (School) Cluster Administrators and Guidance Committee in January, at Eisenhower Middle School Inservice Day in February, at the Bernalillo High School Career Fair in March, at the Middle Rio Grande Workshop in April, to Van Buren Middle School students in the bosque near our Bosque School Alameda site in May, at the New Mexico Watershed Watch Student Congress also in May, at the annual Bosque Improvement Group meeting in August, at the Santa Ana Pueblo Water Fair in September, and at Dia del Rio in Albuquerque in October.

3. Educators attending training sessions for the Bosque Education Guide (created in part in 1995 by outreach coordinator Mary Stuever and used extensively in regional schools since then) were introduced to LTER Schoolyard/BEMP in April at the Rio Grande Nature Center and in September at the New Mexico Museum of Natural History Teachers Night. Also in April, BEMP was incorporated as a model of service learning and field experiences in Project Learning Tree/WILD facilitator training in Albuquerque. Educators attending a community service learning workshop in July for the National Teachers of the Year annual conference in Albuquerque worked on service projects that included BEMP activities.

4. Outreach programs concentrating on leaf litter labs and/or monthly data collection procedures occurred at various Albuquerque public schools five times during the year.

5. A January article on student experiences in monitoring by co-coordinator Dan Shaw appeared in Rock EE News (Vol 1, No.2, Winter 1999).

6. Data updating was brought to near completion for monthly groundwater depths, precipitation, vegetation cover, and litterfall at five sites established by 1999. Intersite and seasonal differences in these sites are striking.

7. Two new BEMP sites were established in 2000. One of these is adjacent to and funded by Bosque School; it is to be used by a variety of K-12 schools in addition to Bosque School students. The other site was set up at Lemitar, just north of Socorro. As our most southern site, it is sponsored by Socorro's Save Our Bosque program, funded by the Bureau of Land Management, and monitored by Sarracino Middle School in Socorro. UNM student interns continue to work with school students and their teachers at all BEMP sites.

8. New Sevilleta Research Field Station Building was constructed during 2000, and this new building contains a Visitor Center, new Conference Center with kitchen, offices for personnel of the U.S. Fish and Wildlife Service and the University of New Mexico LTER group, and a new Research Training Laboratory. This facility was designed for K-12 education, with the laboratory capable of handling up to 24 students at a time. BEMP students will be able to visit the Sevilleta LTER site, spend time in the field on the refuge, and then return to the laboratory to work on sample analyses.

II. Proposed Work for 2001.

1. Web page revision is a major goal for the near future. With seven field sites and as many school programs currently attending them currently operating, information exchange within Schoolyard/BEMP and between the program and external sources requires enhanced facilitation.
2. Data summary and release to appropriate agencies has been anticipated for over a year; however, backlog problems, which have now been overcome, have made that unrealistic. We plan to distribute our first edition of the data report to appropriate agencies and organizations by late spring.
3. This summer semester we will again offer the Bosque Internship course. Depending on circumstances at the time, we may employ a former intern to help teach and coordinate the course. Also, our data manager, Kim Eichhorst, will become a full time doctoral candidate employee of the program and will participate in teaching more than she was able to before.
4. Increased exposure to the spectrum of BEMP sites for incoming student interns is planned for the spring and subsequent semesters. Course evaluations by past interns, some of whom continue to volunteer with mentoring and monitoring, recommend such a move as a way of increasing intern appreciation for the course.
5. This year we plan to employ a student to identify and record last year's pitfall trap specimens of indicator arthropods. Funding last year was insufficient to do so.
6. Creation of a Sevilleta Schoolyard LTER "Teaching Specimen Reference Collection" at the new Research Training Laboratory at the Sevilleta LTER site. This will be accomplished by a UNM student, who will prepare herbarium, vertebrate, and invertebrate museum specimens for inclusion in the reference collection. Many of the Sevilleta species are already represented in the research collections, but selected specimens of these must be moved to the teaching collection, relabeled, organized, and curated in the new specimen cases in the laboratory.
7. Participation in a national meeting is anticipated for at least one member of the Schoolyard/BEMP staff.