

Bosque Ecosystem Monitoring Program

Black Institute for Environmental Studies at Bosque School

Volume 7, Issue 2
March 2012

A Snapshot of Spring Shenanigans



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.

www.bosqueschool.org/bemp.aspx
edited by: Kimi Scheerer



THE UNIVERSITY of
NEW MEXICO

BOSQUE SCHOOL



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Crawford Symposium

~ sharing our passions and knowledge ~

The **Cebirin Goodman Youth Leadership and Environment Project** helped to sponsor the 1st annual **Crawford Symposium: Building a Green Trail to Tomorrow** at Bosque School on February 28th from 4-7:30pm. The symposium was created in honor of BEMP founder Dr. Cliff Crawford and creates an opportunity to bring professionals and youth together to share and learn about our regional watersheds & stewardship programs. We were fortunate to have the following fabulous speakers... **Thank You** for your continual support of *connecting us to the landscape*.



Vince Case ~ Sandia Mountain Natural History Center

Ondrea Hummel ~ US Army Corps of Engineers

Elizabeth Milford ~ Natural Heritage New Mexico

Cliff Dahm ~ University of New Mexico

Michael Jensen ~ Amigos Bravos

Clay Campbell & Colleen McRoberts ~ Bernalillo County Open Space

Beth Dillingham ~ Rio Grande Nature Center State Park

Gary Goodman ~ Youth Leadership & the Environment Project

Student Presenters ~ Amy Biehl HS, Bosque School & the community

Professional topics of delight included: student connections to environmental education; information about the Albuquerque Overbank Project; an overview of habitat restoration projects in the Albuquerque reach; a pharmaceutical summary of contamination in the middle Rio Grande and the effects of the Los Conchas fire on local watershed water quality (image below left, c/o Cliff Dahm & Bob Parmenter). The conference also highlighted local youth research and stewardship activities. Amy Biehl student Keila Gutierrez presented a nature, art & drawing experience. Bosque School Wildlife Biology & Conservation students presented a variety of bosque research projects (see page 2 – Black Institute) and Akilah Sanders-Reed, advocated for Jane Goodall's Roots & Shoots program and 350.org, a global movement to solve the climate crisis.



Las Conchas Fire and Water Quality
Start of New Mexico's Largest Recorded Fire
Las Conchas Fire, Sunday, June 26, 2011, 3 PM
(view from Placitas)

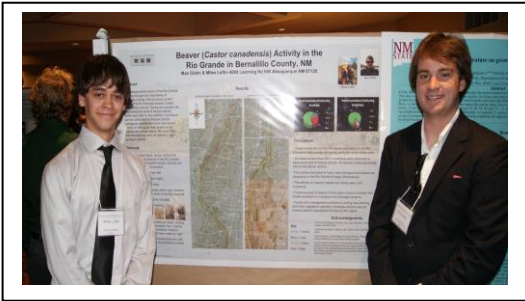
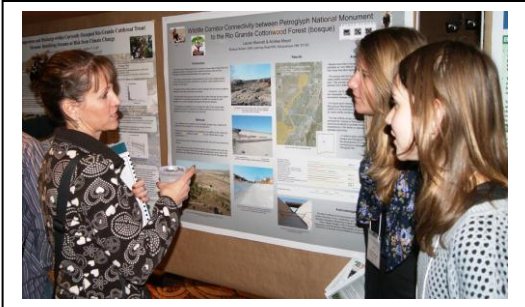


Welcome to **team BEMP** Bosque Farms Elementary!!

BEMP Co-Director Dr. Kim Eichhorst reports that the **27th BEMP site** has been installed ~ see image above on right! Bosque Farms Elementary fifth graders and their teachers (Robert Van Gilst, Donna Welch and Lisa Craig) helped pick a bosque area and installed their new BEMP site near their school in February. The area has plenty of beaver and porcupine activity and students got to see a **porcupine** during their March collection! The site was cleared of exotic trees a few years ago and includes some downed trees, small cottonwood groves, grassy meadows, thick sedges and a couple of junipers.

Bosque Research through the Black Institute

By: BEMP Co-Director Dan Shaw



Six Bosque School seniors presented scientific papers in Phoenix, AZ at the Joint Annual Meeting of the New Mexico and Arizona Chapters of the American Fisheries and Wildlife Societies in February. The presentations were a culmination of several months of field research on wildlife projects in the bosque and upland areas. Sydney Dazzo and Abbey Anderson (top photo, class of 2012) research consisted of documenting the presence of mid-size predators in the bosque using 16 track plates at 4 different locations. Lauren Bennett and Drea Meyer (middle photo, class of 2012) documented the opportunities and impediments within the west-side arroyo that wildlife face as they use the storm channels to move between Petroglyph National Monument and the bosque. Max Gibblin and Miles Loftin (bottom photo, class of 2012) completed a comprehensive survey of the Rio Grande through Bernalillo County to document the presence and intensity of feeding activity of beaver. The six students engaged in substantive discussions with wildlife professionals as they presented their findings and recommendations. The students were the only high school students present at the conference and directly competed with both upper level undergraduate and graduate students from universities across the southwest.

So far, this 2011-2012 School Year **3,599**

...students, teachers, community members, college interns, research partners, parents, agency professionals, festival attendees, tribal representatives & government leaders have been... **BEMPin' it Up!**



Educators work together on Project Wet curriculum at a Bosque School Workshop on Saturday, February 11th.

This past February teachers and environmental educators from across the state attended a Project WET workshop held at Bosque School. The workshop was hosted by Albuquerque Bernalillo County Water Utility Authority and BEMP. This **FREE** hands-on experience included a nature walk through the bosque, a riverside picnic lunch and a guest appearance by Gavilán the red-tailed hawk. During the workshop participants experimented with several curriculum guide activities including "One for All" which required the group to transport their "*limited resource*" through an obstacle course of pollutants, habitat destruction and drought. After completion of the one day workshop teachers each went home with the **NEW** color edition of the **Project WET Curriculum and Activity Guide 2.0!**

Many thanks to all **40+** of the teachers and educators who participated in February's workshop making it an overwhelming success!

The mission of Project WET is to reach children, educators, parents and communities of the world with water education. www.projectwet.org

By: Melanie Keithley, BEMP Educator

Save the Date



www.nmsta.org



www.eeanm.org



www.nmctm.org

The New Mexico Science Teachers Association (NMSTA), the Environmental Education Association of New Mexico (EEANM) & the New Mexico Council for Teachers of Mathematics (NMCTM) present...

Soar to Greater Heights

~ growing STEM's for the next generation ~

WHEN: Thursday (preconference), Oct. 11th
Friday – Saturday, Oct. 12-13th

WHERE: Bosque School - Albuquerque, NM

MORE INFO: www.nmsta.org

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TOPICS: join New Mexico educators as we prepare the next generation for STEM (Science, Technology, Engineering & Mathematics) based opportunities; find your focus by understanding common core curriculum & standards; AND experience methods and examples of interdisciplinary environmental education

FEATURING KEY NOTE: Dr. Kenneth Wesson

"How Children Learn: Brain Research and Inquiry-based Science"



If it's your job to develop the mind, shouldn't you know how the brain works? While there is no profession more noble than educating young minds to their fullest developmental potential, preschool to university-level educators seldom receive any professional preparation on "how the brain works". This presentation will highlight cognitive neuroscience and related principles in the contemporary context of education.

Dr. Wesson is sponsored by:



Legislative NEWS!

This 2012 legislative session, Albuquerque based **Wild Friends** (a network of students, teachers and mentors who support wildlife and seek common-ground solutions to wildlife issues) supported House Memorial 3 and Senate Memorial 10: the **Children's Outdoor Bill of Rights!** Passed unanimously by both the House and Senate, the memorial recognizes the rights of New Mexico children to have *access to outdoor activities*, and encouraging state agencies to *develop outdoor programs for children*. KUDOS to Sue George, her Wild Friends team and the multiple students, teachers and agencies that helped make this happen!

For more info: wildfriends.unm.edu



House Representative Mimi Stewart (center) supports Wild Friends legislation with students from Rio Rancho Cyber Academy, a BEMP monitoring partner!
Photo by: Kristina Ortiz de Jones, Sierra Club

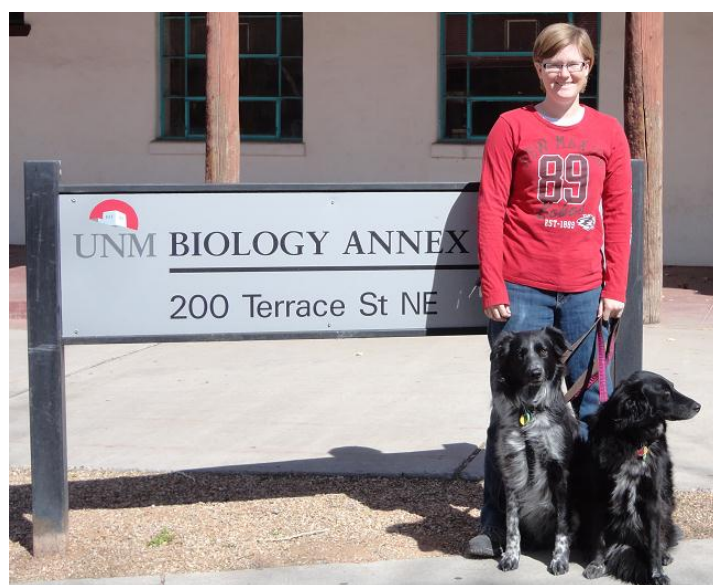
BEMP Student Congress events coming soon... Thurs. April 26th & Fri. April 27th



Hi! My name is Cait, and I was first introduced to BEMP in the Bosque Intern 408 class at UNM.

Since I couldn't take a second semester of it because of class conflicts, I asked if I could just work as a volunteer intern for no credit. To make a long story short, I stuck around for two more semesters and was hired after the winter break as a **BEMP Field Assistant!** However, this fall I'll be going to the University of Wyoming to focus on a PhD in Ecology. Until then, I'm happily spending my time working, riding horses or just hanging out with my friends, my dogs (see right), or my family!

Meet the BEMP Team!



Curriculum...

Opportunity!



The **Desert Reef Educational Project** is a classroom curriculum about the unique geological features found in New Mexico & West Texas. This curriculum consists of 6 lesson plans, each with accompanying short videos

that will enhance each lesson. Curriculum is designed and appropriate for middle and high school students.

All materials are FREE to educators!

www.timaydelottproductions.com/instructional-television

2011-2012 Participating Schools & Groups

Albuquerque Biopark	Kewa Middle School
Abq. Institute of Math & Science	La Academia de Esperanza
Alvarado Elementary	La Cueva High School
Bandelier Elementary	Los Lunas High School
Bernalillo Middle & High School	Montessori of the Rio Grande
Bosque Farms Elementary	Mountain Mahogany
Bosque School	NM Museum – Young Explorers
Citizen Schools	New Mexico State Parks
Cottonwood Valley Charter School	North Star Elementary
Dolores Gonzales Elementary	Ohkay Owingeh Comm School
Earthforce: Summer of Service	Pueblo of Santa Ana
Escuela Luz de Mundo	Rio Grande Elementary
Georgia O'Keeffe Elementary	Roots & Shoots
Harrison Middle School	School on Wheels Alternative HS
Holy Ghost Catholic School	Seville National Wildlife Refuge
Hoover Middle School	The Montessori School
Hope Christian School	Van Buren Middle School
Infinity High School	Wilson Middle School

New Mexico Watershed Watch / BEMP Partners

Cimarron High School, Cochiti School, Desert Academy, East Mountain High School, Espanola Valley High School, Santa Fe Prep & United World College



IMPORTANT DATES

April 5th – Jackrabbit Survey at Sevilleta NWR

April 16-20th – **BEMP monthly monitoring**

April 19th – **Otter Day @ Bosque School**

April 26th – **BEMP/Watershed Watch Congress**

- El Rancho de los Golondrinas 10-2 pm
- 7-12th grade

April 27th – **BEMP Student Congress**

- Bosque School 10-2 pm
- K-6th grade



Naturalist Series



Awaken your senses to the natural world around you by observing the wondrous plants and animals in the Bosque and learn from local experts about this extraordinary ecosystem.

Bernalillo County Open Space is bringing the public this Naturalist Series, featured at Bachechi Open Space that includes a number of nature-related sessions throughout the year. The workshops are **FREE**; however, **space is limited. To register, email calangan@bernco.gov or call 314-0398.** For more information, visit www.bernco.gov/openpspace

April 15th, 2012 (10-1pm) = Spring Nature Journaling Workshop led by Margie O'Brien.

This is a 4 part journaling series based on the seasons.

April 29th, 2012 (10-12pm) = Celebrate Arbor Day!

Rotate through different stations led by local experts to learn about forest health and importance, tree identification and anatomy and proper tree care.

May 20th, 2012 (10-2pm) = Wetland Observations and Ecology. Join local ecologist to explore the amazing life of wetlands including plants, birds, amphibians, mammals and aquatic insects.

THANK YOU

to those that sponsor BEMP

AMAFCA, Stormwater Quality Team ♦ Albuquerque Community Foundation ♦ Bernalillo County Open Space ♦ Bosque School ♦ Captain Planet Foundation, Inc. ♦ Educational Foundation of America ♦ Goodman Family ♦ McKee/Crawford Foundation ♦ Messengers of Healing Winds Foundation ♦ Middle Rio Grande Bosque Initiative/U.S. Fish and Wildlife Service ♦ Middle Rio Grande Conservancy District ♦ National Science Foundation's Schoolyard Education Program at UNM's Sevilleta Long Term Ecological Research Site ♦ New Mexico Association of Soil & Water Conservation Districts ♦ New Mexico Forest & Watershed Institute at Highlands University ♦ Norcross Foundation ♦ PNM Inc. ♦ Sandoval County ♦ U.S. Army Corps of Engineers ♦ U.S. Bureau of Reclamation ♦ USDA Forest Service ♦ Wal-Mart Foundation ♦ 7 Bar Foundation