Bosque Ecosystem Monitoring Program

Earth's Birthday Project

Earth's Birthday Project educates children about the Earth — its beauty, resources and conservation.

www.earthsbirthday.org

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.htm edited by: Kimi Scheerer



BOSQUE SCHOOL







scholarship . community . integrity

Volume 6, Issue 3
May 2011

End of the year enthusiasm!

Festivals, Frolicking and FUN

~ Educational Adventures for Spring Delight! ~

When scientists think about spring they often focus on the changes taking place in their environment: trees leafing out, insects that emerge from the ground and animals caring for a new generation.

Ask an educator about spring and they'll give you a completely *different* story; festivals, warm-weather events, grades due and general end-of-the-year mayhem. BEMP holds no exception... we work with the Black Institute at Bosque School to help coordinate 3 large April events: Otter Day, BEMP K-6th congress and our joint BEMP/Watershed Watch 7-12th student congress!

Photo 1: Bosque School middle & highschoolers lead visiting 1st graders from Dolores Gonzales, Emerson, Mitchell & North Star Elementary's for our *Earth's Birthday Project* partnered **Otter Day** celebration on Wednesday, April 20th.

Photos 2 & 3: UNM intern Cait Rottler helps teach 7-12th graders about raptors at our joint BEMP/Watershed Watch student congress. Below, RiverSouce coordinator Rich Schrader examines student streamflow posters at the *El Rancho de los Golondrinas* event on Thursday, April 28th.

Photos 4 & 5: BEMP Co-Director and Bosque School teacher Dan Shaw works with his high school Wildlife Biology & Conservation students to teach BEMPer's grades K-6 about mammals of the bosque at the **Friday, April 29**th **student congress**. Below, students explore the wildlife of the school pond with BEMP Program Assistant Kristen Weil at one of our learning stations.

SPECIAL THANKS to those educators and organizations that help support our end-of-the-year activities...

Abq. Biopark – Zoo to You Albuquerque Community Foundation City of Albuquerque Open Space Division Petroglyphs National Park NM State Forestry – Rolling River NM Herpetological Society Sandia Mountain Natural History Museum









Notes from the Field Office

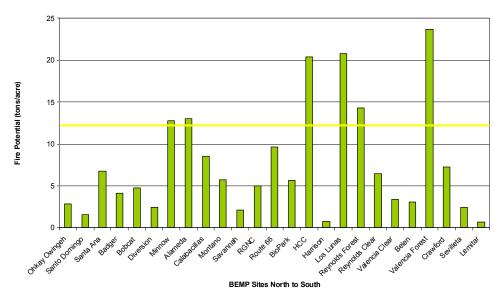
By BEMP Field Coordinator Jennifer Schuetz

Fuel Load... what is that? The graph below shows the fuel load or *fire potential* of the 25 BEMP sites (north to south)! Those sites with fuel levels above 12 tons per acre are considered a CATASTROPHIC fire hazard. When you consider fuel load - think about the diameter or thickness of the fuel (wood). For example: the National Hispanic Cultural Center (NHCC) has a lot of large logs that register in our bosque US Forest Service survey. The NHCC has about 21 tons/acre... a *serious* FIRE issue. However, those large logs are actually there to aesthetically line the trail through the woods and along the river. A data conundrum!

Check it out – does the data make sense compared to what you see at your BEMP site while monitoring?

2011 Fuel Loading at BEMP Sites

catastrophic fire hazard = 12 tons/acre



WHAT DOES THIS MEAN FOR YOU???

Think about the precipitation this year... OR, I suppose the LACK of precipitation. This season the bosque is experiencing lower than average RIVER FLOWS and VERY LITTLE RAINFALL! At our Bosque School Montaño BEMP site rain gauges we've recorded only 2 mm of rain since the December school holidays. GASP! Be prepared for fire warnings and possible fire danger this summer.



Congratulations!

Special congrats to our *BEMP Program Assistant* **Kristen Weil**, pictured on right celebrating her delight of river monitoring! Kristen joined our UNM field office team after taking our BIO 408 Bosque Internship class at UNM in the fall of 2009. She recently presented her undergraduate thesis about the effects of climate change on high elevation trees, specifically around the South American water resource Lake Titicaca (which lies on the border of Peru and Bolivia). Kristen will be graduating this MAY!

From all of us here at BEMP... We're so PROUD of YOU!

So far, this 2010-2011 School Year

5,266

...students, teachers, community members, college interns, research partners, parents, agency professionals, festival attendees, tribal representatives & government leaders...

have been

BEMPin' it Up!







NMSTA launches new website

~ www.nmsta.org ~

New Mexico Science Teachers Association

For **SCIENCE** teachers and interdisciplinary educators across the southwest, a new NMSTA website means easier navigation of **SCIENCE** curriculum, networking and workshops in the state! The updated website also makes it easy to learn about the board, get membership info and see photos from constituents across the state.

It also means an easier way to register for the 2011 joint annual conference with the Environmental Education Association of New Mexico (EEANM). The 2011 conference, titled Soar to Greater Heights: Connecting Earth to Education, will be hosted at *Piedra Vista High School* (home of the Panthers) in *Farmington*, *New Mexico*. It will be held October 20-22nd, 2011. To register (as exhibitor or participant) AND/OR to submit a proposal to present, visit the **new** NMSTA website and click on the conference tab!





Sign up for summer sessions online at: www.bosqueschool.org

Click on the **Summer Programs link** to find out about Bosque School's fabulous schedule of activities! Sessions include: a BEMP EcoScience series (with Archeology, Backpacking, Geology, Wildlife, etc.),
Art, Creative Writing, Spanish, Sports Camps, Video Game Making & more...

programs begin: June 6th



THE 2011 LEP NATIONAL CONFERENCE
Aldo Leopold's Land Ethic-Then and Now
Discovering the Past, Creating Our Future



Don't miss this opportunity to explore the southwest and learn how Aldo Leopold developed his concept of a land ethic. Discover ways that various communities, organizations, agencies and individuals are creating their own sense of land ethics and sharing it with youth and families across the United States. Investigate Leopold's roots as a forester, visit his first job site/homestead where he managed the land and listen to stories of long ago. Learn new ideas, techniques and resources that will enhance your own educational programs through exceptional seminars, field trips and speakers — simply, an event not to miss!

Come get a taste of the southwest and make it a family event! Can't Wait to see you there!



For Information on Registration, Chapter Scholarship Forms, and Call for Proposals please contact: Janine Kohn at 651-209-4971 or jkohn@pheasantsforever.org

Up-to-date information available at www.lep.org

Spotlight on Support

Special **THANKS** to the **Albuquerque**Community Foundation (ACF) and
Program Director *Nancy Johnson* for their continued **SUPPORT** & community
leadership! ACF supports BEMP student
transportation throughout the valley. Their grants help get students from their schools to the Rio Grande bosque for BEMP monthly monitoring and Bosque School
Study Trips! Lucky for us, Nancy's organization was also able to help pay for the busing that brought 227 students to our K-6th Congress event at Bosque School on Friday April 29th AND she was even there herself to witness the fun!

www.albuquerquefoundation.org



ALBUQUERQUE COMMUNITY FOUNDATION

leadership • trust • legacy

NOTES...

from the Education office!

Albuquerque Water Utility Authority Educator Sharon Sivinski gets Jemez Mountain students excited about water issues in a joint BEMP/ABQWUA education event at Bosque School on Friday, April 22nd!



Participating Schools & Student Groups

Albuquerque Biopark Abq. Institute of Math & Science Armijo Elementary Bandelier Elementary Bernalillo Middle & High School Bosque Farms Elementary Bosque School Cottonwood Valley Charter School **Dolores Gonzales Elementary** Earthforce: Summer of Service Escuela Luz de Mundo Georgia O'Keeffe Elementary Harrison Middle School Holy Ghost Catholic School Hoover Middle School Hope Christian School Infinity High School John Baker Elementary

Kewa Middle School La Academia de Esperanza La Cueva High School Los Lunas High School Montessori of the Rio Grande Mountain Mahogany Navajo Elementary NM Museum - Young Explorers New Mexico State Parks North Star Elementary Ohkay Owingeh Comm School Pueblo of Santa Ana Rio Grande Elementary Roots & Shoots Sandia Vista Elementary School on Wheels Alternative HS Sevilleta National Wildlife Refuge Van Buren 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

May 16-20th – BEMP monthly monitoring

May 31st – *APS last day of school!*

June 17th – Project WET/BEMP teacher workshop

June 20 - 24th - BEMP monthly monitoring

June 25th – Beaver Workshop @ Bosque School

July 13th – Sevilleta NWR jackrabbit survey

July 18-22nd – BEMP monthly monitoring

August 16th – *APS first day of school!*



The **BERNALILLO COUNTY** Master

Naturalist class is kicking off their 2011 summer course this June on the Bosque School campus. The program "aims to instill the pursuit of life-long learning and promote environmental stewardship"!

Other opportunities to get involved include:

- agricultural & garden activities in the south valley
- land health monitoring in the East Mountains; including: water quality, flora & fauna studies
- education & outreach projects: youth & public events, cultural & historical presentations AND outreach materials
- AND, ongoing composting classes

contact: Colleen McRoberts phone: 505.314.0398

visit: www.bernco.gov to learn more

THANKYOU

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