

Bosque Ecosystem Monitoring Program

Volume 4, Issue 2
Dec 2008

Frost in the Forest!

Crawford Dedication

Now entering our 12th year, the BEMP staff voted unanimously to name and dedicate the 25th BEMP site to BEMP Program Director Dr. Cliff Crawford. The Crawford site is located in Belen, in an area that burned in the 2007 bosque fire. This site was set up as part of a joint effort between BEMP, the New Mexico Natural Heritage Program, Hawks Aloft, the New Mexico Interstate Stream Commission and the Middle Rio Grande Conservancy District (MRGCD – see below).



Biophilia Foundation Project Manager Sterling Grogan & BEMP Field Coordinator Jen Schuetz watch as Sophie Ellis-Young helps Dr. Crawford cut the official Crawford site ribbon.



This research site is a cooperative effort with the New Mexico Interstate Stream Commission and many other local organizations.

www.ose.state.nm.us

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

Article by Dr. Kim Eichhorst



The MRGCD was formed in the 1920s with the express purpose of draining the Valley's

waterlogged lands, reclaiming them for agriculture and providing irrigation water, drainage and flood control for future generations. Their mission has evolved, and they are now stewards of 30,000 acres of bosque—the largest continuous cottonwood forest in North America.

~ taken from their website 12/5/2008 ~

To learn more, visit:

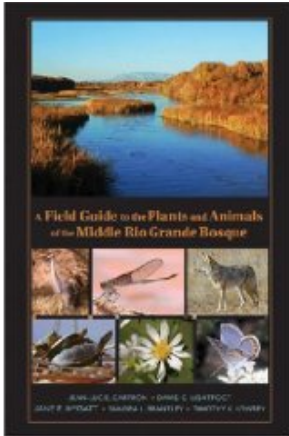
www.mrgcd.com



The whole gang: (back row) Marcel Reynolds, Christian LeJeune, Sterling Grogan, the good Dr. Cliff Crawford, Lisa Ellis, Lisa Robert, Dave Mitchell (front row) Jen Schuetz, Kimi Scheerer, Sophie Ellis-Young, Dr. Kim Eichhorst, Kiera Mitchell, Ryan Mitchell, Donnie Eichhorst and Dan Shaw celebrate the induction of the new site on a sunny November afternoon!



A Field Guide of the Middle Rio Grande Bosque



If you live in the middle Rio Grande valley... get excited – the holiday season has dropped one particular delight in our laps a little early. UNM Press released *A Field Guide to the Plants and Animals of the Middle Rio Grande Bosque* this November. Authors, and UNM researchers, Jean-Luc Cartron, David Liggthfoot, Jane Mygatt, Sandra Brantley and Timothy Lowrey have compiled the first (and most fabulous) guide and resource for New Mexico's middle Rio Grande valley. Filled with beautiful photos, seasonal details and great identification tips – this book opens the beauty of the bosque up to professionals and amateurs alike.

With a prologue by our own Dr. Cliff Crawford, this guide reviews the diverse connections of our natural habitat (helping us to understand the role of our river system) and also how to access it for everyday exploration. With generous spirits, the authors are donating book sale profits towards local education endeavors like BEMP! So far BEMP has been able to distribute 40 copies to local schools, teachers, students, administrators and other educators within the valley! So if you're looking for a great gift to share with the family that gets you OUTSIDE – this is a perfect holiday choice! ☺

BOOK SIGNING EVENTS

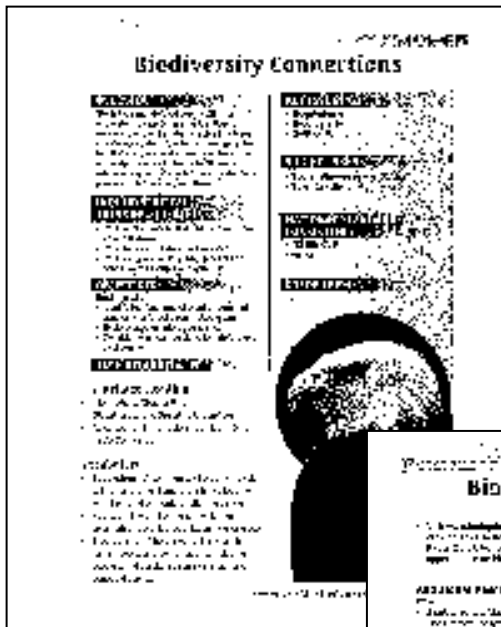
January 10th – Rio Grande Nature Center – 5:30 pm

January 11th – Bookworks (Flying Star Plaza 4022 Rio Grande NW) – 5:30 pm

For more information visit UNM Press at: <http://unmpress.unm.edu>

wicked cool website worth checking out: www.facingthefuture.org

Critical Thinking, Global Perspective,
Informed Action!



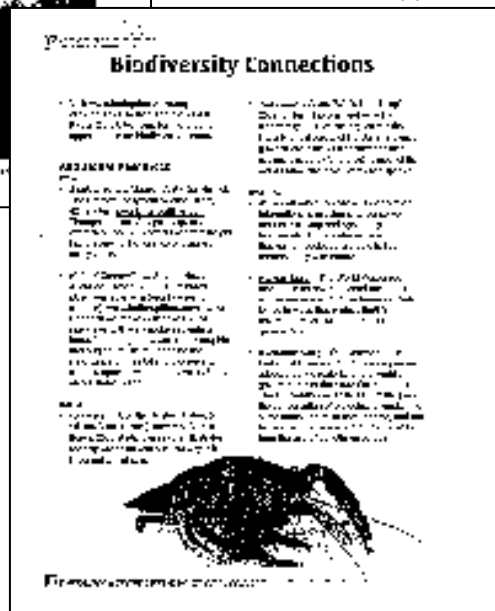
Facing the Future at a glance...

In a world where the lives of our neighbors next door are inextricably linked to those of our neighbors abroad, students need to understand the linkages between local and global issues, and how they can personally help to build positive local and global communities.

~ taken from their website 12/5/2008 ~



I entered the website, clicked on **"For Educators"** and was able to find Biodiversity curriculum (see above) and resources in about 35 seconds. Tons of other topics are available... from Sustainability to Population Growth, Water Resources, Climate Change and Poverty issues.



So far, this 2008-2009 School Year

2494

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

BEMPIn' it Up!

Workshops and Things

Professional Development for Educators Advanced Project WILD Natural History Workshop

Aquatic Birds and the Rio Grande Bosque

Join the New Mexico Department of Game & Fish for a winter learning adventure along the migratory bird central flyway that includes the Rio Grande. We will have warm housing and will be conducting citizen science field techniques at the Bernardo Wildlife Area, owned and managed by the Department of Game & Fish.

- experience mist-netting birds & learn how land is managed for wintering birds
- practice integrating science, math and language arts
- receive classroom resources
- experience activities from Project WILD, the **Bosque Education Guide**, Discover a Watershed, Rio Grande and the Aldo Leopold Education Program

When: Friday evening through Sunday, noon, February 6-8, 2009

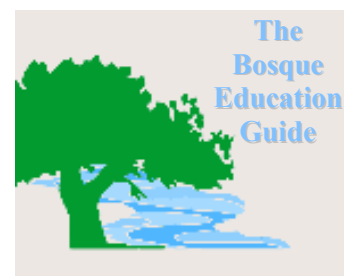
Where: housing at Sevilleta National Wildlife Refuge Research Station and field activities at nearby Bernardo Wildlife Area-both located off of I-25 between Belen and Socorro, NM

- houses are fully furnished with 3 bedrooms each & there is an on-site meeting room

Group Size: LIMITED to 20 - **preregistration is required**

Cost: housing cost is \$35.00/person/night with optional linen fee - participants will need to bring their own groceries for the weekend

Contact: Colleen Welch at 505. 476.8119 or colleen.welch@state.nm.us



BEMP as a National Model Workshop

Are you a teacher or agency representative interested in learning how to set-up a community monitoring program?

WHEN: Saturday, January 24th 10:00 am – 2:00 pm

WHERE: Bosque School: Upper School Science Bldg - 4000 Learning Road NW – Abq. NM 87120

CONTACT: Kimi Scheerer at 505.898.6388 ext. 128 or ksche@bosqueschool.org

WHAT YOU'LL NEED: layers for being inside & warm clothes for hiking the bosque

PROVIDED: BEMP-a-reffic goodies, coffee, snacks & picnic lunch (mileage re-imbursements available)

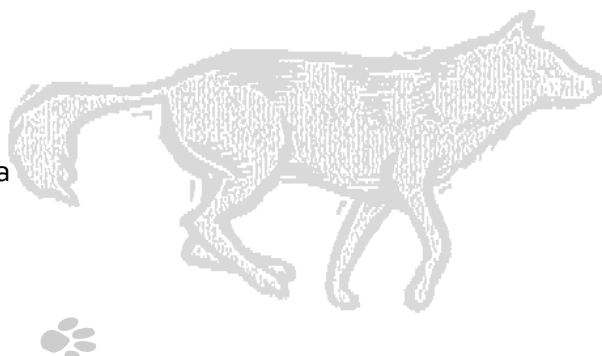
Join our staff to learn more about how BEMP can be used as a model for long-term monitoring in any backyard habitat, schoolyard or ecosystem. We'll cover BEMP basics, review bosque biology and tour a BEMP site. Participants will get lots of goodies to take home including a new Middle Rio Grande Valley Field Guide, BEMP overview & curriculum CD! Please register early as possible as space will be limited.



Photo by: Melanie Keithley

WELCOME TO BEMP – La Promesa Elementary

La Promesa Elementary, a K-6 school within Belen Consolidated system has joined the BEMP team. Under the leadership of 6th grade teachers Mrs. Cordova and Mrs. Dow, and Principal Diane Vallejo, La Promesa students will now be monitoring our Sevilleta site located just north of the San Acacia dam on Sevilleta National Wildlife Refuge land. Hopefully they enjoy this scenic river site with a new outdoor education learning space, BEMP information kiosk and teaching pond!



NOTES...



From the field!

This November, groundwater chemistry data was once again collected from all BEMP wells. Data includes: turbidity, dissolved oxygen, temperature, conductivity,



pH and UNM lab work (which looks at chloride, bromide, nitrate, phosphate, sulfate & ammonium levels!)

Photo by: Jen Schuetz

Participating Schools & Student Groups

Albuquerque Biopark	Horizon Academy
Alb. Institute of Math & Science	John F. Kennedy Middle School
Bandelier Elementary	La Academia Esperanza
Bernalillo High School	La Cueva High School
Bosque School	Los Lunas High School
Cottonwood Valley Charter School	NM Museum – Young Explorers
Dolores Gonzales Elementary	Ohkay Owingeh Comm School
Duranos Elementary	Pueblo of Santa Ana
East Mountain High School	Rio Grande Elementary
Georgia O'Keeffe Elementary	Rio Grande High School
Gallup Middle School	River Retrievers Home School
Harrison Middle School	Santo Domingo School
High Desert Home School	School on Wheels Alternative HS
Hoover Middle School	Van Buren Middle School
Hope Christian School	Washington Middle School

New Mexico Watershed Watch / BEMP Partners:

Cimarron High School, Cochiti School, East Mountain High School & United World College



IMPORTANT DATES

Dec. 16th – BEMP monthly monitoring
 Dec.22–Jan. 2nd – APS Winter Break
 Jan. 20th – BEMP monthly monitoring
 Feb. 17th – BEMP monthly monitoring
 Feb. 20-22nd – AEE Conference (Albuquerque)
 March 17th – BEMP monthly monitoring
 March 23-27th – APS Spring Break
 April 21st – BEMP monthly monitoring
 April 30th – BEMP/Watershed Watch Congress
 May 1st – BEMP Student Congress

SAVE the DATE



BEMP Student Congress

~ a celebration of outside activity ~

WHO: grades 7-12

WHEN: Thursday, April 30th

WHERE: to be determined

In conjunction with Watershed Watch!

WHO: grades K-6

WHEN: Friday, May 1st

WHERE: Bosque School campus (Albuquerque)

2009

Two events designed to bring students, agencies and researchers together to share their experiences in our outdoor environments.

CONTACT: BEMP Education Coordinator Kimi Scheerer for more info: 505.898.6388 ext. 128!

THANK YOU

to those that sponsor the BEMP program

Albuquerque Community Foundation ♦ Bernalillo County ♦ Bosque School ♦ Educational Foundation of America ♦ McKee/Crawford Foundation ♦ Messengers of Healing Winds Foundation ♦ 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 ♦ New Mexico Association of Soil & Water Conservation Districts ♦ New Mexico Forest & Watershed Institute at Highlands University ♦ PNM Inc. ♦ Sandoval County ♦ U.S. Army Corps of Engineers Bosque Restoration Program ♦ U.S. Bureau of Reclamation ♦ USDA Forest Service in cooperation with the Middle Rio Grande Conservancy District ♦ 7 Bar Foundation