

Bosque Ecosystem Monitoring Program

Volume 5, Issue 1
October 2009

Fall Foliage & Fun!

Field Guides all along the Valley



Take a free-spirited hike
through the bosque... it's
beautiful this season!

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

With the changing of the seasons comes the last chance to get some good plant identification in before the leaves drop from the trees and shrubberies. Keeping this in mind, I travel along the valley to BEMP classrooms helping students learn about, identify and create their OWN field guides of common native and exotic producers.

Highlighting the ever important native heart-shaped cottonwood and long, narrow willow leaves – students do artistic rubbings, vocabulary based field notes and actual tapings of live specimens in their field journals. Additionally, we often compare and contrast these natives with exotic invasive species like the tasty saltcedar and fuzzy, sweet-smelling Russian olive.

Our goal is to create something useful and educational, but to also have fun (with a sense of accomplishment) at the end of the day. After creating these guides, I hope students get some inspiration to head down to the bosque after school or on the weekend to show off their superior plant identification skills with friends and family.



Cottonwood Valley Charter School students, Jonas Akudago (above), Maya Cordova (below left) and Setayesh Fakhimi (below right) in Socorro, NM worked with me to create plant identification guides!



Litterfall Update

Thanks to Bosque School 6th grade Science teacher and BEMP site representative Sarah DeRosear, we've now properly identified the **thicket creeper** (left) or *Parthenocissus vitaceae*.



DeRosear noted we've been improperly identifying and categorizing Virginia creeper (*Parthenocissus quinquefolia*), as she created native and exotic plant activities for her 6th graders. After she brought this to our attention, we did a little digging... and some consulting with the *NEW Field Guide to the Plants and Animals of the Middle Rio Grande Bosque* and Phil Tonne of the Natural Heritage New Mexico Program at UNM. We've correctly established that this perennial woody vine, which is a member of the grape family, is in fact commonly known as thicket creeper (not it's cousin the Virginia creeper). ☺



Summer Eco-Science Adventures

By Melanie Keithley

"As a child, one has the magical capacity to move among the many eras of the earth; to see the land as an animal does; to experience the sky from the perspective of a flower or a bee; to feel the earth quiver and breathe beneath us; to know a hundred different smells of mud and listen unselfconsciously to the sighing of the trees."

-Valerie Andrews, A Passion for this Earth

This past summer, entering 4th, 5th and 6th graders enrolled in a new and exiting BEMP summer science camp program, which was a little weird and wacky, and quite the bonanza! Two separate yet complementary curriculums focused on what it means to be a wildlife biologist as well as creating a sense of place by exploring our local bosque ecosystem.

As Eco-Science Summer Camp Director, the most rewarding part of my summer was watching pure enthusiasm wash over the faces of both boys and girls catching woodhouse toadlets by the bucket load and hearing the giggles and screeches of the students upon opening their pitfall traps. These camps are a great way to get our kids outside! While the camps are fun and a little wacky, they are also highly educational and have a strong tie to math and science. The truly exciting thing is that our campers are doing things at this camp that University students get to do! I hope it gives students a sense of ownership and accomplishment.

Weird and Wacky Wildlife Biology camp introduced students to the fun, and sometimes strange, world of working as a professional wildlife biologist. Throughout the week students learned about a variety of native fauna of the Middle Rio Grande bosque. Hands-on activities included arthropod collections and identification with our very own Dr. Cliff Crawford, tracking of radio collared porcupines with Bosque School graduate Katie Elder, and a hike with Susan Davis of the Sandia Mountain Natural History Center. At the Center Students learned about how biologists use hidden cameras to track the movement of animals like bears and mountain lions. Other activities focused on birds, herps and mammals with Steve Cox (an avid birder and professional ornithologist) Shirley Kendell (a local raptor rehabilitator), Tom Giernokowski (a herpetologist with UNM) and Dr. Paul Polechla Jr. (a mammalogist with the Museum of Southwestern Biology at UNM).



www.bosqueschool.org/summercamps.htm

For more info about Bosque School's
Summer Camp programs...

Bosque Biology Bonanza camp focused on the story of our river valley, both past and present. Campers became familiar with native and exotic flora and fauna of the bosque through exploratory hikes and art projects (including sketching a live educational red-tailed hawk)! Campers collected data throughout the week at several official BEMP sites; they looked at groundwater depths, monthly precipitation and litterfall. Students also created a model of the Middle Rio Grande valley using the **Bosque Education Guide's** Changing River Model. Day hikes included a trek to the top of the escarpment at Petroglyph National Monument (led by Ranger Susan Villanueva) and a visit to a pueblo ruins at the City of Albuquerque Open Space visitor's center with coordinator Joshua Willis. Campers also visited the San Juan Diversion Dam Drinking Facility on a behind-the-scenes tour with Scott Schnepfer and Sharon Sivinski of Albuquerque Bernalillo County Water Utility Authority.

Other Eco-Science Camps offered through Bosque School included "From Farm to Table" and "The Albuquerque Geoscape." These unique and inspiring camps were created and directed by Cathy Bailey, an 8th grade science teacher at Bosque School. They too are a wonderful addition to the summer camps provided by Bosque School.

Special thanks to Colleen Seager for all of her wonderful help as summer camp coordinator. Her behind-the-scenes footwork kept things running smoothly and efficiently - making our first year of Eco-Science camp a successful one!

This 2009-2010 School Year

1311

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

BEMPin' it Up!

BOSQUE SCHOOL WELCOMES

THE
**Patrick
Dougherty**
LAND/ART PROJECT



Artist Patrick Dougherty is known around the world for turning simple twigs into **enormous architectural masterpieces**.

Come see his newest project unfold on the campus of **Bosque School, Oct. 5-23**. Students, staff and faculty will assist in creating the artwork, which will incorporate two beautiful cottonwoods.

Volunteers from the public are also welcome to participate.
Contact Colleen Seager at cseag@bosqueschool.org

Funded By:
The FUNd at the
Albuquerque
Community Foundation

LEF Foundation

VIEWING HOURS

Weekdays October 5th-23rd
9am-2pm

Weekend Dates October 10 & 11
9am-5pm

SPECIAL EVENTS

October 18 "A View of Bosque"

October 22 "Artist Talk"
4pm Budagher Hall

www.bosqueschool.org
www.stickwork.net
www.landartnm.org

BEMP rocks the Water Fest!

How do you teach water education to thousands of New Mexican 4th graders in a fun and inspiring way? Attend the super-charged Water Festival, held annually in both Rio Rancho and Albuquerque, courtesy of Katie Babuska's Experiential EE.

The Rio Rancho event, which is the first of two, took place at Rio Rancho High School on October 1-2nd, works to improve student AND teacher water resource education. According to Experiential EE's website, the goal of the festival is to "lay the foundation so that students can successfully answer **Big Water Questions** by the time they finish elementary school."

BEMP has been participating with middle school, high school and university presenters for half a dozen years now and will continue at the Albuquerque Festival on October 22-23rd at the Albuquerque Convention Center.



Learn more at: <http://www.waterfestnm.com>



Above: Bosque School senior Liam Cary-Eaves (top left) and UNM intern Victor James (top right) teach students about how BEMP processes leaf litter. Below: Bosque School senior Caitlin Ribbens (left) and 6th grader Remi Ward (right) explain what arthropods are and how we use pitfall traps to collect them.



NOTES...

Albuquerque, NM

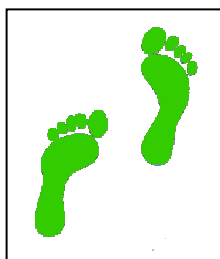
from the community!

Next Generation – Making A Green Trail

A Conference & Celebration For Young People
Who Are Taking Action to Create A Sustainable Future

4-8 PM Wednesday, November 11th 2009

Bosque School – Albuquerque, New Mexico



For more Info:

Contact: Colleen Seager

Phone: 505.898.6388

cseag@bosqueschool.org

The conference cost of \$5 per person will help
defray the costs of a scrumptious dinner
featuring foods from our bio region.

Participating Schools & Student Groups

Albuquerque Biopark
Abq. Institute of Math & Science
Bandelier Elementary
Bernalillo Middle & High School
Bosque School
Citizen Schools
Cottonwood Valley Charter School
Dolores Gonzales Elementary
Duranes Elementary
East Mountain High School
Gallup Middle School
Georgia O'Keeffe Elementary
Harrison Middle School
Hoover Middle School
Hope Christian School
Horizon Academy

John F. Kennedy Middle School
La Academia Esperanza
La Cueva High School
Los Lunas High School
Mountain Mahogany
NM Museum – Young Explorers
Ohkay Owingeh Comm School
Pueblo of Santa Ana
Rio Grande Elementary
Rio Grande High School
River Retrievers Home School
Santo Domingo School
School on Wheels Alternative HS
Van Buren Middle School
Washington Middle School
Zia Elementary

New Mexico Watershed Watch / BEMP Partners:

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



IMPORTANT DATES

October 20th – BEMP monthly monitoring
October 22-23rd – ABQ Water Festival
October 22-24th – EEANM Annual Conference
Nov. 4-6th – Quivira Coalition Conference
Nov. 7th – EEANM annual meeting
~ at RGNC State Park 11:00-1:00 pm
Nov. 11th – Green Trails Student Conference
Nov. 17th – BEMP monthly monitoring
Dec. 15th – BEMP monthly monitoring
January 19th – BEMP monthly monitoring

Annual Fall Conference

Soar to Greater Heights:

Professional Development for Our Sustainable Future



New Mexico Council of Teachers of Mathematics
New Mexico Science Teachers Association
Environmental Education Association of New Mexico

Oct. 22-24, 2009

At Ruidoso High School
125 Warrior Drive

Conference at a Glance:

Thursday, October 22 – I will hope to see some of southern New Mexico's most interesting people!
I will society classes and morning proficiency in mathematics workshops also available
Friday, October 23 (8:00 am-4:00 pm) – Keynote speaker: concurrent sessions, vendor exhibits
Saturday, October 24 (8:00 am-1:00 pm) – NMSTA and NMCTM annual breakfast meetings,
concurrent sessions, vendor exhibits

Blount Auditorium

Review agenda and register on-line at nmteach10.eventbrite.com

Early registration deadline for October 13!

Register at the conference on October 22 (7:00-9:00 AM and 2:00-5:00 PM) and October 23 (7:00 AM-5:00 PM)

www.nmsta.org www.nmctm.org www.southern.org

SAVE the DATE: BEMP Student Congress

Teachers and Agency Representatives...

WHO: grades 7-12

WHEN: Thursday, April 29th

WHO: grades K-6

WHEN: Friday, April 30th

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 ♦ Wal-Mart Foundation ♦ 7 Bar
Foundation