Bosque Ecosystem Monitoring Program

Black Institute for Environmental Studies at Bosque School

www.bosqueschool.org/bemp.aspx

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2013 Crawford Symposium

Green Trails for the Next Generation

The goal of the Crawford Symposium is to bring students, professionals and interested community members together for a night of education, information sharing, and enchilada eating while discussing our bosque. Dr. David Gutzler, UNM Climatologist, highlighted trends in drought throughout the Southwest. A serious topic to share with the next generation, Dr. Gutzler helped communicate the reality of drought in New Mexico and possible long-term consequences on the landscape.

High school groups from Albuquerque Academy and Bosque School presented on threats to local riparian areas, overviewed ongoing wildlife projects, and sparked conversation about development and wildlife habitats!

For our final activity, Bernalillo County Open Space Coordinator Colleen McRoberts teamed up with Vern Huser, our very own Claudia Crawford and BEMP Educator Kim Fike to present **Seasonal Sightings along the Middle Rio Grande**, a community-driven effort to document phenological changes. **Phenology** is the study of how flora and fauna respond to seasonal changes (such as flowering or migration). The program challenges community members to get outside their own homes and neighborhoods to observe and document biotic data. The site creates a forum to post pictures and details about your experiences with wildlife!

www.inaturalist.org

Photos of the Crawford Symposium (top to bottom): BEMP Co-Director Dan Shaw remembers BEMP Co-Founder Dr. Cliff Crawford; high school students work with Melanie Keithley and a red-tailed hawk; Albuquerque Academy students overview riparian threats to the Rio Grande.

Photos by Kim Fike

Tamarisk Leaf Beetle: information and updates

What is a Tamarisk/Saltcedar?

Tamarisks are deciduous shrubs with silvery green leaves that form dense thickets. They were introduced in the United States to fight soil erosion. Because of their ability to release seeds over a longer period of time than native plants, to take advantage of late summer rains for establishment, and their response to flower more heavily after fire, they are able to propagate more successfully than most native plants.

As any BEMP student knows, Saltcedar tastes salty!

The Challenges of Tamarisk

Tamarisk develops in dense thickets, as many as 3,000 plants per acre, which can prevent the establishment of native vegetation. Due to their extensive root systems, tamarisk draw more salts from the groundwater than native plants and release it through leaf glands. Salt is deposited on the ground with leaf litter, which may contribute to increased soil salinity. The large amount of leaf litter increases the intensity of riparian wildfires and may increase their frequency. Tamarisk fires burn hotter and faster, killing native vegetation, but stimulating further tamarisk growth. Tamarisk monocultures likely support a lower diversity of wildlife than a more diverse native plant community, and dense tamarisk stands reduce forage and prevent access to surface water.

From the Tamarisk Coalition webpage:

www.tamariskcoalition.org

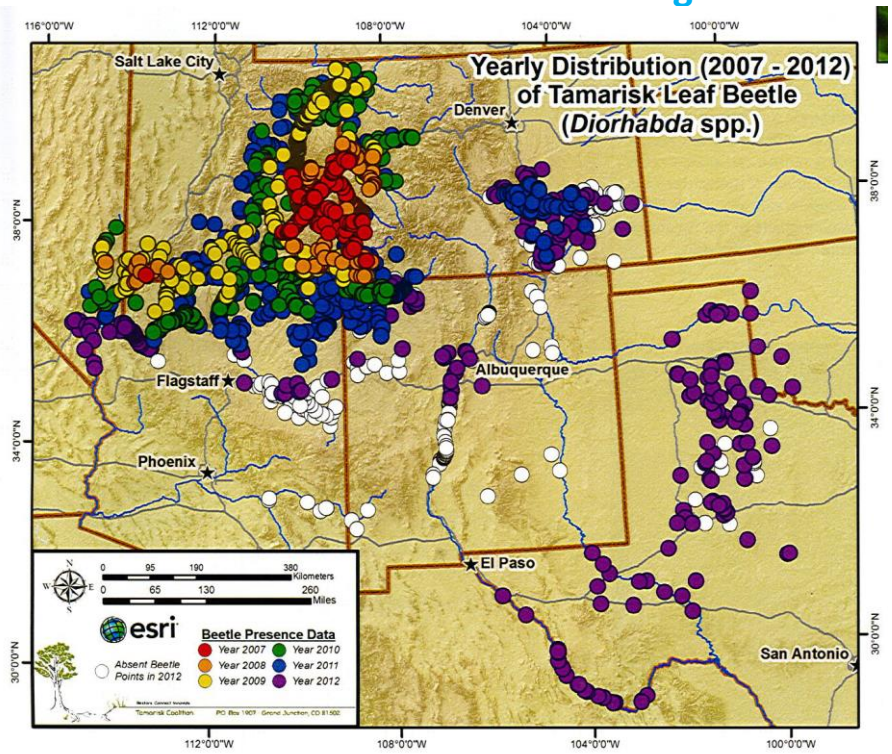


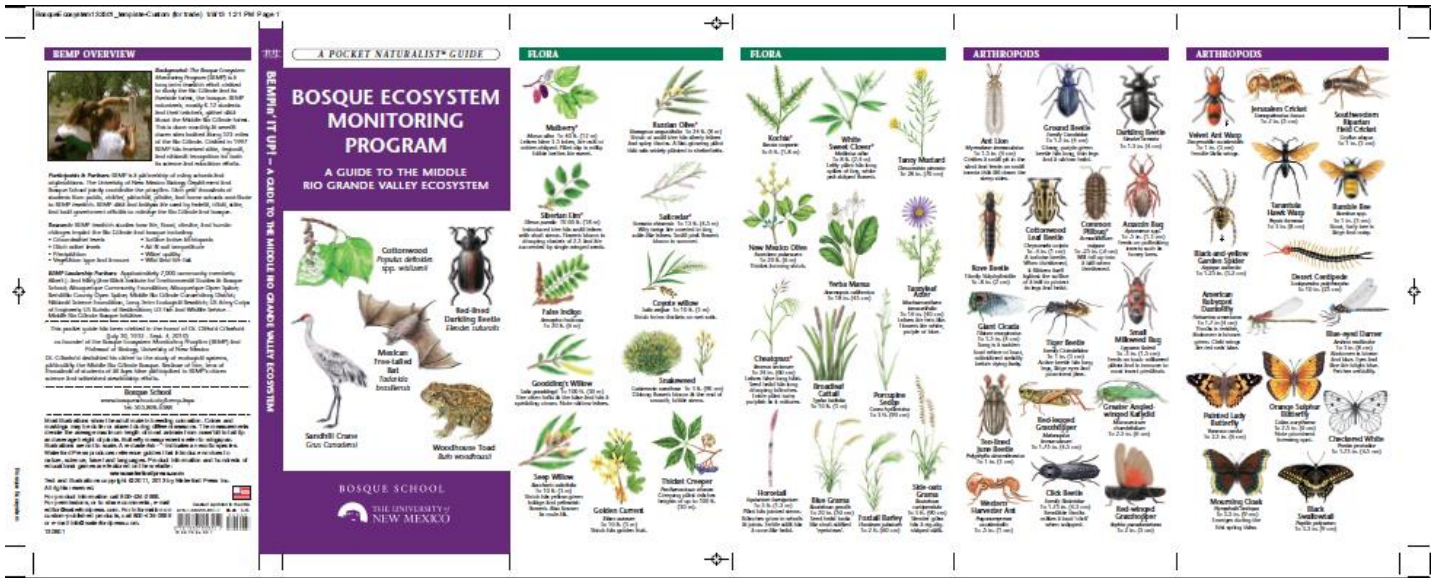
Photo of *Diorhabda carinulata* by Dan Shaw

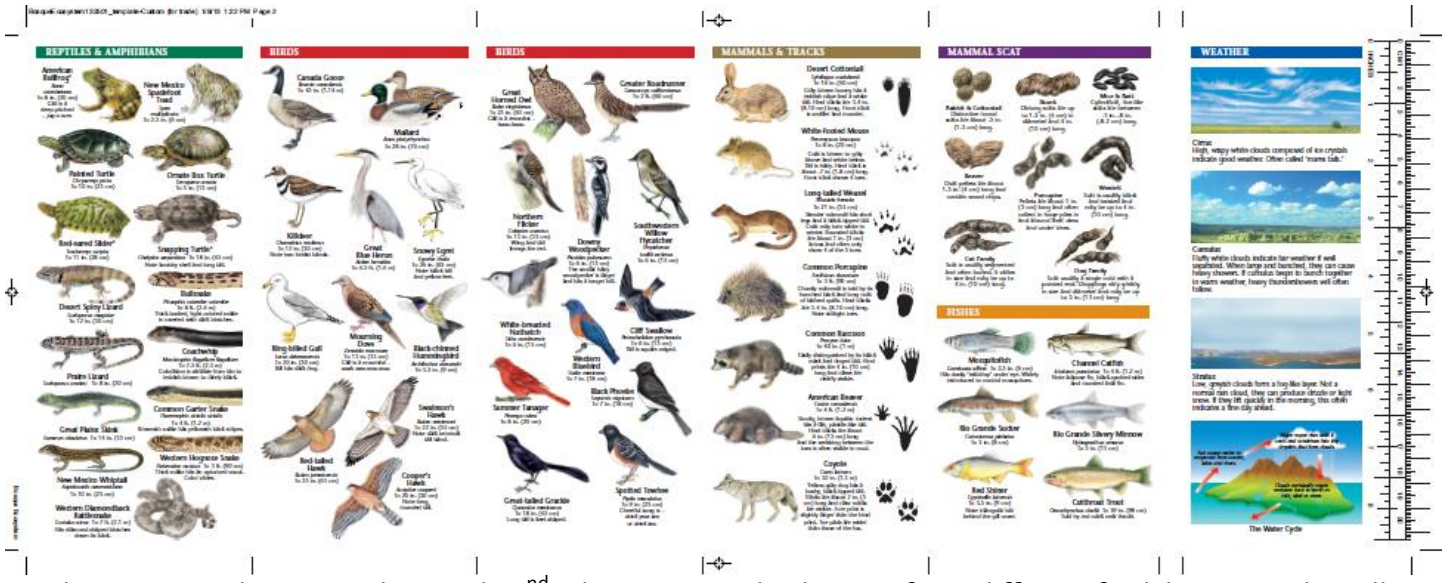
Alternative Spring Break for Field Coordinator Schuetzy!

This spring break, BEMP Field Coordinator, Jennifer Schuetz, attended a conference entitled *"River Crossings: Linking River Communities"* in Grand Junction, CO. Researchers from the Tamarisk Coalition, River Management Society, and Colorado Mesa University Water Center were impressed with BEMP's number and variety of sites and the collaboration of public school and university students. This summer, BEMP will be implementing a protocol to monitor saltcedar leaf beetle populations and their impact on the middle Rio Grande!

Tamarisk Coalition
Restore. Connect. Innovate.

BEMP Pocket Naturalist Guide – 2nd Edition





The BEMP Pocket Naturalist Guide 2nd edition, created in honor of Dr. Cliff Crawford, has several small illustration updates from Waterford Press and was printed in partnership with Albuquerque Water Utility Authority, City of Albuquerque Biopark Education and Outreach, Whitfield Wildlife Conservation Area and Rio Grande Elementary.

You too can own your very own copy for just $6.00.

Just contact BEMP Education Coordinator Kimi Scheerer at kimi.scheerer@bosqueschool.org or 505.898.6388 ext. 151.

Ask for education rates for schools, students, teachers and programs.

Photo by Rowan Converse

Good news for the northern rio and bosque! On March 25, 2013 President Obama designated the **Rio Grande del Norte National Monument**. The new national monument encompasses beautiful wild lands and water, is rich in habitat for wildlife, provides outdoor recreation opportunities, and is one of the oldest continually habituated places on the continent.

Native Fish in the Classroom
May 2, 2013 Release

Students from Valle Vista, Laguna Acoma, and Emerson Elementary Schools and Bosque School Wildlife Class participated in the U.S. Fish and Wildlife Service "Native Fish in the Classroom" program. They raised western mosquito fish, white sucker, and flathead chub and will release them into the Rio Grande on May 2. Hundreds of BEMP students also had the opportunity to get know these native fish!

Can you identify THIS native fish? The first person to email Kimi with the correct fish will receive a **FREE** BEMP Pocket Naturalist Guide!

kimi.scheerer@bosqueschool.org

Photo by Angela James

THE UNIVERSITY of NEW MEXICO

BEMP Bosque Ecosystem Monitoring Program

BOSQUE SCHOOL
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THANK YOU
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Spotlight on Support

Special thanks to ConocoPhillips for their 2012-2013 school year support. With ConocoPhillips' help, we maintained trails and field equipment; supported students with BEMP Bosque Study Trips; and maintained our commitment to monitor 27 sites along the Middle Rio Grande Valley for long term data use!

ConocoPhillips

OUR MISSION

*The mission of the **B**osque **E**cosystem **M**onitoring **P**rogram (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.*