

# The Nature Park News

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The Nature Park News is published quarterly by the Chihuahuan Desert Nature Park, a nonprofit organization dedicated to increasing scientific literacy by fostering an understanding of the Chihuahuan Desert. Please direct all inquiries to:  
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## Vandals Strike Nature Park

In the last two years, volunteers donated more than 200 hours and staff members raised nearly \$20,000 to create shade ramadas along the trails and a rock wall around the parking area. In the worst rash of vandalism at the Nature Park, all of this was destroyed during three incidents in February and March. All vandalism occurred when the Park was empty.

Just days after the rock wall around the parking area was completed, someone rammed a vehicle into the wall repeatedly, damaging a 40-foot section.

Just two weeks later, the shade ramada behind the restrooms was burned



*Vandals destroyed a 40-foot section of rock wall and burned two shade ramadas down during February and March.*

down. Fortunately, the fire was extinguished before it caught any of the surrounding vegetation on fire.

The last incident occurred one week later, when a shade ramada along the main trail was destroyed. Just 11 days earlier, four volunteers had added a beautiful new extension to this ramada to accommodate large groups of students who visit the Nature Park on field trips.

“The entire staff and Board of Directors were devastated by these events,” said Stephanie Bestelmeyer,

Executive Director of the Park. “We all put our sweat and fundraising efforts into making these facilities available. To think that just a couple of vandals can destroy all of these efforts so quickly is disheartening. However, we refuse to give up, and we are taking numerous steps to ensure that we catch the vandals and protect the rest of the Park for thousands of children and adults to continue enjoying each year.”

With the help of several methods, the Nature Park is now under close surveillance when staff members are not present. Staff are also working with local law enforcement officials to catch the vandals. Nature Park members are asked to report any suspicious behavior they see

near the Park.

“Please continue enjoying the Nature Park between sunrise and sunset every day,” said Bestelmeyer. “We have worked hard to provide a beautiful place to enjoy our desert, and a few vandals will not dissuade us from this mission.”

*If you would like to make a donation to rebuild the rock wall and shade ramadas, please send a check to the Chihuahuan Desert Nature Park, P.O. Box 891, Las Cruces, NM 88004. Write “Rebuild the Park” on the check, and we will use your donation specifically for these projects.*

# Notes from the Director

## On The Move ... In Style



By Stephanie Bestelmeyer, Ph.D.

Many of you in southern New Mexico and the El Paso region may have already seen the newest addition to the Chihuahuan Desert Nature Park. In late December, we acquired a 2004 Nissan XTerra, thanks to a generous grant from the Messengers of Healing Winds Foundation in Santa Fe. This vehicle replaces the Nature Park's Isuzu Trooper, which took staff and volunteers more than 30,000 miles since it was donated by a Nature Park member in 2002.



*The Nature Park's new vehicle transports staff, volunteers, and science education supplies around New Mexico and west Texas.*

After many hard miles, the Trooper was beginning to have mechanical problems too big to be fixed economically. We are excited to have the new vehicle to transport staff, volunteers, and supplies to the Nature Park and regional schools for many years to come.

### Calendar of Events

**April 28 - Thirteenth Annual Community Earth Day Fair in Alamogordo.** Visit booths by the Chihuahuan Desert Nature Park and dozens of other exhibitors to celebrate Earth Day. There will be craft activities for kids at the Nature Park's booth. The event will be held from 9:00 AM - 4:00 PM inside the Alameda Park Zoo in Alamogordo.



**May 9 - Recipes and Remedies with Desert Plants** talk by Helen Shields of Human Systems Research for the Native Plant Society of New Mexico's monthly meeting. The talk will be held in the Conference Room of the Social Center at the University Terrace Good Samaritan Village, 3011 Buena Vida Circle in Las Cruces. Talk begins at 7:00 PM.

**May 12 - Three Rivers Petroglyph trip** with the Native Plant Society of New Mexico. Participants will meet at 8:00 AM at the K-mart parking lot on Highway 70 to carpool to the petroglyphs.

**May 19 - Nature Walk at the Chihuahuan Desert Nature Park.** Join local experts for a guided walk at the Nature Park. We will discuss desert plants, desert animals, soil, water, and much more. Program begins at 9:00 AM at the Chihuahuan Desert Nature Park.



**June 13 - Seeds of Success** talk by Mike Howard for the Native Plant Society of New Mexico's monthly meeting. The talk will be held in the Conference Room of the Social Center at the University Terrace Good Samaritan Village, 3011 Buena Vida Circle in Las Cruces. Talk begins at 7:00 PM.

**June 16 - Sacramento Mountains trip** with Ray Bowers and the Native Plant Society of New Mexico. Participants will meet at 7:00 AM at the K-mart parking lot on Highway 70 to carpool.



**June 16 - Nightlife of the Chihuahuan Desert** at the Chihuahuan Desert Nature Park; 7:00 PM. Join Nature Park staff and teachers who have participated in the Nature Park's teacher workshops in early June for a night of fun and exploration at the Nature Park. Hands-on activity booths for kids of all ages will introduce visitors to the desert at night.

# On-Farm Metering and Water Conservation Pilot Project

**By Sophie Evitt**  
**World Wildlife Fund**

Agriculture is the largest user of water in New Mexico, with upwards of 80% of water diverted for irrigation. Unmet needs for water statewide have increased and are predicted to increase further since the population is projected to grow 35% in the next 25 years. In the agricultural Mesilla Valley near Las Cruces, New Mexico, producers and scientists are working together to develop and test irrigation practices that will conserve water in this desert region while still maintaining the strong agricultural tradition.

The World Wildlife Fund's Chihuahuan Desert Program (WWF) in collaboration with the Elephant Butte Irrigation District (EBID) carried out an on-farm metering pilot project in the Mesilla Valley over the 2005 and 2006 irrigation seasons. On study fields on four farms, WWF and EBID monitored experimental flood irrigation techniques to see how they impacted irrigation volume. Alternate furrow irrigation with cotton was one of the techniques tested.

To determine the impact this technique had on irrigation volume, the study fields were divided into two plots – a control plot and a treatment plot. The plots were of the same soil type, of the same size (if possible) and were divided by a border. In 2005, producers used their customary practice on both plots: every row irrigation for one producer and every other row irrigation for the other. Then in 2006, the treatment plot received

every other row irrigation, and the control plot received every row irrigation. Producers irrigated the plots separately both seasons and provided WWF with the start and stop time of these irrigations.

To determine irrigation volume, EBID installed a variety of devices. To determine groundwater application, they installed well meters (MAG-tubes) on the groundwater wells used to irrigate



*Alternate row irrigation with cotton, 2006 (© WWF; taken by Andres Sanchez). Preliminary results show that this technique produces equivalent quality and quantity of cotton while reducing water use and overall costs.*

study fields. To determine surface water deliveries, they installed electronic water level sensors, and if necessary, concrete weirs in the canals that served the study field. All meters/sensors relayed water level, flow and volume at thirty minute increments to radio telemetry units. Once the data was received at EBID headquarters, it was reviewed for accuracy and then made available to the WWF and the collaborating producers via the EBID website.

Preliminary results suggest that alternate furrow irrigation with cotton requires 20-30% less irrigation volume than every row irrigation without impacting crop yield or quality. Producers were

asked to share with WWF their yields in bales per acre and the percentage lint turnout of their cotton. There was no significant difference in yield and quality between plots in both 2005 and 2006.

In addition, a collaborating producer observed that the technique reduced his groundwater pump fuel costs because it took less time to irrigate every other row. The

producer consequently also saw a reduction in his labor costs. An average of \$6.20 savings per acre was calculated between the two participating cotton farms in the project. All other costs were the same for every row and every other row irrigation.

The Pilot Project was a successful collaboration between WWF, EBID and four producers. It would not have been possible without the help and advice of many local experts. It is hoped these collaborations will continue in the future.

WWF would like to take this opportunity to thank the staff at EBID for their time and advice and everyone else who has been involved in the project.

## About the Author

Sophie Evitt was born in Cambridge, UK and grew up in a village typically surrounded by flood water. She studied Environmental Science and Hydrology, specializing in water conservation. For further information regarding the project, please contact Sophie Evitt, WWF Chihuahuan Desert Program, 100 E. Hadley Street, Las Cruces, NM 88001. Tel: 505 252 9532. E-mail: Sjevitt@ekit.com

## Site Development Corner

**By Justin Van Zee**

*President of the Board of Directors and Chair of the Site Development Committee*

Despite the recent scourge of vandalism, projects and displays at the Nature Park will continue to develop. The latest project is a scientific research soil pit that will soon be on display near the parking area. In late March, the pit was re-excavated. Ten years of soil accumulation was removed from the bottom of the pit, and a fresh side was exposed.

Arlene Tugel, a soil scientist from the Natural Resources Conservation Service, identified the different layers of soil in the profile. We will use the information from her characterization to develop an educational display. We are planning to produce at least one mounted display board, similar to those stationed around the Desert Discovery Mini-Trail.

Thousands of years of soil development are revealed when a pit like this is opened.



*Above: Eddie Garcia excavates the soil pit at the Nature Park. Below: Arlene Tugel characterizes the soil profile for use in an educational display.*

A useful aspect of this pit is that it represents a large part of the surrounding landscape. We are fortunate at the Nature Park to have this type of public soil pit display, as they are very rare in outdoor education.

The soil pit near the parking area is not the only location on Nature Park property where layers of soil are exposed. Another area of the Park, not yet open to the public, will also reveal soil layering. A natural soil profile was created in a nearby arroyo cut. This nearly 3 meter (10 foot) high vertical wall of soil will soon be part of a trail connecting the Desert Discovery Trail to the small parking area on the access road. About 25% of this trail is already completed, but it will not be connected to the Desert Discovery Trail until additional brush and rock are cleared.

The soils in this area of the Park are very different from those near the parking area, demonstrating how variable desert soils can be, even when they're just a 10 minute walk from each other.

## Eagle Scout Project Completed at Nature Park

Andrew Milligan from Boy Scouts of America Troop 66 organized and ran a project this spring at the Chihuahuan Desert Nature Park in partial fulfillment of his Eagle Scout designation. Eagle Scout status is earned by only 5% of Boy Scouts.

Andrew's project involved several maintenance projects at the Nature Park. Andrew and 17 members of his troop added UV-resistant coating to shade ramadas, benches, and sign posts. They also lined 200 feet of the Desert Discovery Trail with rocks.

Prior to the workday, Andrew contacted local businesses for donations of supplies. He is grateful to Sun Valley Do It Best Hardware, Hayden's Hardware Centers, and Lowe's Home Improvement Warehouse for donating paint trays, rollers, and other supplies for his project. Congratulations and thank you, Andrew!



*Andrew Milligan (left) and fellow troop member Austin Baca-Ray haul rocks to line the trail at the Nature Park.*

## Nature Park Brings Science to the Farmers' Market Every Month

On the second Saturday of each month in 2007, the Chihuahuan Desert Nature Park will run an informational booth at the Farmers' Market in Las Cruces. The market runs from 8:00 AM until 12:30 PM each Saturday, and it brings residents and visitors from all over the region to purchase fruit, vegetables, baked goods, and crafts from local farmers and artisans. The Chihuahuan Desert Nature Park adds to this mix by bringing a bit of science education to the market as well.

Visitors can come to the Nature Park's booth to get information about the Nature Park and upcoming events. Each month will also feature a science-related arts and crafts project for kids. Reactions to the first four Nature Park appearances at the Farmer's Market have been overwhelmingly positive, with many donations and considerable interest in the Nature Park.

We are thankful to the Greater Federated Women's Club Progress Club of Las Cruces; two of their members assist Nature Park staff with the booth each month. We hope to see many of you at upcoming markets - our next appearances will be on May 12, June 9, and July 14.

### Education Programs

Here are the programs your donations helped us provide since January.

- |  |  |
|--|--|
| Jan 10 - Central Elementary - weather                | Mar 2 - Sonoma Elementary - field trip               |
| Jan 11 - Columbia Elementary - weather               | Mar 3 - Keystone Heritage Park - teacher workshop    |
| Jan 13 - Farmer's Market                             | Mar 3 - AAUW - Girls Can! career awareness           |
| Jan 17 - Sonoma Elementary - scientific process      | Mar 7 - Central Elementary - earth movers            |
| Jan 17 - Jornada Elementary - biomes                 | Mar 8 - Canutillo Elementary - field trip            |
| Jan 18 - Jornada Elementary - weather                | Mar 9 - Oñate High School - Expo training            |
| Jan 18 - Valley View Elementary - weather            | Mar 10 - Albuquerque - School to World Career Fair   |
| Jan 18 - MacArthur Elementary - weather              | Mar 10 - Farmer's Market                             |
| Jan 22 - Doña Ana Elementary - weather               | Mar 12 - Doña Ana Elementary - earth movers          |
| Jan 24 - Hermosa Heights Elementary - weather        | Mar 13 - Mayfield High School - field trip           |
| Jan 25 - CNDP Annual Membership Meeting              | Mar 14 - Hermosa Heights Elementary - earth movers   |
| Jan 30 - Alameda Elementary - weather                | Mar 15 - Valley View Elementary - earth movers       |
| Jan 31 - Mesilla Valley Kiwanis Club - talk          | Mar 15 - MacArthur Elementary - earth movers         |
| Feb 1 - Sierra Middle School - science fair          | Mar 17 - Dog Days at the Nature Park                 |
| Feb 2 - Alameda Elementary - field trip              | Mar 22 - Stone Age to Space Age Project - field trip |
| Feb 7 - Central Elementary - solar system            | Mar 23 - Ross Middle School - vertebrates            |
| Feb 8 - Columbia Elementary - solar system           | Mar 26 - Valley View Elementary - field trip         |
| Feb 9 - Doña Ana Elementary - field trip             | Mar 27 - Alameda Elementary - earth movers           |
| Feb 10 - Farmer's Market                             | Mar 28 - Sonoma Elementary - field trip              |
| Feb 10 - Share Fair at the Mesilla Valley Mall       | Mar 28 - NMSU Ag Extension - Expo training           |
| Feb 12 - Doña Ana Elementary - solar system          | Mar 29 - Columbia Elementary - earth movers          |
| Feb 13 - Sonoma Elem. - desert animal adaptations    | Mar 29 - Hillrise Elementary - field trip            |
| Feb 14 - Sierra Middle School - field trip           | Mar 30 - Richardson Middle School - field trip       |
| Feb 15 - Valley View - solar system                  | Apr 2 - Sierra Middle School - field trip            |
| Feb 15 - MacArthur - solar system                    | Apr 3 - Sierra Middle School - soil                  |
| Feb 17 - Photo Tips in the Desert at the Nature Park | Apr 4 - Richardson Middle School - vertebrates       |
| Feb 20 - Alameda Elementary - solar system           | Apr 4 - Central Elementary - soil                    |
| Feb 21 - Hermosa Heights Elementary - solar system   | Apr 5 - Jornada Elementary - arthropods              |
| Feb 23 - Lynn Middle School - Career Day             | Apr 5 - Sierra Middle School - field trip            |
| Feb 23 - MacArthur Elementary - field trip           |  |
| Feb 26 - Ross Middle School - field trip             |  |
| Feb 27 - Ross Middle School - field trip             |  |
| Feb 28 - Sonoma Elementary - weather                 |  |



## New and Renewing Members

Many thanks to all of our new members, renewing members, and those who gave additional gifts in February, March, and early April 2007.

### Turquoise

Donna & Michael Yargosz

### Peridot

Jeff Herrick & Christine Laney  
Arlene Tugel  
Wellspring Church

### Obsidian

Paul Bussan  
Mesilla Valley Kiwanis

### Jasper

Brian & Mynell Harper  
Hi Hopes Garden Club  
Moy Surveying, Inc.  
Karen Peissingner  
Raritan Central Railway

Mary Hoffman & Jim Sorenson  
George & Mary Anne Thibodeau  
Sally & Steve Thomas  
Norman E. Todd  
Mollie Walton

### Gypsum

Anonymous (1)  
Stanley Bardwell, M.D.  
Leoniece Beatty  
Ellen Castello  
Frances & Vincent Dovydaitis  
Mike Gilman  
Juanita Kientz  
Thomas & Susan Schmugge  
Ann Stuever  
Ken Warner & Tanya Dawson

### Quartz

Anonymous (3)  
Donald & Marilyn Aicardi  
Anasazi Trails, Inc  
Betty Arndt  
Phil & Charlotte Brooks  
John & Eleanor Byers  
Brian Christie  
Steven Filippelli  
Judy Forney  
Sandra Geiger  
Leland H.Gile  
Jim & Peggy Hawbaker  
Nigel Holman  
Jensen Family  
Alan Krueger  
Alicia Lee

Larry Ludwig  
John & Virginia Manbeck  
Denise & David Muller  
Tom O'Laughlin  
Ingeborg Peter  
Alan Phelps  
Rebecca Creamer & Rich Richins  
Craig & Marian Saastamoinen  
Barbara Hansen & Dan Santantonio  
Elba Serrano  
Dick & Sherry Thomas  
Nancy Lee Wertz  
J. Maxine Wyman  
Donna & Edward Wood

*Thank You*

## Other Ways to Support the Park

- 1) If you shop at Albertsons, **link you Preferred Savings Card to the Albertson's Community Partners Program.**
- 2) Recycle your **old cell phones or printer ink jet cartridges** by dropping them off at the Nature Park office.
- 3) **Use GoodSearch.com (powered by Yahoo) as your search engine** and the Park receives a donation for every search.
- 4) Do your **online shopping through iGive.com** and the Nature Park receives a percentage of your total purchases. This site is adding new stores every month. Log on to the iGive.com web site. From there, you can link to popular travel sites (e.g., Travelocity.com, Orbitz.com, and Site59.com), photo processing sites (e.g., Shutterfly.com and Snapfish.com), bookstores (e.g., Barnes & Noble), clothing stores (e.g., Coldwater Creek and j.jill), and stores that sell outdoor gear (e.g., Eddie Bauer and REI). You shop from the store's web site, and a percentage of the total sale goes to the Nature Park. Please check this site every time you shop online.

*Call us (505-524-3334) for details on any of these easy ways to support the Chihuahuan Desert Nature Park.*

## 6th Grade Students Donate Money to Park

Five 6th grade students from Lynn Middle School recently organized a donation campaign for the Chihuahuan Desert Nature Park. Virginia Sosa, Missy Webb, Colin Luschei, Joseph Ortiz, and Zach Rhodes from Mrs. Arnone's class at Lynn Middle School are part of the Future Me Project. They chose the Chihuahuan Desert Nature Park as their charity and took donations from classmates. The group presented \$33 in donations to the Nature Park on April 12.

Our sincere thanks go to these generous, hardworking students for their support of the Chihuahuan Desert Nature Park!



## Heard at the Park

"I think I want to be a scientist when I grow up!"

-Doña Ana Elementary School 3rd grade field trip participant

"Thank you for taking time out of your day to show us how fun wildlife biology is."

-Lynn Middle School 8th grader at career day

"I can't believe someone would burn down the shade out here. They must not know how much you scientists do to help us kids."

-Hillrise Elementary 2nd grade field trip participant



16(1)

**Chihuahuan Desert Nature Park**  
P.O. Box 891, Las Cruces, NM 88004-0891

YES! I want to support the Chihuahuan Desert Nature Park's efforts to increase scientific literacy by fostering an understanding of the Chihuahuan Desert. All donations are welcome; the minimum donation to receive a printed copy of the newsletter is \$10. Please sign me up in the following category:

- |   |  |
|---|--|
| <input type="checkbox"/> Quartz (\$15 +)      | One-year subscription to the <i>Nature Park News</i> .                                       |
| <input type="checkbox"/> Gypsum (\$50 +)      | One-year subscription to the <i>Nature Park News</i> and tickets to the Butterfly Flutterby. |
| <input type="checkbox"/> Jasper (\$100 +)     | Everything above plus and invitations to a VIP breakfast at the site.                        |
| <input type="checkbox"/> Obsidian (\$250 +)   | Everything above plus invitations to a VIP tour.   |
| <input type="checkbox"/> Peridot (\$500 +)    | Everything above plus a limited-edition print of the Nature Park.                            |
| <input type="checkbox"/> Turquoise (\$1000 +) | Everything above plus a custom cactus garden planter.  |

I would like \$\_\_\_\_\_ of this donation to go to the Chihuahuan Desert Nature Park endowment fund.

Please make checks payable to Chihuahuan Desert Nature Park or charge to:

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 Expiration Date: \_\_\_\_\_  
 Signature as it appears on card: \_\_\_\_\_

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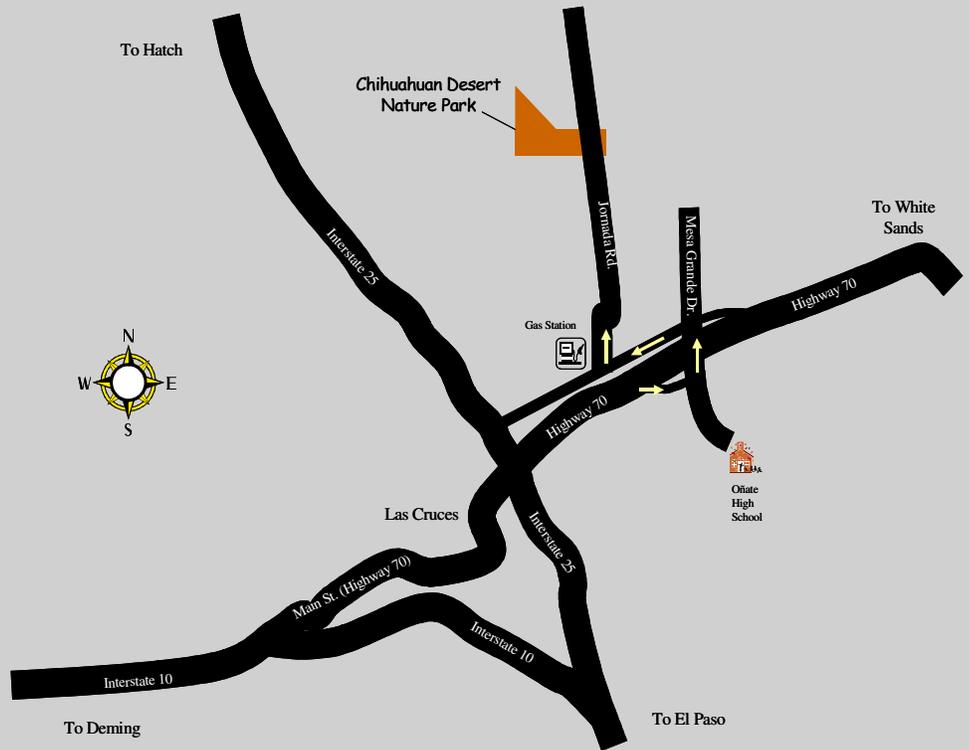
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E-MAIL \_\_\_\_\_ Check here if you do NOT want to be listed in Nature Park publications \_\_\_\_\_

# Directions to the Nature Park

- From I-25 in Las Cruces, go east on Highway 70.
- Take the Mesa Grande Drive exit (at Oñate High School).
- Make a U-turn under the highway to head west. After the U-turn, stay in the right lane.
- Turn right (north) on Jornada Road.
- Follow Jornada Road north for 6.5 miles. After approximately 1.5 miles, the road is unpaved.
- Turn left at the Chihuahuan Desert Nature Park sign.
- Follow the entrance road to the parking area and trailhead.

**ENJOY!**



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