

Asombro Insights

Science education for eager minds

A Quarterly Newsletter

Volume 20, Issue 4 (Oct. - Dec. 2011)

Monthly Donors

Monthly donors provide consistent funding that helps keep Asombro programs running strong for local children. See how easy it is to join this important, generous group of donors. **Page 2**

Kids' Passport to the Desert

The newest Asombro public program was launched on September 16. Learn more about this exciting event. **Page 2**



Education Programs

Donors like YOU have made science come to life for 9,725 students and 1,650 adults in the first three quarters of 2011. See a list of last quarter's programs. **Page 3**

Nature Park Highlights

Read about recent projects and upcoming events at Asombro's Chihuahuan Desert Nature Park. **Page 4**



Many Thanks

Don't forget the Asombro Institute when planning your end-of-year gifts. See a list of the generous donors who have already made a gift this year. **Page 5**

Map to the Nature Park

Enjoy the beautiful fall weather with a hike at the Chihuahuan Desert Nature Park. Check here for a map to get you started. **Page 6**



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Exploring the Desert with Dr. Walt Whitford

NMSU Professor Emeritus Walt Whitford LITERALLY wrote the book on desert ecology. His Ecology of Desert Systems (2002) brought together his own research as well as findings from many other desert ecology experts.

On Saturday, October 15, Chihuahuan Desert Nature Park visitors got to explore the desert with Dr. Whitford during the Asombro Institute's **Autumn Nature Stroll**.

Dr. Whitford has studied virtually every aspect of Chihuahuan Desert ecology during his illustrious career. During the walk, he shared information on creosote bush, tarbush, and honey mesquite, the three major shrubs at the Nature Park. He also told fascinating facts about jackrabbits, woodrats, and the many invertebrates of the desert.

One of Dr. Whitford's favorite topics is termites. Prior to the walk, he set up

toilet paper roll baits like those he used many times in his own research. Based on the number of forager termites extracted from these bait rolls, he and his colleagues estimated that there were 1,700 foragers per square meter. When that number is converted to biomass, it works out to be 30 pounds of termites per acre!

The group also explored badger diggings along the Nature Park trails and discussed scale insects and stem girdling beetles.

As we expected, everyone left the stroll full of new knowledge and wonder about the fascinating desert. Thank you, Dr. Whitford, for sharing your insight and enthusiasm with us all!



Dr. Walt Whitford (second from left) leads visitors on a desert adventure.



A Texas horned lizard was spotted on the Nature Stroll.

NOTES FROM THE DIRECTOR

I recently signed up my own family to become monthly donors to the Asombro Institute for Science Education. Yes, in addition to working here, I'm also a donor. In fact, every staff and Board member gives funds each year - we believe strongly in what Asombro is all about!

Our monthly donations have many benefits for the Asombro Institute, including:

- A continuing, reliable source of income for the organization allows Asombro to make long-range plans and dreams come true.
- One receipt at the end of the year and no reminders sent means less work for staff, resulting in staff spending more time doing quality education programs.

Becoming a monthly donor has lots of benefits to me too, including:

- It is so easy! I set it up once using the Donate Now button on Asombro's website. Each month, my donation is automatically made. As a busy working mom, I love shortcuts and time savers.
- Giving monthly gifts rather than a single large gift is easier for my family's budget.
- One monthly donor told me that he enjoys seeing his donation on his bank statement each month. He gets a monthly reminder that he's giving to a cause he believes in. I can't wait to experience that too.

Are you interested in joining me and experiencing this WIN - WIN situation? Here's what you do:

- 1) Visit www.asombro.org and click on the "Donate Now" button at the bottom of the page.



Asombro Institute for Science Education donors give the gift of wonder to thousands of children each year. Becoming a monthly donor allows you to share this gift throughout the year.

- 2) This will take you to Network for Good, a nonprofit that helps other nonprofits by handling the administrative details of online donations. If you are a new donor, create a free profile.
- 3) In "Choose a Charity," find Asombro Institute for Science Education.
- 4) Fill in the information and choose to make yours a "monthly recurring donation."
- 5) Network for Good charges a 4.75% fee to cover processing costs. You can add this extra cost to your donation or have it withdrawn from your donation total.

It's really that easy. If you have any trouble or would like me to walk you through the steps, please contact me (stephanie@asombro.org or 575-524-3334).

On behalf of the 13,000 children who experience the wonder of desert science with Asombro, I thank you for your support!

Stephanie Bestelmeyer

Dr. Stephanie Bestelmeyer

"Kids' Passport to the Desert" Debuts at the Nature Park

A brand new event had a great start at the Chihuahuan Desert Nature Park in September. The purpose of the Kids' Passport to the Desert event was to get the public outside, hiking, and of course learning about our amazing Chihuahuan Desert.

As visitors arrived at the Park, they were given a map and passport that could only be completed by taking a hike. We had stations set up along our Desert Discovery Trail so that as the public enjoyed the hike, they would come across science activities.

Stations allowed visitors to learn about using a compass, plants of the Chihuahuan Desert, dinosaurs, animal tracks, microclimates, and snakes.



Board member Mary Beth Harper (left) shares her knowledge of Chihuahuan Desert plants with Kids' Passport visitors at her activity station.

We once again owe a special thank you to all of our volunteers for running activities at each station.

If you missed the event this year, don't worry. The staff at the Asombro Institute is always planning more public events like this one. Keep your eyes and ears open for upcoming programs.

Support Asombro When You Shop Online

Are you going to shop online for holiday gifts? If so, please shop your favorite stores through www.iGive.com. When you do, your gift will also help the Asombro Institute for Science Education.

Simply go to www.iGive.com and search for your favorite stores. You'll find hundreds of popular stores like REI, L.L. Bean, Roadrunner Sports, and even Amazon.com. Designate Asombro Institute for Science Education as your cause of choice, and then shop your favorite sites. A percentage of your shopping total will automatically be donated to Asombro.

Gift giving that keeps on giving - priceless!





Calendar of Events

Oct. 28 & 29 Ghosts of the Past at the Farm and Ranch Heritage Museum, 6:00-8:30 PM. Encounter intriguing historical characters from New Mexico's past during two mysteriously entertaining evenings. Visitors will take indoor or outdoor tours where they will interact with these historical characters. It's fun and educational for the whole family. Advance tickets are \$3 for adults and \$1 for children. Tickets on the day of the tours are \$4 for adults and \$2 for children.

Nov. 12 Dunes at Dawn at White Sands National Monument, 7:15 AM. Registration starts October 29. This new program at the Monument is an early morning hike in the dunes. Registration for this hike opens on October 29th.

Dec. 21 Winter Nature Walk at the Chihuahuan Desert Nature Park, 9:00AM. Don't let winter keep you indoors. Bring your family out for a guided hike in our ever-changing desert. Free program, but donations are welcome.

Silent Auction Donors

Many thanks to the following people who donated items for the Kids' Passport to the Desert Event:

- Stephanie Bestelmeyer
- Barbara Darrington
- Mary Beth Harper
- Mark Sechrist
- Rink Somerday
- Donna Yargosz



John Smith Retires

By Paul Harper, Site Coordinator

Dr. John Smith has been a vital part of Asombro's field trip programs for the last decade. "The man with the cow" has taught 23,944 student scientists. Anyone who has been out to the Jornada Experimental Range will remember John's "Tis a fine morning" greetings with his large mustache and old tin coffee cup.

John Smith has devoted 45 years to federal service, and 37 of those years were spent with the USDA. From 1966-1970, he was in the Navy before moving to the Agricultural Research Service in Arizona. He came to the Jornada Experimental Range in 1974 to "cowboy." When some people hear the word "cowboy," they get visions of old movies or John Wayne. While John has some similar characteristics to these groups, one thing is for sure, he is a jack of all trades who will be missed at the Jornada.

John has a great disposition and a wonderful way with students. You would be hard pressed to find a student in southern New Mexico who hasn't heard about John's cow station. At his field trip station, students learn about a cow's digestion and rumen and then look into microbiology by viewing various species of protozoa found inside the rumen. Using the notorious shoulder gloves and a trusty microscope, John has been inspiring the wide eyed scientists of the future.

Thank you John for your years of service, and we wish you good luck on your future endeavors.

Education Programs

As of September 30, we have already worked with 9,725 students and 1,650 adults this year. Thanks for supporting these programs!

- 9-July El Paso Library - Earth Movers
- 30-July Girl Scout Troop 131 - desert safety
- 20-Aug Butterfly Flutterby at the Nature Park
- 26-Aug Tombaugh Elem. - scientific method
- 6-Sept Mesa MS - install plots
- 7-Sept Mesa MS - install plots
- 7-Sept Las Cruces Catholic Schools - arthropod identification
- 8-Sept Mesilla Park Elem. - I'm A Scientist, Too
- 10-Sept Holloman Family Fun Fest - Sort Like a Scientist
- 10-Sept Teacher workshop - Timing of Nature Through Science & Art
- 12-Sept MacArthur Elem. - I'm A Scientist, Too
- 13-Sept Mesa MS - install erosion plots
- 14-Sept Mesa MS - install erosion plots
- 16-Sept Mesilla Elem - I'm A Scientist, Too
- 16-Sept Sierra MS - field trip
- 17-Sept Kids' Passport to the Desert at the Nature Park
- 19-Sept Monte Vista Elem. - science discovery
- 20-Sept Central Elem. - I'm A Scientist, Too
- 20-Sept Mesa MS - scientific method
- 21-Sept Mesa MS - scientific method
- 21-Sept Monte Vista Elem. - scientific method
- 23-Sept Sonoma Elem. - field trip
- 28-Sept Las Cruces Catholic Schools - I'm A Scientist, Too



Chihuahuan Desert Nature Park

Fall and Winter at the Nature Park

By Paul Harper, Site Coordinator

Fall is here! We have made it through another blistering summer with a less than average monsoon season; rain totals for our area are about half the amount we usually have at this point in the year.

Fall is by far my favorite time of year here in our desert. The cool weather provides a much needed relief. This time of year also seems to be good to view desert animals - coyotes singing in the morning and deer sightings throughout the day. Come relax at one of our tables, benches, and shade structures that are strategically placed to give you the best views of the Jornada Basin and the Organ Mountains.

Do you need some peace and quiet? Several trails have small spurs that take you to private vistas. The evenings and mornings are usually perfect for hiking, but our moderate fall temperatures make our days just as enjoyable. Remember that the Nature Park is open from 7:00 AM - 5:00 PM, Tuesday through Saturday. So go out and enjoy **your** Park!

Join us for a guided hike on December 21, beginning at 9:00 AM. This is a great event if you have family coming into town for the holidays. Hope to see you there!

Mesa Middle School Plots

Just a few miles south of the Chihuahuan Desert Nature Park, young scientists at Mesa Middle School are investigating ecological questions right in their schoolyard.

Thanks to a grant from the Wolslager Foundation, the Asombro Institute and all Mesa Middle School students are using the schoolyard as an outdoor laboratory. When the school was built, they kept a part of mesquite duneland on school grounds. A small trail winds through the duneland and allows students to explore and learn about the desert.

Closer to the school buildings, there is also an unvegetated area that was used to store construction equipment and supplies. Thanks to the hard work of Asombro staff and Mesa Middle School 6th graders, this unvegetated area has now become a long-term experiment to investigate the best way to get native desert grasses to grow in an area disturbed by human activity.



Grasses and forbs are already visible on plots treated with the addition of organic matter.



Mesa 6th grade teacher Sam Sanchez celebrates his students' hard work installing science plots.

"It was important to have the 6th graders help install these plots," said Asombro's Executive Director Stephanie Bestelmeyer. "They are going to be here at Mesa for three years, so they can continue to monitor the results of the experiment."

Using sound experimental design principles, students divided the area into 16 plots. Four plots were not treated, thus serving as controls. The remaining 12 plots were divided equally into replicates for three treatments: (1) application of native grass seeds, (2) application of organic matter and seed, and (3) fencing to keep out herbivores like rabbits and seed application.

This experiment is modeled after the 10-year-old Science Demonstration Plot at the entrance to the Chihuahuan Desert Nature Park.

Much to our excitement, the week after we installed the experiment, a few rains came through, and some of the seed started to germinate. It is still early in our long-term experiment, but what a good start to a new school year and years of science to come!



Asombro Institute for Science Education
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YES! I want to support the Asombro Institute for Science Education's efforts to increase scientific literacy by fostering an understanding of the Chihuahuan Desert. All donations are welcome. Please sign me up in the following category:

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Many Thanks

Our sincere thanks go to these contributors who have donated in 2011 (through October 15).

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Chihuahuan Desert Nature Park

Open Tuesday - Saturday, 7:00 AM - 5:00 PM

- From I-25 in Las Cruces, head 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 2 miles, the road is unpaved.
- Turn left at the Chihuahuan Desert Nature Park sign.
- Follow the entrance road to the parking area and trailhead.

