ASOMBRO INSTITUTE FOR SCIENCE EDUCATION

Asombro Insights

Science education for eager minds

A Quarterly Newsletter

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Asombro Asks Visitors to Plant It!

By Stephanie Haan-Amato

One-hundred lovely cacti from a mining site in El Paso were rescued, potted, and given good homes at our *Plant It! Cactus Adoption and Native Plant Day* event. On March 1, visitors adopted cacti to take home or plant at the Nature Park. Asombro will use adoption fees for our education programs. Adopters chose from several cacti species, including hedgehogs, Turk's caps, chollas, and fishhook barrel cacti.

Plant experts were on hand to talk with visitors. Jack and Martha Carter, authors of <u>Common</u> <u>Southwestern Native Plants</u>, helped visitors identify local plants. The Las Cruces Chapter of the Native Plant Society of NM and Doña Ana County Master Gardeners discussed native plants and xeriscaping.

There was fun for people of all ages. Kids played plant bingo, learned to use a dichotomous key, and made a plant guide.

We're grateful to all of the visitors, guest experts, and volunteers who made the day a success!





Clockwise from top: botanists Jack Carter (far right) and Martha Carter (center) discuss New Mexico plants with visitors; Asombro Board president Justin Van Zee plants an adopted cactus with volunteers Tom Packard and John Kimtis; volunteer Jean Davis leads a round of plant bingo for two young visitors.

Chihuahuan Desert Nature Park is Now Open on Sundays!



New hours are: Tuesday - Sunday 7:00 AM - 5:00 PM

Common Core State Standards and Asombro Science Programs

By Stephanie Bestelmeyer

You may have heard about the Common Core State Standards (CCSS) for language arts and math that were developed in 2009 and 2010. Broadly speaking, the standards focus on covering fewer topics in greater depth and linking topics across grades.

Since the final CCSS were released in June 2010, 44 states (including NM, but not TX) have voluntarily adopted them. Teachers have made a major effort to align each day's lessons with the CCSS. Unfortunately, this has often resulted in less science teaching time in favor of more math and language arts.

Asombro works to make sure that elementary students still get quality science instruction. One strategy we use is showing how CCSS have been incorporated into Asombro's engaging science lessons.

Aligning Asombro science lessons with the CCSS has been simple. For example, our new Desert Stories project allows 3rd graders to learn about the yucca/ yucca moth mutualism through a series of scientific studies, stories we read together, and writing activities. As students learn the life cycle of yuccas and yucca moths, they address CCSS 3rd grade language arts standards such as:

"Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence)."

As students collect and graph data on yucca root lengths, they address CCSS 3rd grade math standards like:

"Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot..."



Yucca seed pod drawing by Herman Campos, NMSU biology graduate student.

While we would prefer that students measure in metric units standardly used in science, we discuss differences and then cover the standard.

Engaging students in quality science education has always required that students understand and communicate science using math, reading, and writing. The new CCSS are giving us another opportunity to show this link.

Education Programs

Thanks to your support, Asombro staff provided 200 hours of science programming for 4,093 students so far in 2014!

10-Jan	Sunrise Elem Animal Adaptation		
13-Jan	East Picacho Elem Arthropod identification		
14-Jan	Picacho Middle School - Wildlife CSI		
14-Jan	Central Elem States of Matter		
15-Jan	LC Catholic Elem Arthropod identification		
15-Jan	Tombaugh Elem Earth Movers		
15-Jan	J Paul Taylor Academy - Life Cycles		
16-Jan	Mesilla Elem Arthropod identification		
17-Jan	Sunrise Elem Animal Adaptation		
21-Jan	Central Elem States of Matter		
21-Jan	J Paul Taylor Academy - Life Cycle Follow-Up		
21-Jan	Las Montañas Charter High School - Desert Data Jam		
22-Jan	Mayfield High School - Desert Data Jam		
23-Jan	New Mexico State University - Desert Data Jam		
23-Jan	Doña Ana Elem Earth Movers		
24-Jan	Picacho Middle School - Field Trip		
27-Jan	Hillrise Elem Earth		
28-Jan	White Sands Middle School - Science Fair		
28-Jan	Central Elem States of Matter		
28-Jan	Las Montañas Charter High School - Desert Data Jam		
29-Jan	Picacho Middle School - Biodiversity Sampling		
29-Jan	Hillrise Elem Earth		
30-Jan	Hillrise Elem Earth		
30-Jan	Mayfield High School - Desert Data Jam		
30-Jan	Central Elem Solar System		
4-Feb	University Hills Elem Animals		
4-Feb	Picacho Middle School - Carbon Cycle		
5-Feb	Camino Real Middle School - Wildlife CSI		
6-Feb	Sierra Middle School - Science Fair		
10-Feb	East Picacho Elem Biomes		
11-Feb	University Hills Elem Animals		
12-Feb	Tombaugh Elem Animal Adaptation		
12-Feb	J Paul Taylor Academy - Biomes		
12-Feb	LC Catholic - Life Cycles		
13-Feb	Lynn Middle School - Biodiversity Sampling		

15-Feb	Fall in Love with the Desert Nature Walk
18-Feb	University Hills Elem Animals
18-Feb	Vista Middle School - Carbon Cycle
19-Feb	LC Catholic - Animals, Biomes, Arthropod Identification
20-Feb	Red Mountain Middle School (Deming) - Desert Data Jam
20-Feb	Arrowhead Early College High School - Carbon Cycle
20-Feb	Desert Hills Elem Science Night
21-Feb	LC Catholic - Animals
25-Feb	Arrowhead Early College High School - Desert Data Jam
25-Feb	LC Catholic - Animals & Everyone Needs a Rock
27-Feb	Onate High School - Field Trip
27-Feb	Mayfield High School - Desert Data Jam
28-Feb	Sierra Middle School - Vegetation Measurements
28-Feb	J Paul Taylor Academy - Science Fair
3-Mar	East Picacho Elem Life Cycles
4-Mar	Mayfield High School - Field Trip
5-Mar	Tombaugh Elem Plant Adaptations
5-Mar	LC Catholic - Animals & Plant a Seed & Life Cycle
5-Mar	J Paul Taylor Academy - Desert Stories
6-Mar	Lynn Middle School - Carbon Cycle
6-Mar	J Paul Taylor Academy - Desert Stories
7-Mar	J Paul Taylor Academy - Desert Stories
8-Mar	Las Cruces Volunteer Fair
11-Mar	Vista Middle School - Carbon Cycle
11-Mar	New Mexico State Univ Desert Plants & Environ.
13-Mar	Sierra Middle School - Biodiversity Sampling
11-Mar	New Mexico State Univ Field Trip
14-Mar	Sierra Middle School - Field Trip
18-Mar	Sonoma Elem Weather
19-Mar	Sierra Middle School - Land Use
19-Mar	LC Catholic - Science Interns
19-Mar	J Paul Taylor Academy - Earth Movers
20-Mar	Alameda Elem field trip
20-Mar	Sierra Middle School - Wildlife CSI
21-Mar	Sonoma Elem Field Trip

Give Grande, NM May 6

One day. Every person. Our community.

We're counting down to Give Grande New Mexico on May 6, 2014. On this single day of online giving, Asombro is joining with hundreds of other nonprofit organizations, donors, and communities across the country to raise critical funds for causes right here in Las Cruces and across the state.

With access to a national pool of funds that will be used to amplify local donations, as well as a national and state media campaign, our community is poised to receive unprecedented levels of support for the causes that people care about.

To make this day a success, we need your help. You can give to Asombro online at <u>www.givegrandenm.org</u> (it's fast, easy and secure) or use the link on our website at <u>www.asombro.org</u>. We'd love it if you can help spread the word to your networks. Interested donors will only be able to give through this campaign on May 6th. That day, you will be able



to see Asombro's donations in real time and see what other nonprofits raise across the state.

Asombro Programs Reach South Africa

For the past several years, Asombro educators have been working with Dr. Heather Throop from NMSU, developing education programs based on her research on carbon cycling and soil organic matter. We've used these activities to teach thousands of students in our region.

In March, Dr. Throop took these same programs to South Africa, where she taught 55 high school students in Mamelodi, a township near Pretoria. Students are in the Mae Jamison US Science Reading Room Program, an after school library and science project. Using fantastic Chihuahuan desert carbon cycle diagrams created by graduate student Jane Smith, the students learned about our desert, including the creosote bush and walking stick. We are delighted that our programs have international appeal!



THANK YOU!

We are grateful to the generous donors in the first quarter of 2014.

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Paperless Newsletters

Would you prefer to read your Asombro Insights newsletter online rather than receiving a hard copy by mail? If so, please do the following:

• Email Program Coordinator Rink Somerday (<u>rink@asombro.org</u>) and let her know you'd like the paperless newsletter only.

Everyone on this list will receive an email with a link to the newsletter on the same day the newsletters are mailed. You'll save paper and also save Asombro the cost of printing and mailing hard copies.

Everyone can see the latest newsletter as well as previous editions on the Asombro website (<u>www.asombro.org</u>). Click on the "News" tab and then select "Newsletters."

Thank you again for your support of quality science education!

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