

# Asombro Insights

*Science education for eager minds*

A Quarterly Newsletter

Volume 26, Issue 3 (July - September 2017)

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### CONTACT US

Asombro Institute for Science Education  
 PO Box 891  
 Las Cruces, NM 88004  
 575-524-3334 (voice)  
 575-646-2315 (fax)  
 information@asombro.org  
[www.asombro.org](http://www.asombro.org)

## Summer Science Exploration

By Ryan Pemberton

Asombro was asked once again to participate and deliver hands-on science education as a part of the Las Cruces Public School District's Challenger Learning Center Summer Camps for incoming 1<sup>st</sup>-8<sup>th</sup> grade students in June.



*3rd-5th grade students explore solar panel efficiency as air temperature increases.*

This year, students learned about the characteristics of planet Earth. This presented us with a unique opportunity to pilot test our New Mexico Climate Champions curriculum in a summer camp setting for 3<sup>rd</sup>-8<sup>th</sup> grade students.

During the first two weeks of camp, students learned about climate change and energy use. The second two weeks of camp focused on the effects of climate change on the water cycle. We spent an extra day with middle school students for the "action" component of the curriculum. In one day, these students created short informational videos to encourage other New Mexico middle school students to switch to LED light

bulbs, unplug energy vampires, put a bucket in the shower while the water warms up, check for leaking toilets, or take other small actions to help fight climate change.

In addition to working with the older campers, Asombro was asked to be a part of their new one-day Micro Explorer Academy for incoming 1<sup>st</sup> and 2<sup>nd</sup> graders. Each of the four weeks of camp offered new lessons around the theme of what it would take to grow plants in space! During Week 1, the Micro Explorers learned about carbon dioxide and adaptations plants would need to live in space. Week 2 focused on soil and nutrients, while Week 3 was all about sunlight and temperature. In Week 4, Micro Explorers investigated different ways to help plants conserve water.

These explorers had a great time exploring and collecting data with some cool equipment and learning something new. We hope to see them this school year and hear excited exclamations of "Asombro is here!" when we walk into their classrooms.



*Micro Explorers use a soil moisture probe to monitor water availability in the soil.*

## New Mexico Teachers Attend Asombro's Workshop

By Stephanie Bestelmeyer

Hundreds of New Mexico students will become experts on climate change and water / energy issues in our state thanks to their teachers' hard work this summer. Ten teachers from Albuquerque, Shiprock, Bloomfield, Santa Rosa, and Las Cruces attended Asombro's New Mexico Climate Champions educator workshop on July 17 and 18. The project is funded by a grant to Asombro by the Environmental Protection Agency.

During a busy two-day workshop, teachers learned from Asombro staff as well as guest presenters Dr. Caiti Steele (USDA Southwest Climate Hub), Scott Burns (SunPower by Positive Energy Solar), and Rhonda Diaz (City of Las Cruces Water Utilities).

Teachers learned nine hands-on, inquiry-based lessons that Asombro developed to

introduce students to climate change and energy and water issues. They practiced using the supplies from kits of materials that accompany the activities. Each teacher will receive all the supplies they need to implement the activities with their students in the 2017/18 school year.

During the second half of New Mexico Climate Champions, students use their new knowledge to implement student-directed action plans to combat climate change. Teachers saw sample action projects and discussed possible projects their students could implement in their own communities.

Teachers were unanimous in their praise for the workshop. On an anonymous evaluation, one teacher said,

*"This was the most meaningful workshop / prof. development I have ever been to! I am very grateful to have been selected. ASOMBRO should be state wide! Thank you, thank you, thank you."*



*New Mexico Climate Champions workshop participants. Back row: Jason Roback (Albuquerque), Ryan Pemberton (Asombro), Estela Thompson (Santa Rosa), Javier Montejano, Jr. (Las Cruces), Tina Schroeder (Bloomfield), Lynda Hahn (Albuquerque), Elsa Nuñez (Las Cruces), Joe Dan Lovato (Albuquerque). Front row: Cynthia Dumayas (Shiprock), Stephanie Bestelmeyer (Asombro), Lillian Fitzpatrick (Albuquerque), Libby Grace (Asombro), Kristen Bandy (Albuquerque). Photo by Stephanie Haan-Amato.*

### Education Programs

**Thanks to your support, Asombro staff provided 538 hours of science for 11,843 students so far in 2017!**

Here are the programs from April, May, and June.

|        |  |        |                                   |           |  |
|--------|--|--------|-----------------------------------|-----------|--|
| 3-Apr  | Camino Real MS - human impacts             | 21-Apr | Sierra MS - human impacts         | 25-May    | Mesilla Park Elem - Learning Day                 |
| 3-Apr  | University Hills Elem - animal adaptations | 24-Apr | Mesa MS - human impacts           | 1-Jun     | NM STEM Symposium - NM Climate Champions         |
| 4-Apr  | Hillrise Elem - field trip                 | 25-Apr | Monte Vista - Science Interns     | 6-Jun     | La Semilla Discovery Camp - animal adaptations   |
| 5-Apr  | LC Catholic - penny flip                   | 26-Apr | LC Catholic - soil organic matter | 6-Jun     | LCPS STEAM camp - plants #1                      |
| 5-Apr  | Vista MS - human impacts                   | 1-May  | DACC - greenhouse effect          | 7-8 Jun   | LCPS STEAM camp - energy                         |
| 6-Apr  | J Paul Taylor Acad. - penny flip           | 2-May  | Alameda - Science Interns         | 10-Jun    | Alamogordo Library - animal adaptations          |
| 6-Apr  | Vista MS - human impacts                   | 3-May  | Alameda - Science Interns         | 12-Jun    | Capitan Library - yucca                          |
| 6-Apr  | Zia MS - Data Jam                          | 3-May  | Vista MS - human impacts          | 13-Jun    | LCPS STEAM camp - plants #2                      |
| 7-Apr  | Sierra MS - field trip                     | 4-May  | Vista MS - bats                   | 14-Jun    | LCPS STEAM camp - energy                         |
| 11-Apr | Camino Real MS- human impacts              | 4-May  | Lynn MS - human impacts           | 15-Jun    | Bayard Library - arthropod ID                    |
| 11-Apr | Monte Vista - Science Interns              | 5-May  | Alameda - Science Interns         | 19-Jun    | La Semilla Discovery Camp - soil organic matter  |
| 12-Apr | Picacho MS- human impacts                  | 5-May  | Mesa MS - human impacts           | 20-Jun    | LCPS STEAM camp - plants #3                      |
| 12-Apr | Picacho MS - human impacts                 | 8-May  | Lynn MS - human impacts           | 21-22 Jun | LCPS STEAM camp - water                          |
| 13-Apr | Chaparral Elem (GISD) - Rock It            | 9-May  | Alameda - Science Interns         | 24-Jun    | El Paso Main Library - fossils                   |
| 13-Apr | LC Water Festival                          | 9-May  | Sierra MS - human impacts         | 27-Jun    | LCPS STEAM camp - plants #4                      |
| 13-Apr | Picacho MS - Data Jam                      | 10-May | Valley View Elem - animal adapt.  | 28-Jun    | LCPS STEAM camp - water                          |
| 14-Apr | Homeschool - field trip                    | 11-May | Alameda - Science Interns         | 29-Jun    | Hatch Public Library - geology & Earth processes |
| 18-Apr | Monte Vista - Science Interns              | 11-May | Highland Elem - skins & skulls    |           |  |
| 19-Apr | J Paul Taylor Acad. - soil organic matter  | 12-May | BT Wash. Elem - Desert Stories    |           |  |
| 20-Apr | NMSU preservice teachers                   | 15-May | Zia MS - human impacts            |           |  |
| 20-Apr | Nob Hill (Ruidoso) - Rock It               | 15-May | BT Wash. Elem - Desert Stories    |           |  |
|        |  | 16-May | TIONM - Sort Like a Scientist     |           |  |
|        |  | 16-May | Garfield Elem - career day        |           |  |
|        |  | 19-May |                                   |           |  |

## 15 Years of Butterflies: Our 15th Annual Butterfly Flutterby

*"Butterflies are self propelled flowers."*

-Robert. A Heinlein

Asombro shares this appreciation of the winged beauties of the desert. In fact, we appreciate butterflies so much that we have been celebrating them with our Butterfly Flutterby event for 15 years!



*Western Tiger Swallowtail*  
Photo Credit: Wikipedia

Our 15th Annual Butterfly Flutterby event promises to be one of the most fun yet! Learn about current butterfly research at the Radio Telemetry and 1, 2, 3 Count Me booths; cool off with a wet sponge at our Sponge Toss game; and make a fantastic butterfly necklace to take home. Bring the whole family for butterfly-themed fun!

To **volunteer** at the event, please contact Stephanie Haan-Amato at [s.haan-amato@asombro.org](mailto:s.haan-amato@asombro.org) or 575-524-3334. We could use your time and talents!

### 15th Annual Butterfly Flutterby

Saturday August 19, 2017

9:00 am - 12:00 pm

Chihuahuan Desert Nature Park

56501 N. Jornada Road, Las Cruces

**Admission: \$3**



*The whole family will enjoy games and activities at Butterfly Flutterby.*

## Get Active to Support Science Education for Local Youth at Our 5th Annual Desert Dash

We can't wait to welcome runners and walkers of all ages and abilities to the Chihuahuan Desert Nature Park on **November 11, 2017** for our 5th Annual Desert Dash Trail Race fundraiser! Help bring hands-on science programs to local youth by participating in one of our events. We offer a distance for everyone: 1-mile, 5K, 10K, or half marathon (13.1 miles).

**Information and registration:**

[www.asombro.org/dash](http://www.asombro.org/dash)



## THANK YOU!

We are grateful to the generous donors in the second quarter of 2017.

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### Check Current and Past Weather at the Chihuahuan Desert Nature Park

There's an easy way to check the current weather at the Chihuahuan Desert Nature Park. Log on to:

[weather.donaanacounty.org](http://weather.donaanacounty.org)

Choose the Chihuahuan Desert Nature Park from the list of sites on the top of the page. You'll see nearly real-time temperature, relative humidity, wind velocity, and much more.

Click on the boxes to examine data collected since the Nature Park weather station was installed in February 2016.



*Use the Doña Ana County Flood Commission's weather station at the Nature Park to check the weather before you head out to the site.*

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