

# Asombro Insights

*Science education for eager minds*

A Quarterly Newsletter

Volume 19, Issue 3 (July - September 2010)

**Calendar of Events**

Opportunities abound in the next few months to learn about and enjoy our region. From the Butterfly Flutterby to a hot air balloon event at White Sands, there is something for everyone to enjoy. See our calendar for more information.

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**Backyard Campout**

Your own backyard can become a fun, free campground. Learn some activities to make the most out of your backyard camping experience.

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**Volunteer Spotlight**

Meet Tom Packard, a retired pediatrician and superb Asombro Institute volunteer. Learn what volunteering means to Tom and find out how you can volunteer, too.

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**New Data Website**

Students will soon be able to share their data through the Asombro Institute's interactive data website. Learn more about this exciting addition to Asombro's programs.

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**Many Thanks**

See the list of donors and volunteers who make the Asombro Institute successful. Join these dedicated, talented individuals by showing your own support.

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**Map to the Nature Park**

Enjoy the monsoon season with a trip to the Chihuahuan Desert Nature Park. Find a map here.

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## Board & Staff

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- Paul Harper - Site Coordinator
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## 8th Butterfly Flutterby Takes Flight

By Anna Keener, Asombro volunteer



The 8<sup>th</sup> annual Butterfly Flutterby brings the community together to celebrate these beautiful bugs! Asombro Institute is hosting the event at the Chihuahuan Desert Nature Park on **Saturday, August 21 from 9:00 am until noon**. The entry fee is \$2 per person.

The event is for the entire family, with fun and learning for all ages. Visitors will learn where butterflies live in their natural habitat and how they make it possible for humans to live on the planet by pollinating plants. People will get a chance to plant their own butterfly attracting plants. There will also be a live butterfly release. Scientists will be on hand to share their knowledge about the butterflies of our region and answer questions about what you may have seen fluttering by.

Visitors will be able to enjoy a pollination ring toss, a butterfly identification scavenger hunt, a sponge toss, and face painting. There will be opportunities to make mobiles of the butterfly's life cycle and to decorate butterfly bookmarks. A bucket auction for fabulous items will also be held.

"This event is well worth the drive," says Paul Harper, Asombro Institute Site Coordinator and Butterfly Flutterby coordinator. A map to the park is located on the back of the newsletter. People are encouraged to bring water, hats, and sunscreen when they come to the park.

August is the best time to see the butterflies native to southern New Mexico. Many caterpillars become butterflies during the monsoon season. It's truly a beautiful time to be out in the desert and a sight not to be missed. Contact the Asombro Institute at 575-524-3334 for more information.



NOTES FROM THE DIRECTOR

*I'm sometimes asked if the Asombro Institute staff takes the summer off. The short answer is, "No way!" Although we all take vacation days during the summer, this is often one of our busiest and most important times.*



*We spend the summer updating and creating new hands-on science programs, leading teacher workshops, writing grant proposals, and restocking our Science Investigation Kits. For example, this summer we are writing a new module (8 activities) on biodiversity for our Schoolyard Desert Discovery Project. We're also developing a new field trip station on phenology and a new website where students will be able to enter and examine data collected at the Chihuahuan Desert Nature Park and in schoolyards.*

*So the "lazy days of summer" are anything but lazy at the Asombro Institute. But when you are fortunate enough to do a job you love and find meaningful, every season brings new excitement!*

*Stephanie Bestelmeyer  
Dr. Stephanie Bestelmeyer*

Calendar of Events



**August 18** - Talk on the Broad Canyon Ranch Restoration Project for the Mesilla Valley Audubon Society. Bret Beseley, Restoration Specialist for U.S. Fish & Wildlife, will present an update on the salt cedar removal at birding sites around Las Cruces. 7:00 pm. Village at Northrise, Hallmark Bldg. 2882 N. Roadrunner Pkwy, Las Cruces. For more information, contact Storm Sermay at 575-382-3348.

**August 21** - Butterfly Flutterby, hosted by the Asombro Institute for Science Education. Learn about these beautiful bugs and why we need them. Fun for kids and adults with lots of new activities. 9:00 am - noon. Chihuahuan

Desert Nature Park. \$2 per person. Call 575-524-3334 for more information.

**August 21** - Sacramento Mountains Field Trip. For further information, check the Mesilla Valley Audubon Society website or contact David Griffin at 575-382-2080.

**August 25** - HSSS Herpetology Simplified Science Show. Hands on presentation about the world of snakes and other reptiles of the Tularosa basin. 8:00 pm. White Sands National Monument Amphitheatre. \$3 entrance fee to the park.

**August 28** - Lake Lucero Tour. Take a guided tour and learn how the White Sands were formed. 5 pm. Call 575-679-2599 ext. 236 to make reservations. Another tour will be held September 26th at 9 am.

**Through August 29** - Summer Passport to Health continues through August 29. Kindergarten through 5<sup>th</sup> grade children can collect stamps and win prizes for getting outside and playing. [www.healthnym.org](http://www.healthnym.org)

**August 29** - Ciclovía Health Event. Ciclovía offers bike riding, walking, jogging, zumba, aerobics, gymnastics, skating and more! Young Park, 1905 E. Nevada Avenue. 10 am - 2 pm. Free admission. Call 575-522-0289 for more information.

**September 17-18** - 2010 White Sands Hot Air Balloon Invitational. A collection of colorful balloons filling the air over the white gypsum dunes. White Sands National Monument, 45 miles east of Las Cruces, Highway 70. Lift-off at 7 am. \$3. 575-679-2599. [www.nps.gov/whsa](http://www.nps.gov/whsa)

**September 24** - White Sands in 3D. Fly through the dunes, see a tarantula up close, and explore crystal pedestals in a 3-D visual journey of White Sands National Monument as part of their full moon nights. 3-D glasses are provided. 7:30 pm. \$3 entry into the park. Visit [www.nps.gov/whsa](http://www.nps.gov/whsa) for more information.

Back to Nature with a Backyard Campout

By Cate Schneider, Education Technician

Summer is upon us, and finding ways to enjoy the outdoors while avoiding the sizzling heat can be a challenge. A great way to enjoy nature this time of year is to get outside after sundown. Tap into your inner child and have a family backyard campout! Whether you are camping in the backcountry, at a nearby state



park, or in your own backyard, getting outside and sleeping under the stars remains the objective (even if there is a streetlamp nearby!). Try the following ideas for a fun and memorable evening with the family.

Conduct a backyard bioblitz! You'll be amazed by the diversity of plants and animals present in your own backyard. Grab a notebook and pencil and set the timer for 30 minutes. Search for as many living organisms as possible and record what you find. If you don't know the name of the plant or insect, describe it. Once 30 minutes are up, take time to share your findings with family members and then sit and sketch one of the plants, flowers, or other specimens of interest. Check out field guides beforehand at your local library to help identify the plants, birds, and other animals you find. You can repeat this activity in the nighttime to see if you can find anything different. Use a flashlight to help you, and even try a blacklight for spotting scorpions, as they fluoresce under ultra-violet light. Remember to always use caution, especially when turning over rocks.

Once the sun has set, try a few different night sky viewing activities. Make a game to see who can find five constellations first. You can print and assemble your own star wheel to guide you. Log onto: [www.skyandtelescope.com](http://www.skyandtelescope.com). Click on "Let's go stargazing" under "How To"/ Click on "family fun"/ Click on "printable star wheels."

Cover a flashlight with red saran wrap or cellophane paper and secure with a rubber band. Use this as an aid to look at the star wheel to help you find constellations. Red light doesn't interfere with night vision as much as white light. Under "family fun" on Sky and Telescope's website, you will also find a printable star clock you can assemble to tell time, and a printable star deck game to play with family members. Lastly, take turns viewing the sky through a quality pair of binoculars. This is a great activity to enhance your observation skills as you may see objects more clearly or find objects that you couldn't see with the naked eye.



## Getting Out There

Families don't get outside as much as they used to. Statistics show a nationwide turn toward indoor inactivity, and away from outdoor activity. A study by the Kaiser Family Foundation shows that children now spend an average of 58 hours a week using media, from television to texting. The same study reported that children are six times more likely to play a video game than ride a bike. The amount of television children watch is linked with a higher risk for poor grades and health problems. In the past twenty years, obesity rates for adults have doubled, and rates for children have tripled.

The natural world and green spaces have helped people cope with stress, heal more quickly from illnesses, and treat symptoms of ADHD, asthma, and depression. Being active outside decreases the risk of diabetes and obesity. Discovering the natural environment through experiential learning promotes positive attitudes towards education and science.

The Asombro Institute is dedicated to encouraging the community to get outside and explore. We are working with community organizations to form a regional movement designed to help the community return to the outside and live a healthy lifestyle. If you are interested in becoming a part of this movement, please contact the Asombro Institute. There are plenty of ways to help. In the meantime, let's get outside and get active!

## Volunteer Spotlight

On many days during the school year, you can find Asombro volunteer Tom Packard in one of his favorite places, the Chihuahuan Desert Nature Park, engaging students as they learn the scientific wonders of the desert. A retired pediatrician, Tom enjoys the opportunity to connect with and educate children without the pressure of dealing

with disease and illness. Tom has been fascinated with desert ecosystems since childhood (beginning with a subscription to AZ Highways magazine), and volunteering gives him more time outside to witness all the happenings of the desert. This is one reason why he chose to retire in Las Cruces, along with viewing magnificent sunsets and the night sky, and the ability to continue his beloved hobby of collecting cacti housed in his very own greenhouse.

Tom fits his work with Asombro into a busy schedule since he is an active volunteer with at least six other organizations in the community, including singing, mentoring, and completing hours as a Master Gardener. Tom loves to volunteer because it is fun and satisfying work. He encourages others to help out because he believes the work needs to be done by people who care. Tom has been helping Asombro achieve their mission for many years. He has done a variety of work for Asombro over the years including field trips, classroom visits, trail work, and special events. The Board of Directors and staff of Asombro thanks Tom for his outstanding service as a dedicated volunteer. To learn more about volunteer opportunities at Asombro Institute, please call 575-524-3334 or email [link@asombro.org](mailto:link@asombro.org).

## Lecture @ 401

June's "Lecture @ 401" program featured Dr. Dawn Browning from the USDA/ARS Jornada Experimental Range. Her talk "Seeing Green: Tracking Seasons with Satellite Imagery" was a fascinating introduction to current research examining changes in phenology (the study of recurring plant and animal life stages) that can be examined through field measurements and satellite images. Dawn has also been assisting the Asombro Institute staff with the creation of new activities that bring this current research into middle school classrooms.

## Education Programs

*Here are the programs run by Asombro Institute for Science Education staff during the second quarter of 2010. As of June 30, we had already worked with 8,169 students and 1,205 adults! Thanks for supporting these programs!*

- 1-Apr Valley View Elem. - soil
- 6-Apr Sunrise Elem. - soil
- 6-Apr Zia MS - global climate change
- 6-Apr AAUW - Asombro Institute
- 7-Apr Sunrise Elem. - soil
- 7-Apr Vista MS - track plates
- 8-Apr Jornada Elem. - I'm a scientist, too
- 8-Apr Lynn MS - field trip
- 9-Apr Sierra MS - field trip
- 13-Apr Central Elem. - soil
- 14-Apr Davenport Elem. - field trip
- 15-Apr Desert Hills Elem. - science night
- 17-Apr Nighttime in the Desert
- 19-Apr Sierra MS - track plates
- 20-Apr Sierra MS - track plates
- 21-Apr Vado Elem. - field trip
- 22-Apr Fort Bliss Earth Day Festival
- 24-Apr Alamogordo Earth Day Festival
- 26-Apr Camino Real MS - phenology
- 27-Apr Camino Real MS - phenology
- 28-Apr Camino Real MS - phenology
- 29-Apr Booker T. Washington Elem. - soil
- 30-Apr Booker T. Washington - field trip
- 4-May Sierra MS - field trip
- 5-May Jornada Elem. - field trip
- 6-May Davenport Elem. - track plates
- 7-May Jornada Elem. - field trip
- 10-May East Picacho Elem. - field trip
- 11-May Dona Ana Head Start - field trip
- 12-May Sonoma Elem. - field trip
- 13-May Jornada - global climate change
- 14-May Radford School (El Paso) - field trip
- 19-May East Picacho Elem. - field trip
- 20-May Jornada Elem. - field trip
- 7-Jun Friends of MV Bosque State Park
- 12-Jun El Paso Library - desert animals
- 16-Jun Lecture@401 - Dawn Browning
- 18-Jun NMSU PREP - field trip
- 23-Jun El Paso Library - desert animals
- 25-Jun NMSU PREP - field trip
- 25-Jun Alamogordo Library - animal adaptations
- 30-Jun Rockhound State Park - arthropods

# Chihuahuan Desert Nature Park

## Butterfly Fun Facts

By Anna Keener, Asombro volunteer

The word butterfly comes from Old English, meaning literally butter and flying creature. Butter probably referred to the light yellow color of some European butterflies.

Butterfly wings are covered in scales that create the intricate color patterns we see. These colors help camouflage them or provide warnings to predators. The front part of the wing is rigid but the majority is flexible, which helps propel them through the air. The wings are laced with delicate veins full of air, which support the wings.

The differences between moths and butterflies:

- 1) Most butterflies fly during the day. They need temperatures greater than 86° F in order to fly. Most moths fly at night.
- 2) Most butterflies have knobs at the end of their antennae while moths do not.
- 3) Most butterflies have hairless bodies that are slender. Moths have furry bodies that are usually more thick.
- 4) Butterflies rest with their wings upright, while moths rest with their wings spread out.

The North American Butterfly Association organizes groups to count butterflies across the country. In Doña Ana County, a local group has participated in the NABA count for 19 years. The count covers a circle with a radius of 15 miles and includes Dripping Springs and the Organ Mountains.

Come learn more fun facts about butterflies at the Asombro Institute's Butterfly Flutterby on Saturday August 21 from 9:00 am - noon at the Chihuahuan Desert Nature Park. You can also see photos and video of painted lady caterpillars as they grow and eventually become butterflies on the Asombro Institute's Facebook page.



## Data Website Debuts Soon

By Cate Schneider, Education Technician

We are excited to announce a new product that will debut this fall for Asombro's Schoolyard Desert Discovery Project - a website showcasing collaborative data from students in the field. This custom online database has been a dream of Asombro for many years, and thanks to generous grants from the National Science Foundation for science and education programs coordinated through Oregon State University and Brown University, this dream has finally come to fruition.

The website will serve as a central place for students and teachers in the region to input and share data they have collected on four projects designed to measure long term changes in the environment at the Chihuahuan Desert Nature Park and in schoolyards around the region. Projects include a long-term study of plant revegetation following disturbance and a study

of plant changes under shelters that block 50% of incoming rain (both pictured below).

These projects are modeled after scientific studies conducted by Long Term Ecological Research (LTER) scientists. Schools outside this region can participate by asking and answering questions related to data collected at the Chihuahuan Desert Nature Park and downloading data in the data center. Updated graphs analyzing the collaborative data will be accessible on the website as well.

The Asombro Institute will host a teacher workshop to pilot the website and gain feedback to maximize opportunities for website function. We expect the full site to be online and operational by fall.

The Schoolyard Desert Discovery Project provides classroom education, field trips and teaching materials through a collaboration of scientists and educators with the Jornada Basin LTER, the USDA-ARS Jornada Experimental Range, and the Asombro Institute for Science Education.



PLEASE! 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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I would like \$ \_\_\_\_\_ of this donation to go to the Asombro Institute for Science Education endowment fund.

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# Many Thanks

*Our sincere thanks go to the following individuals and businesses that made contributions in the second quarter of 2010 (April - June).*

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Donna & Michael Yargosz

**Peridot (\$500 - \$999)**

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Arlene Tugel

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Special thanks to Will Keener for the photo above as well as mountain and butterfly photos on page 4 of this issue.

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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 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.

