2013 ANNUAL REPORT

Asombro Institute
FOR SCIENCE EDUCATION

ASOMBRO'S COMMUNITY GROWS

STUDENT COMMUNITY
19,371 students participated in Asombro field trips, classroom/schoolyard programs, and other activities in 2013. Thanks to new programs like our Research Experience Field Trips, they spent time outside collecting data on long-term experiments while engaging with questions of experimental design and conclusions.

DONOR COMMUNITY
Along with the second annual Moonlight Dinner fundraiser, Asombro hosted two new fundraisers this year including a golf tournament and the first Desert Dash Trail Race in November.

VOLUNTEER COMMUNITY
Volunteers donated time to help Asombro with new programs, new fundraisers, and a large number of class programs. Together they donated more than 3,000 hours to help educate children and families in 2013.

EXPERT COMMUNITY
Asombro involved local scientists in two different teacher workshops this year, strengthening science teaching and training with discussions of the latest research.

Mission
The Asombro Institute for Science Education is dedicated to increasing scientific literacy by fostering an understanding of the Chihuahuan Desert.

Asombro students learn science by gathering data and asking questions about their findings at the rainout shelter research project at the Nature Park.

The children's 1K race was a big hit for kids and parents during the first Desert Dash Trail Race at the Nature Park. Photo by Marie McGrath.

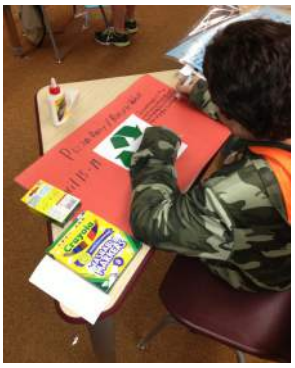
Volunteer Steph Preciado created a tile mosaic of the desert landscape to hang at the Nature Park. She donated materials and many hours of meticulous work to bring art to Park visitors.

Asombro connects scientists with teachers so they can learn from each other about the latest research and teaching strategies. Dr. Heather Throop visits with a group of teachers at the Making Carbon Fun Workshop at the Park.

INNOVATION IN EDUCATION

Desert Data Jam's second prize winners Nikita Saenz-Lopez, Aspen Hall, and Madison Jensen (not pictured) examined precipitation and populations of kangaroo rats using a physical model.

Asombro's Science Interns Project allows 5th graders to become near-peer teachers, learning from Asombro educators and then helping younger students learn science concepts.



Earth Squad students developed a recycling campaign in response to what they learned about climate change.

RESPONDING TO RESEARCH

Asombro responds and adapts to new research in education when designing our programming. Besides creating hands-on, fun programs, we also incorporate four important techniques for improving learning and creating future scientifically literate citizens. They include:
1) interdisciplinary education, 2) older students teaching younger students (near-peer teaching), 3) communication about science and data, and 4) experience-based learning.

INTERDISCIPLINARY LEARNING

Asombro's Experience Science Program gets 3rd graders involved in monthly scientific investigations with Asombro educators. They learn science concepts and use math and language arts to analyze data and share their results and conclusions.

SCIENCE COMMUNICATION

The Desert Data Jam challenges students to communicate with nonscientists about large data sets. Students created rap songs, poems, physical models, and children's books. They competed for prizes for the most accurate and creative explanation of data sets from local scientists' research.

NEAR-PEER TEACHING

Perhaps the best way to learn is to teach. During the Science Interns Project, 5th grade classes participated in hands-on science activities with Asombro staff throughout the year. After learning the material, the 5th graders used their new knowledge to teach hands-on activities to younger students on topics like matter, seasons, and animal adaptations.

EXPERIENCE-BASED LEARNING

All of Asombro's programs promote experience-based learning opportunities both in the classroom and at the Chihuahuan Desert Nature Park. During our Research Experience Field Trips, for example, students assisted with long-term research projects at the Nature Park.

Students in Asombro's Earth Squad program explored climate change data and then used their new understanding of the science to come up with a conservation plan for their school. They designed and implemented recycling and energy conservation programs such as a no-idling zone for cars to reduce greenhouse gas emissions.

"My favorite station was radio telemetry because we got to use the equipment real scientists use to find tagged animals."

-Ethan Taylor 7th grade

Paul Harper shows Girl Scouts how to use global position systems (GPS) at the geocache event at the Nature Park. Once they understood the technology, they were off to find hidden desert treasures using GPS coordinates.

" I loved seeing the protozoa underneath the microscope. I never knew there were so many living things in a cow's rumen."

-Eliana Cadera 7th grade

THE OUTDOOR CLASSROOM

Graduate students help young visitors learn how to do a butterfly survey. Events like Butterfly Flutterby encourage people to get outside to learn about the Chihuahuan Desert.

Teachers Susie Swope and Madison Hill execute vegetation surveys on the shrub removal plot at the Nature Park as part of their research project during the biodiversity workshop.

Asombro engages kids in doing research, such as studying how shrubs respond to different amounts of precipitation

THE OUTDOOR CLASSROOM

The Chihuahuan Desert Nature Park continues to be a valuable teaching space for Asombro. From field trips, to public events and teacher workshops, people who engage with the wildness of the Park get to enjoy and understand the Chihuahuan Desert better. The park is also open to visitors for free self-guided hikes, so the community can learn about the beauty of our local environment.

COMMUNITY EVENTS

Besides the classic Butterfly Flutterby event, now in its 11th year, Asombro pioneered some brand new programs for the community to enjoy, including the Egg Trek which taught visitors about desert egg layers. Asombro also hosted a Valentine's Day Fall in Love With the Desert hike, a movie night, and a winter Luminaria event at the Park.

TEACHER WORKSHOPS

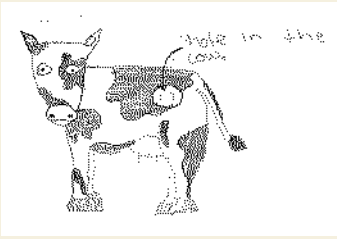
Teachers used the Nature Park for professional development. Asombro hosted the Biodiversity Workshop where teachers visited with mammalogist Dr. Bob Schooley and botanist Dr. Jack Carter before designing and implementing their own research projects at the Park.

At the Making Carbon Fun Workshop, biologist Dr. Heather Throop shared her expertise about how carbon moves through the desert ecosystem as teachers learned from ongoing experiments at the Park.

THE FAMOUS ASOMBRO FIELD TRIPS

Local teachers and students continue to value Asombro's field trips with classic stations like the cannulated cow, that allows students to learn about the protozoa that help cows digest food. Asombro also keeps adding new field trip stations like radio telemetry tracking.

Asombro field trips are the first time some students have direct interaction with the Chihuahuan Desert or do a hands-on science project. These are experiences they remember and enjoy.



Drawing by 7th grader Eliana Caldera after a memorable experience learning about the cannulated cow.

"I wasn't excited about teaching science, but after this week, I've learned that science is fun and non-threatening."

- Teacher at the Biodiversity Workshop

Teachers Kathleen Guitar and Cathy Fister have fun at the biodiversity workshop using track plates to capture animal prints.

"I understand the complexities of the carbon cycle so much more, which translates into better instruction for my students."

- Teacher at the Making Carbon Fun Workshop

ASOMBRO INSTITUTE FOR SCIENCE EDUCATION

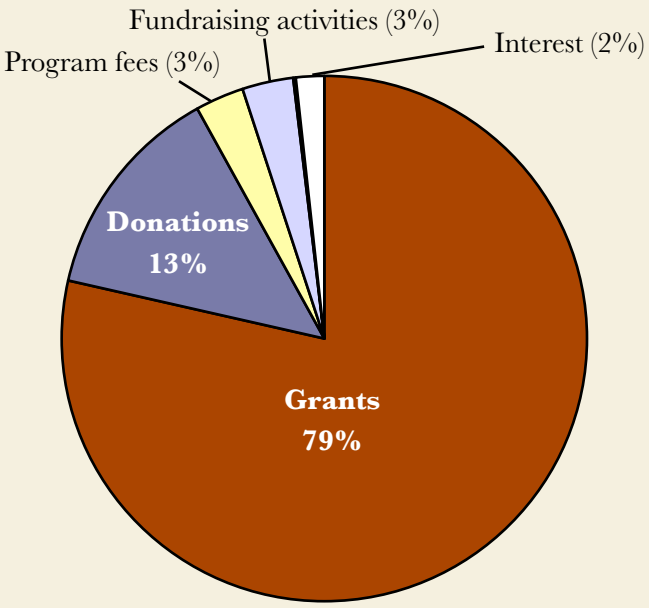
INCOME	
Donations	$28,230
Grants	$165,304
Program fees	$6,308
Fundraising activities	$6,612
Merchandise sales	$336
Interest	$3,654
TOTAL INCOME	**$210,444**

EXPENSES	
Salaries	$106,887
Payroll taxes	$9,011
Professional fees - accounting	$2,619
Professional fees - investment	$890
Occupancy	$4,394
Insurance	$5,767
Fuel and vehicle maintenance	$4,368
Education program supplies	$13,211
Stipends for teachers in workshops	$19,750
Transportation grants (TIONM)	$8,750
Office expenses	$7,759
Information technology	$3,953
Advertising and promotion	$215
Site security and maintenance	$7,744
Business registration, dues	$320
TOTAL EXPENSES	**$195,638**

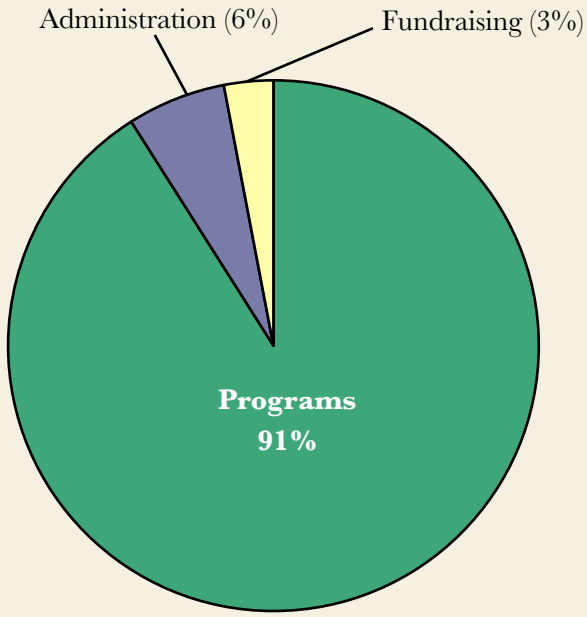
Balance Sheet

(December 31, 2013)

Checking and savings	$147,017
Endowment and investments	$125,508
Vehicles and inventory	$9,911
TOTAL	**$282,436**



INCOME



EXPENSES