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 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

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.

"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

"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

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

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

"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

"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
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

Donations 13%
Grants 79%

EXPENSES

Programs 91%
Income (3%)
Administration (6%)
Fundraising (3%)