# **Asombro Insights**

Science education for eager minds

#### **A Quarterly Newsletter**

Volume 28, Issue 4 (October - December 2019)

# Board & Staff

## **BOARD OF DIRECTORS**

Justin Van Zee - President Gene Gant - Vice President Mark Sechrist - Secretary Donna Yargosz - Treasurer Cara Rotan - Board Member Gil Tellez - Board Member

#### STAFF

Stephanie Bestelmeyer, Ph.D. Executive Director

Stephanie Haan-Amato Assistant Director

Ryan Pemberton Science Education Program Leader (Elementary)

Kelly Steinberg Science Education Program Leader (Secondary)

Kim O'Byrne Science Education Program Leader (Special Projects)

Emilia Linley Science Educator

Abigail Miller Science Educator

## 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

# Big Changes and an Exciting Future for Asombro

By Stephanie Bestelmeyer

While I don't admit to often getting inspiration from a quote on a coffee mug, I recently took a photo of a mug with this quote from John Fitzgerald Kennedy: "Change is the law of life, and those who look only to the past or present are certain to miss the future." It encapsulates the spirit with which Asombro made some big changes in organizational structure, staffing, and programming over the past few months. expand programs related to water conservation and sustainable agricultural practices in the desert southwest. This gave us an opportunity to add two new staff positions and restructure the organization to meet both current and future needs.

With the help of Nancy Barnes-Smith from Nonprofit Support and Success, the Board of Directors and I began an exciting process of



The largest ever staff at the Asombro Institute for Science Education, dressed as our favorite desert organisms! Left to Right: Emilia Linley, Stephanie Bestelmeyer, Kim O'Byrne, Kelly Steinberg, Abi Miller, Ryan Pemberton, and Stephanie Haan-Amato

Since I was hired as the organization's first paid staff member 19 years ago, we slowly and steadily added staff members to serve as science educators as funds allowed. Over the years, we expanded to five full-time staff members, and the demand for our awardwinning programs just kept increasing. There were limitations to this organizational structure, but it was an expedient way to add staff quickly when we had funds to do so.

This spring, we were fortunate to turn our dream of additional science education for 6th-12th grade students into a reality. We received two large, multi-year grants to envisioning an expanded staff to meet the future needs of the organization. The result was a new organizational structure with several leadership positions to assist me with program management.

Previous staff members Stephanie Haan-Amato and Ryan Pemberton were selected for two of these

new leadership positions. We then posted job openings for four new staff members, and I couldn't be happier about the amazing science educators we added to our team. You can get to know Kim, Kelly, Emilia, and Abi by reading their biographies on pages 3 and 4.

Asombro is now poised to meet our current needs and bring the innovation that has helped us expand and thrive so far into the next chapter of the Asombro story. Not only will we not "miss the future," but with your support, we are ready to <u>shape the</u> <u>future of science education</u> in our region.

# Diving Into Desert Ecology at Scientist Saturday Mornings

# By Abi Miller

Scientist Saturday Mornings are back at the Chihuahuan Desert Nature Park! October attendees learned about "Desert Myths and Mysteries" and got the chance to bust some common misconceptions about desert animals through hands-on activities. Snakes, tarantulas, millipedes, and nocturnal animals were investigated, and visitors completed scavenger hunts as they visited natural history exhibits and hiked around the Nature Park.

Each Scientist Saturday Morning is crafted around a theme with different activities selected for each month. November's "Thankful for Thorns" event will focus on the defenses that allow desert plants and animals to survive in a competitive environment. This Scientist Saturday will host the debut of our new plant scavenger hunt, funded by the Native Plant Society of New Mexico, which will take place around the Desert Discovery Nature Trail. In December, visitors can explore "Winter in the Desert" and learn about the adaptations that help desert wildlife survive in cold temperatures.

Join Asombro Scientists for this free event on the **first Saturday of every month**! Drop in anytime between 8 AM and noon to have some with fun with us while learning about the desert.



Scientist Saturday participants practiced "hearing" like a snake – by trying to feel vibrations through a table with their eyes closed.





Asombro staff member Ryan debunks a myth about desert tarantulas - by explaining that they aren't aggressive towards to humans.

# **Education Programs**

Thanks to your support, Asombro staff provided <u>834 hours</u> of science for <u>16,609 students</u> so far in 2019. Programs conducted in July, August, and September 2019

	9-Jul	Silver City Library - Animal Adapt.
	10-Jul	Los Lunas Library - Animal Adapt.
	10-Jul	State 4-H Conf Radiotelemetry
	11-Jul	Socorro Library - Geol. & Earth Proc.
	16-Jul	Hatch Library - One Day in the Desert
	19-Jul	White Sands - Juvenile Justice
	25-Jul	El Paso Library - Geol. & Earth Proc.
	7-Aug	J Paul Taylor Acad Teacher Wkshp.
	13-Aug	E. Picacho Elem Desert Stories
	14-Aug	J Paul Taylor Acad Criollo Cattle
	15-Aug	Tombaugh Elem Desert Stories
19-20 Aug E. Picacho Elem Desert Stories		
	22-Aug	E. Picacho Elem Desert Stories

26-27 Aug Columbia Elem Science Interns					
30-Aug	E. Picacho Elem Desert Stories				
3-4 Sep	Highland Elem Desert Stories				
5-Sep	Sierra MS - Field Trip				
6-Sep	E. Picacho Elem Desert Stories				
9-Sep	J Paul Taylor Acad Science Interns				
9-10 Sep	Columbia Elem Science Interns				
10-Sep	Brownie Troop - Bug Badge				
10-11 Sep	J Paul Taylor Acad Science Interns				
11-Sep	J Paul Taylor Acad Plant Traits:				
	Learning from Herbarium Coll.				
13-Sep	J Paul Taylor Acad Science Interns				
17-18 Sep	Columbia Elem Desert Stories				

17-18 Sep Hatch Valley HS - Matter & Energy				
19-Sep	Tombaugh Elem Desert Stories			
l9-Sep	Deming Schools - Teacher Wkshp.			
24-25 Sep	Highland Elem Desert Stories			
26-Sep	Las Cruces Catholic - Math/Sci. Night			
26-Sep	Columbia Elem Desert Stories			
27-Sep	Columbia Elem Field Trip			
30-Sep	Las Cruces Catholic - Sun & Shade			
30-Sep	Las Cruces Catholic - Young			
	Arthropod Identification			
30-Sep	Las Cruces Catholic - Plant Structure			
	and Function			
30-Sep	Mayfield HS - Warming Up to Data			

# Meet Kim O'Byrne, Program Leader: Special Projects

What led you to your new position? As a kid growing up in Cliff, NM, I was outdoors all of the time. I have lived in the southwest corner of the state my entire life. I was lucky enough to combine my passions, agriculture and education, for a very rewarding career. As an agriscience educator, I worked with Asombro on many occasions and loved what they did for students and teachers to learn more about the science of where they lived. When the position opened for a program specialist for water conservation and beef production sustainability, I knew it would be a wonderful opportunity to work with great people AND get to do something I love!

What is your favorite thing about your job so far?

The Asombro Team and volunteers are amazing. Not

only do I work with a very caring, talented team, but I

write up a job description tailored just for me, I am

get to develop curriculum and teach. If someone were to



Kim O'Byrne, Program Leader: Special Projects

pretty sure it would look just like this one. I get to learn new things and share the joy and wonder of learning about the world around us with students.

*New Mexico is the Land of Enchantment. What do you find most enchanting about our state?* 

As a "lifer," I love NM. I have been lucky enough to travel to many other states and enjoy the culture and scenery. But at the end of the trip, there is nothing like coming home to our gorgeous sunrises and sunsets, our mountain ranges, the smell of creosote after a rain, the people, and our "can't find it anywhere else" NM cuisine.

#### Red or Green?

BOTH!! Right now during roasting season, I have to have GREEN! Rellenos, green chile stew, green chile cheeseburger. However, when the red comes off, I love a good red enchilada for breakfast, and red chile meat. One thing for sure is this is the BEST place for chile anywhere. Sorry Colorado, yours is good but not as good as ours.

# Meet Emilia Linley, Science Educator: Elementary

## What led you to your new position?

I worked with the Asombro A-Team from 2015-19 as an elementary educator. When the position opened, I was at a point in my career where I was ready to step out of the classroom and take on a new teaching challenge. My love of science and hands-on investigation, as well as admiration for the staff and mission at Asombro, led me to apply so that I could share my passion for science discovery with even more students.

*What is your favorite thing about your job so far?* 

As a former elementary educator in southern NM, I had the privilege of experiencing Asombro's programs within

my classes. This has made it a thrilling experience to be on the opposite side of the lesson, teaching rather than observing. Within my first week, I had the opportunity to be a co-teacher for three Asombro lessons. One was a lesson I'd had in my own classroom, and it was so much fun being in my new role, watching as students exclaimed their love of science and made new discoveries. I'm beyond ecstatic to be doing what I love and have such a wonderful team to work with – and it's all SCIENCE!!



Emilia Linley, Science Educator: Elementary

*New Mexico is the Land of Enchantment. What do you find most enchanting about our state?* 

NM runs through my veins and regardless of where I've lived in the US, I feel the wild freedom and cultural diversity that is our state within me at all times. As a Hispanic New Mexican, I feel humbled to know that my roots run deep in this state. In NM, we're all family, whether blood or not, and you rarely ever meet an unfriendly face. That's definitely enchanting to this city-girl. The most enchanting part of NM for me, however, is how it continually calls me back to my inquisitive and imaginative youth. I

always want to go on new adventures throughout the state—a new festival, hiking trail, or campground. I've visited many places across NM more than once, but I've never had the same experience twice.

#### Red or Green?

Can I say both? Both! At home I primarily eat green, and when I go out it's usually red. I'm all about heat!

# Meet Kelly Steinberg, Program Leader: Secondary Education

## What led you to your new position?

Growing up playing in NM's beautiful landscapes taught me to be curious and to love learning. I am so excited to get up every day and help others learn what the desert has to teach us. There's also a side of me that loves the puzzle of studying data, finding stories, and finding different ways to communicate them to people from all backgrounds. (I may have knit a few scarves inspired by drought data.) At Asombro, I've found a place to mix my love of the outdoors, teaching, and data, and I get to work with a great team of inspiring educators. I'm looking forward to joining a community of researchers, teachers, and students to work together to understand the world we live in.

What is your favorite thing about your job so far? In my first days at Asombro, I immediately knew I had joined a great team. This is a team that is excited to work together, and whether we are coming together to revise something old or start something new, there is a lot of passion, knowledge and



Kelly Steinberg, Program Leader, Secondary Education

openness around the table, making it a really great place to be. There's so many things going on here all the time, and I can't wait to jump in further and be a part of everything that's going on.

*New Mexico is the Land of Enchantment. What do you find most enchanting about our state?* 

I love all the ways that NM is an incredibly diverse state. I love that you can go from the desert to the mountain tops in just a few hours' drive. I love that you can see all sorts of birds migrating along the Rio Grande and find all sorts of rattlesnakes on the mesas

nearby. I love that a summer day can go from too hot, to just right during a rain storm. I love learning about the people and languages that have shaped our history. Sometimes I wonder if I should try living somewhere else, but I can't really think of a good reason to leave.

*Red or Green?* Green, unless it's enchiladas, then red.

# Meet Abi Miller, Science Educator: Secondary

What led you to your new position? As a child I loved playing outside, and I never thought that my hobby of learning about nature could become a career until I started volunteering at the Austin Nature and Science Center's "trade counter" in high school. Families could bring things found while hiking (i.e. fossils, bones, rocks), and after discussing the item with me they would receive points that they could then trade in for other items. I loved talking with people about natural science, and that led me to study Natural Resources and Forestry and work in environmental education in college. I'm very excited

about Asombro's collaborative efforts with local researchers to develop programs that will be relevant to students and hopefully inspire them to be interested in science research in the future.

What is your favorite thing about your job so far? On my first day at Asombro, we led a group of 7<sup>th</sup> graders from Sierra Middle School on a field trip at



Abi Miller, Science Educator: Secondary

the Jornada Experimental Range and the Chihuahuan Desert Nature Park. We got to be outside all day and even though it was hot, everyone maintained a wonderful, positive attitude. It was fun to participate in a field trip that's been happening for so many years, and contribute to the large dataset that the school has been building.

*New Mexico is the Land of Enchantment. What do you find most enchanting about our state?* 

I'm amazed by the diversity of ecosystems you can experience in NM. You can start in the desert and be in a mountainous forest in an hour's drive!

# Red or Green?

As a recent transplant to NM, I'm still deciding how to answer this question. So far, I like both but would be open to trying lots more chile in the future to help me decide!

# Educating About Sustainable Agricultural in the Southwest

By Stephanie Bestelmeyer and Kim O'Byrne

Asombro is delighted to join a team of more than 30 scientists, ranchers, extension agents, and other educators on a new project focused on sustainable

agriculture in the southwest. We will work with the PhysicTEM A crit

BlueSTEM Agri-Learning Center in El Reno, Oklahoma to lead the

development and implementation of K-12 education activities related

to the project's science themes. Our education team will deliver activities to more than 8,000 K-12 students and 150 teachers through classroom lessons, field trips, and teacher workshops. A five-year grant from the USDA's Sustainable Agricultural Systems grant program will fund this new, innovative project.

SUSTAINABLE

SOUTHWESTERN

BEEF

The project got off to a great start on October 24 with a kickoff meeting that brought project participants from around the country to Las Cruces to discuss plans for the first year of the project.

# Wonder Award for Outstanding Volunteer Service: Mark Sechrist

# By Kelly Steinberg

Asombro has a history of amazing volunteers, which is why we make sure to honor the people who volunteer their talents to make Asombro great. This quarter we are excited to present the Wonder Award to Mark Sechrist, whose work has helped us highlight the history and the people of the Chihuahuan Desert! Mark has been volunteering with Asombro for more than 20 years and currently serves as the Secretary of the Board of Directors.

As an archeologist, Mark's work has taken him all across the Southwest and we are so lucky that he shares with us his knowledge about the people who

have lived in the Chihuahuan Desert for thousands of years. He has conducted archeological surveys of our Nature Park, and his fingerprints can be found on our park signs and tour book, where he has shared insight into the rich history of the area.

Mark's dedication to engaging people in learning through the desert makes him WONDER-ful!



Mark Sechrist, 2019 Fourth Quarter Wonder Award Recipient

# We Need YOU: Volunteer to Make a Difference

Asombro is seeking volunteers for our classroom lessons, field trips, and public programs! There is no minimum time contribution. Help when you can. Please call 575-524-3334 or email <u>information@asombro.org</u> for more information.

# THANK YOU!

# We are grateful to the generous donors in the third quarter of 2019.

#### Asombro Booster Club

(monthly donors) Anonymous (2) Laura Beaty Steph & Brandon Bestelmeyer Jean A Davis Libby Grace Carolyn Gressitt & John Freyermuth Stephanie Haan-Amato & Jeff Amato Anna & John Kimtis Marcela Newman Deb Peters

## Asombro Booster Club

(cont.) Norman Todd Justin Van Zee Jim & Kathy Vorenberg Walt & Linda Whitford Donna Yargosz

#### <u>Turquoise</u> Pete & Mildred Steen

Peridot Clifford Pelton Arlene Tugel & Neil Fuller

# <u>Obsidian</u>

Barbara Kauffman Ted Fay Fly Shop Mike Weiss

## <u>Jasper</u>

Donald Beasley Leoniece Beatty Marline Blalot & Patricia Teasdale Bridget Burris, DDS, PC Sandra Galindo Aravamudan & Champa Gopalan Will & Linda Keener Don McKittrick



Jolaine Mills Lynn & George Mulholland Connie Phillips Thomas Sechrist

## <u>Gypsum</u>

Maria Flores Craig Haneke Leilani Horton Robert Schooley John Steinberg

Quartz April Rogers Robert Severance Jay & Martha Sharp



PO Box 891 Las Cruces, NM 88004-0891



Outstanding volunteers at our Volunteer Gathering on October 8, 2019 ensured that we were ready to bring lots of handson science learning to local students. Please consider joining us at our next Volunteer Gathering! Lend a hand to cut, staple, sort, and have fun for science education. <u>Gatherings are held on the second</u> <u>Tuesday of each month from 9:30-10:30 am at the Asombro office,</u> <u>401 E. College, Las Cruces, www.asombro.org/volunteer</u>.

YES! I want to support the Asombro Institute for Science Education!			
○ Quartz (\$15 +) ○ Gypsum (\$50 +) ○ Jasper (\$100 +)			
○Visa ○MasterCard Account Number:			
Expiration Date:			
Signature as it appears on card:			
NAME			
ADDRESS			
	STATE Zip		
PHONE			
E-MAIL			
Check here if you do NOT want to be listed in Asombro publications			
1	ute for Science Education, , Las Cruces, NM 88004		