



ARIZONA-SONORA
DESERT
MUSEUM

NEWS

ASDM NEWS — SUMMER 2019
A newsletter for friends of the Arizona-Sonora Desert Museum

Animal Playtime at the Desert Museum:

It's not all just fun and games

Most Desert Museum supporters know how seriously we take the physical health of our animals, but did you know that psychological health is just as important?

Thanks to the dedicated animal care team, every single animal resident—from mountain lions and black bears to scorpions and spiders—receives environmental enrichment that allows them to express themselves and use their problem-solving skills as they would in the wild. Allowing animals to make decisions and flex their muscles—both physically and cognitively—prevents frustration and boredom and helps the animals have more control in their lives.

Practice Makes Perfect

The primary goal of enrichment is to create novel psychological experiences. Just like humans, each individual animal has a dif-

ferent skillset and proficiency level, and thus necessitates unique enrichment activities for each. As you can imagine, with more than 230 different species at the Desert Museum, a great deal of trial and error goes into finding effective ways to create engaging experiences. Zookeepers and volunteers are continuously thinking of new ideas, always with a consideration for an animal's natural history and safety. Zookeepers think about what the animal has evolved to do over time and then think of ways to evoke those same actions. For example, we know that wolves heavily depend on their advanced sense of smell for hunting. Our wolves do not "hunt" as they would in the wild, but we can replicate aspects of the experience for them by introducing deer scent into their habitats.

This encourages the wolves to sniff around for prey and is one of many ways to keep them stimulated in their environment.

There are multiple classifications of enrichment, each intended to illicit different behaviors, often targeting the different senses such as smell, sound, taste and touch. All enrichment sessions are recorded, reviewed, and rated by zookeepers and veterinarians. This allows us to not only keep track of what type of enrichment is done and when, but also allows us to note the animals' reactions. The ratings represent whether the reaction is positive, negative, or neutral. It should be noted that an adverse reaction isn't necessarily bad; the goal is for animals to experience the same emotional variations that they would in the wild. For instance, snake shed might be placed in the packrats' environment. Interactions with a predator's scent may not be pleasant for the packrats, but it is certainly something they would encounter in the wild. That said, not all enrichment activities are meant to replicate experiences animals would have in their natural environments.

New Twists on Old Behaviors

Javelina are, surprisingly, quite the "artists." If you can believe it, the animals enjoy pressing their noses against canvases covered in non-toxic paint to create their own artistic masterpieces! Painting enrichment is designed to mimic the act of rooting in the ground with their noses for food. This is just one example of enrichment that encourages inherit behavior from an animal in a method that is totally unique to anything they would experience in the wild.

Likewise, if you've ever spotted empty cardboard boxes in an exhibit, have no fear—we haven't lost track of the recycling! Our trash truly is like treasure to many of the small mammals, reptiles, and birds at the Desert Museum. Rattlesnakes love exploring boxes, slithering around until they find just the perfect napping spot, and it's not uncommon to see a parrot nibbling away at a phone book. The animals wouldn't encounter these objects in the wild, but add-

ing them to their habitats provides hours of enrichment.

Change of Scenery

While some animals benefit most from having different objects introduced into their habitats, others enjoy a little change of scenery. Parrots in our Interpretive Animal Collection get excited when they get to go on walks through the grounds with zookeepers and trained volunteers to get the opportunity to interact with different people. Even the more introverted species benefit from going out and about. Reptiles, for instance, are given access to their very own enrichment courtyard that's loaded with different textures, materials, and spots to hide. Some reptiles are content to explore the courtyard on their own, but others, such as tortoises and Gila monsters, sometimes prefer interacting with each other in their home away from home.

Mountain lions and bobcats, for instance, can be trained to follow "targets," which are long sticks with a small ball at the tip. The cats are taught to move according to where the stick is pointed, thus helping zookeepers transfer them from one area to another or into a crate if necessary. Anyone who has ever tried getting a housecat into a carrier will appreciate the time, energy, and frustration the zookeepers must save themselves—and the animals—with target training!

Many people are shocked to learn that fish are also target trained. This is especially helpful at feeding time in mixed-species habitats where slow feeders co-mingle with voracious eaters. In this case, certain fish are conditioned to move to a specific area in their habitat when a target is presented. The fish's behavior is reinforced with a food reward and, before you know it, the fish



Cats and other mammals are "crate" trained, parrots are "t-perch" trained, and birds of prey are "glove" trained. Teaching birds and mammals these behaviors is not only mentally stimulating for them, but it is extremely helpful when zookeepers or veterinarians need to examine an animal or move it from one habitat to another.

Eye on the Target

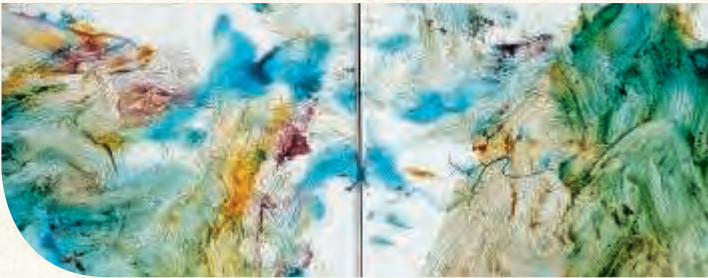
Some enrichment is better classified as behavioral rather than environmental. Many activities are designed to help zookeepers and veterinarians better and more easily care for the animals. Target training is a perfect example of this type of enrichment.

have been trained to feed in a specific location so that everyone is guaranteed a full belly at the end of mealtime.

Meal Time

Many other food related activities can be used as enrichment. In the wild, animals

Javelina are, surprisingly, quite the “artists.” If you can believe it, the animals enjoy pressing their noses against canvases covered in non-toxic paint to create their own artistic masterpieces!



are not presented with perfectly prepared meals and that’s not necessarily best when in human care either. It’s both physically and mentally stimulating for an animal to have the opportunity to make an effort to get their meal. Food puzzles similar to those available for domestic dogs and cats are a great tool. Food is sometimes hidden around the animals’ habitats so they have the opportunity to forage. Zookeepers and volunteers can also make paper mache items with food inside giving the animals the chance to tear it open. It is often observed that when in human care, if an animal is given the choice between needing to use their skills to access food, such as with a food puzzle, and that same food item is readily available, they will choose the option that requires an effort.

Helping Us Help Them

Cats and other mammals are “crate” trained, parrots are “t-perch” trained, and birds of

prey are “glove” trained. Teaching birds and mammals these behaviors is not only mentally stimulating for them, but it is extremely helpful when zookeepers or veterinarians need to examine an animal or move it from one habitat to another. Luca, one of our military macaws has even been trained to spread his wings on command. While this display is certainly beautiful and elicits plenty of oohs and ahhs, the behavior actually serves a practical purpose as it allows us to see the condition of his feathers. Along the same line, Strawberry the black bear is learning how to present her forearm for a blood draw, and the mountain lion, Cruz, has learned to navigate to a specific spot in his night holding area to present his tail for the same purpose. The goal of this type of training is twofold: the animals benefit from mental stimulation and treatment is far less invasive than if veterinarians needed to use anesthesia to perform these checkups. ■

Interested in helping enrich

the animals at the desert museum?

DESERT MUSEUM MEMBERS CAN ENTER A CONTEST TO WIN A ONE-OF-A-KIND ENRICHMENT EXPERIENCE



Get the chance to hang out with our zookeepers and the animals we have the honor of taking care of, participate in making an enrichment item, and get to see the animals enjoy it firsthand! To enter, visit the member page at desertmuseum.org and enter the code ENRICHMENT19. *The winner will be chosen and notified by September 15th.*

If you'd like to directly contribute to the psychological health of the Desert Museum's animals, please consider making a donation online at desertmuseum.org/support. Be sure to select “Animal Care & Enrichment” under the designation and your donation will be used to help create experiences to keep animals happy!



It’s both physically and mentally stimulating for an animal to have the opportunity to make an effort to get their meal.



On the evening of Sunday April 28th, 2019, hundreds of Desert Museum supporters came to the Museum to enjoy this year’s annual Gala fundraiser “Sonoran Nights, An Evening in the Desert”.

There was lively entertainment, nocturnal animal ambassadors, delicious food and drink, stargazing, and hundreds of exciting auction items. Underlying all of this exciting activity was something else: a true sense of Tucson-area philanthropy.

Philanthropy can be described in many ways; helping, giving, fundraising, or charity. It is ultimately an activity that promotes the welfare of something other than yourself, expressed by generous donations to various causes. We all know there are thousands of deserving organizations that benefit from the support of philanthropic businesses and individuals. The Desert Museum is proud to be one of these deserving recipients in the local Tucson community for philanthropists.

Even though the Desert Museum is a world-renowned and widely respected institution, it should not be forgotten that it is also classified as a 501 c(3) nonprofit organization. Unlike many other organizations, the Desert Museum does not receive significant federal or state government funding. The

Museum depends on the support of many generous donors in order to continue providing top-quality Sonoran desert education and experiences for all.

During the Desert Gala, philanthropy was present in the generosity and excitement of the Gala guests, in the bold precedent of event sponsors and underwriters, the strong support of the donors, and in the participation of the Gala volunteers and staff. The work of many dedicated individuals orchestrated the largest annual fundraising event for the organization, and helped to raise over \$250,000 in support of the Arizona-Sonora Desert Museum. Of this, almost \$30,000 was raised to specifically support animal care and vet care for some of our most special Museum residents! Tucson, your generosity goes a long way, and the Arizona-Sonora Desert Museum thanks you for your support.

Visit desertmuseum.org/donate or contact Philanthropy Director Dave Eshbaugh at deshbaugh@desertmuseum.org to learn more!





DESERTMUSEUM

CLASSES and TRIPS

adult



Registration Information: call 520/883-3025 or log onto desertmuseum.org/adultclasses. Prices are 10% more for non-members.

CLASSES

Prickly Pear Harvest

August 17 or 25

August is the season that the beautiful red fruit of the prickly pear cactus ripens. This plant is ubiquitous and edible! Learn how to collect and process the fruit, as well as how it can be used in different dishes. You will also prepare the tender green pad for “nopalitos”. Includes lunch. **\$65**



Natural History of the Sonoran Desert

October 26 & 27

Would you like to be more knowledgeable about the animals, plants and landscape of our desert? This two-day survey course covers desert ecology, climate, mammals, birds, reptiles, botany and geology. We will take a plant hike, get a behind-the-scenes tour through the herpetology building, and maybe even be treated to a personal Raptor Free Flight experience! **\$130**

Hohokam of the Tucson Basin

November 16

The Tucson Basin holds a storied past beginning over 10,000 years ago. Persistent connections remain today, held by the Tohono O’odham and the Pasqua Yaqui descendant communities, through songs and oral tradition about the places of their origins and their ancestors. Los Morteros, Honey Bee Village, Tumamoc Hill, the Valencia Site, and Mission Gardens represent only the most recent 1,500 years of human history. We invite you to a guided tour of these archaeological preserves with Pima County and Arizona State Museum experts. **\$65**

TRIPS

Biodiversity & Animal Behavior of the Chiricahua Mountains:

a Summer Field Camp

July 7-13

LAST CHANCE TO SIGN UP

Cool off in the mountains! Southeastern Arizona contains some of the richest reservoirs of plant and animal life on earth. In addition to our own projects with Mexican jays, lizards and slave-making ants, we will have the opportunity to interact with other scientists, attend their seminars, and accompany them into the field. Our base is The Southwestern Research Station of the American Museum of Natural History. Includes instruction, all meals and lodging for one week. **\$1,150**



Río Sonora Heritage Tour

October 26 – 28

This agrarian region is still very much as it was a hundred years ago, with farmers, ranchers and mission communities thriving in the fertile Río Sonora Valley. Backyard gardens are planted with the same Mediterranean species, pomegranate, quince and fig, which were introduced in the 17th and 18th centuries by the Spanish. We’ll follow in the footsteps of legendary Jesuit missionary, explorer, cartographer, and agriculturist Father Eusebio Francisco Kino and explore the mission districts of the Pimería Alta (northern Sonora) where we’ll spend three adventurous days visiting the missions in the region, enjoying local cuisine and spending quality time with wonderful people that share gracious hospitality. Highlights include visits to the missions of San Ignacio, Magdalena de Kino, Banámichi, Huépac, Aconchi, Baviácora, Ures and Arizpe. **\$895**



Copper Canyon

December 7 – 15

Take an enchanted journey to the jewel of the Sierra Madre: Mexico’s Copper Canyon. Enjoy rolling lectures on the historical, cultural, & biotic communities we visit with experienced guides Jesús García and Doug McLaurin. We’ll ride the “El Chepe” Train from sea level to 8000 ft. in an awe-inspiring ride to the Barranca del Cobre. Encounter the mysterious Tarahumara Indians, widely regarded as the most culturally intact native peoples in North America. And, we’ll be there during the Virgin of Guadalupe Feast day to partake in the celebrations. At the close of the day you’ll gaze upon stunning vistas of the canyon below from your rim-side hotel balcony. **\$2,990**

Black Lava and White Sand

February 9-12

The volcanic landscape of the Pinacates includes huge maar craters, two varieties of lava flows, cinder cones, and majestic shifting dunes hosting their own specialized ecosystems. This young volcanic field is adjacent to the Sea of Cortez which, because of extreme low tides, allows viewing of its marvelous intertidal marine life. For a special cultural experience, we visit the Sonoran Tohono O’odham village of Quitovac, an oasis along the ancient salt pilgrimage trail to the sea. **\$1,075**



ART EXHIBIT:

**Guy Coheleach
Solo Exhibition**

July 13, 2019 - September 22, 2019

**Opening Reception with Artist Lecture:
July 13**

Ironwood Gallery

From 1991 through 2011, Guy Coheleach has displayed one-man exhibitions at major museums in 36 cities across America, from Los Angeles to New York. His work is inspired by frequent travels to our national parks, Alaska, Europe, South America, and Africa. His extensive traveling has given him unique up close and personal experiences with animals resulting in a deep understanding of nature, manifested in his artwork. Guy's recent work reflects his years of experience observing animals in the wild. Eye To Eye, a painting of a leopard in a tree looking directly at the observer is typical of the experiences that Coheleach has witnessed many times.

PLEASE NOTE:

The Ironwood Gallery is open daily from 10 a.m. – 4 p.m. but is occasionally closed for special events. To confirm hours of operation call 520/883-3024.



COOL SUMMER NIGHTS

Open until 10:00 PM Saturdays

Join us every Saturday night through August 31 to beat the summer heat while learning something neat! The desert comes alive at night as nocturnal animals awake. Bats perform aerial acrobatics in pursuit of dinner, beavers splash around in their pond, and scorpions glow green under black light. Bring your flashlight and explore, grab a local beer and wander, experience a live animal encounter, scamper in Packrat Playhouse, feel the touch of a stingray, or participate in special nightly activities. See the schedule below for weekly themes.

July 6 – Creatures of the Night

July 13 – Creatures of the Night

July 20 – Explore Outdoors!

July 27 – Insect Insanity

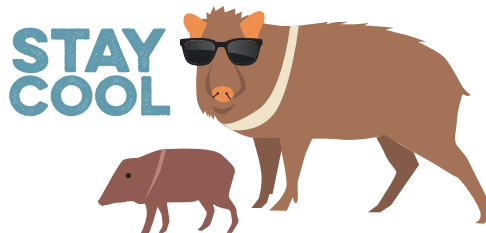
August 3 – Harry Otter Night

August 10 – Creatures of the Night

August 17 – Teacher Appreciation
and Gastronomy Night

August 24 – Creatures of the Night

August 31 – Bat Night



**Sonoran Harvest:
Taste the Desert**

Saturday, Nov. 16th • 6:00 – 9:30pm

Join the Desert Museum for our second annual food and drink festival, Sonoran Harvest. Watch as local chefs compete using native ingredients and vote for your favorite to be crowned the Sonoran Harvest Queen or King! Chat with ethnobotany experts, enjoy live music, taste savory samples and delicious drinks, visit with our animated animals, stargaze, and more. Tickets start at \$45 for members and include several food tastings, two drink tickets, beer tastings, and more. For more information, please visit www.desertmuseum.org/sonoranharvest.



DESERT MUSEUM

**PLANT SALE! 6:30am – Noon
Sat & Sun, September 28th & 29th**

Are you a purposeful planter? Join the Botany crew at the Desert Museum's Annual Plant Sale to discover how to turn your garden into a powerful pollinator pad! Fall is the perfect time for upgrading your home landscape with new plants! Whether you're a gardening novice or a soil specialist, this Plant Sale is for you. Not only can you buy all of the green things, you can speak with experts for the best gardening tips and tricks. Desert Museum Members: Don't forget! You get first dibs on the best selection of plants before the public sale and 10% off your plants! For more info, visit www.desertmuseum.org.

DONOR *Recognition*

Thank you to the following donors for their generous support of the Desert Museum's stewardship, interpretive, and conservation efforts.

(1/1/2019 - 5/31/2019)



MAJOR GIFTS

Community Foundation for Southern Arizona

Kate J. Seeman Charitable Trust
Lohse Foundation

National Fish and Wildlife Foundation-Sonoran Desert CWMA

Pima County Buffelgrass

PNS Foundation

Priscilla and Michael Baldwin Foundation

The George Mason Green and Lois C. Green Foundation

The Elizabeth Wakeman Henderson Charitable Foundation

Tucson Electric Power Company

HONORARIUM GIFTS

In honor of Mary L. Becker
Sandra Herman
Pat Ormsby

In honor of Anthony Blackburn
Kathleen and Martin Blackburn

In honor of Joshua Carroll
Anonymous

In honor of Kimberly K. Duffek
Diane Nippoldt

In honor of Dawn-Starr Crowther and Dave Eshbaugh
Lynn Frisco

In honor of Laurel Grindy and Paul Nixon
Janet Cornelison

In honor of Amy Hoy
Thomas Cannon

In honor of Stephen F. Jacobs
Lolly and John A. Almquist, Jr
Bertha Walton
Andrea Wellington

In honor of Debby and Allan N. Kover
Steven J. Kover

In honor of Emerson Lee
Nova Clark

In honor of Marie McGhee and Amanda Wolfe
Sarah Newman

In honor of Nancy Rossie
Sandra S. Rossie

In honor of Rhonda Quick
Stacy Brodrick
Patricia S. Edwards
Andrew Hurst
Sandra Rogers and Maggie Griffen

In honor of Alice and Bill Roe
Margaret Ann and William E. Horst

MEMORIAL GIFTS

In memory of Forest Barton
Jane Herron

In memory of Kenneth B. Boom
Loma K. and James S. Griffith

In memory of Robert H. Brown
Mary Jo Eakle
Gary F. Speer

In memory of Tina J. Christensen
James Corbin
Sandi Gomes
Sarah Lytle-Barcelo
Pat F. and Jack D. Mount
Doreen E. and Richard Wentland
James Zimmerman

In memory of Anita R. Colell
Clarissa C. and Paul Marques

In memory of Geraldine E. Dennison
Arthur W. Dennison

In memory of Phyllis C. and Robert W. Dierken
The Nathan Family

In memory of Roger O. Eagle
Norma and Ken D. Workman

In memory of Stephen F. Jacobs
Jacqueline R. and John W. Berthold, III
Nancy and David Brewer
Susan B. Hopf
Barbara M. May

In memory of J. Rukin Jelks
Anna M. Domitrovic

In memory of Lorraine Ruth M. Kanter
Elisabeth Trach

In memory of Diane R. and Vernon L. Kliever
Arizona Chapter Associated General Contractors
Carmel Elementary School Faculty Fund
Brian Gallimore
Tamara Hawkins
Kathy and Arnold Kliever
Robert McGennis

In memory of Leo W. Landau
Patricia L. and Luis J. Briones

In memory of Malcolm F. McNeil
Carol and Gary McElroy

In memory of Lewis C. Miller
Anna M. Domitrovic

In memory of Fred J. Ottinger
Lois and Harold A. Lauffenburger

In memory of Tina Pearson
Karla Spiegler

In memory of Rhonda Quick
Margaret T. and Ward O. Griffen Jr.
Roberta J. and David L. Hindenlang
Northwest Medical Center

In memory of George K. Robles
Susie J. and Clarence W. Dupnik
Lynne D. and Mark J. Lyons
Vicky and George Morris
Terry O'Sullivan
Carolyn and Charles Pyle
Regina and John C. Todd
Constance L. Trecartin

In memory of Luke Smith
Nancy L. and William B. Smith

In memory of Gene E. Storry
Kim E. Beckwith

In memory of Judy Storry
Lauren Compton
Gloria J. J. Fenner
Amanda Smith
Gene E. Storry
Susan J. Wells and John Madsen

In memory of Elizabeth T. Woodin
Charles S. Marston

In memory of William H. and Elizabeth T. Woodin
David S. Maher

In memory of Lauray Yule
Anna M. Domitrovic

.....
For information about supporting the Museum with your gift or bequest in honor of a loved one, please contact Dave Eshbaugh at 520/883-3039 or deshbaugh@desertmuseum.org.
.....



The Arizona-Sonora Desert Museum's Art Institute program is honored to include passionate and talented artists such as Laura LePere.



The mission of the Arizona-Sonora Desert Museum is to inspire people to live in harmony with the natural world by fostering love, appreciation, and understanding of the Sonoran Desert.



You Cannot Resist Me
Medium: Ink on Clayboard, scratched

Laura has been a quiet yet powerful leader within our Nature Art Certificate Fine Art program. She has shown dedication to pursuing new ways of sharing her creativity through 2-dimensional fine art while continuing to showcase brilliant and unique polymer clay sculpture work.

◀ This piece originally was exhibited in the 2018 student show and acquired for the museum's permanent collection.

REGULAR HOURS

Open 365 days a year.
October – February 8:30 a.m. – 5:00 p.m.
March – September 7:30 a.m. – 5:00 p.m.
May 20-Sept. 2 7:30 a.m. – 10:00 p.m. on Saturdays

2018 – 2019 Board of Trustees Guiding our Study, Education, and Stewardship

- Erik Bakken, Immediate Past Chair
- Michael C. Baldwin
- Craig Barker
- Kevin E. Bonine, PhD, Chair
- Stephen K. Brigham, Vice Chair
- Shane C. Burgess, DVM/PhD
- Julie N. Davey
- Lynn Ericksen
- Amy E. Fletcher
- J. Felipe Garcia
- Lisa K. Harris, PhD
- Russell L. Jones
- José Lever
- Angela Faith Liston
- William H. Lomicka
- Lisa Lovallo
- Shannan Marty, Treasurer
- Bobby Present
- Mary V. Price, PhD
- Nannon Roosa
- Alyce Sadongei
- Peter W. Salter
- John P. Schaefer, PhD
- Alexander G. Schauss, PhD
- Joan Scott, Secretary
- Peter Wand
- Carole DeAngeli, Docent Representative

The Arizona-Sonora Desert Museum News A Quarterly Publication

Craig Ivanyi, Executive Director
Dave Eshbaugh, Director of Philanthropy

Photography:
Thanks to ASDM, Rhonda Spencer,
Tom Veneklasen

Arizona-Sonora Desert Museum
2021 N Kinney Rd., Tucson, AZ 85743-9719
Phone 520/883-2702 • Fax 520/883-2500
www.desertmuseum.org

The Arizona-Sonora Desert Museum is a non-profit organization. No part of this newsletter may be used without permission. All rights reserved. ©2019



When Deborah and Abraham Blattstein founded the Coati Kids Club in memory of their son Ari, they would have been thrilled to think that the club would still be going strong after a quarter century. Ari was an ardent fan of the Museum, which he dubbed "The Mazoo." The Museum engaged his passion for animals and unquenchable curiosity for the natural world, and he loved exploring here with his family. Deborah and Abraham knew that they wanted his memory to live on in a place they had so enjoyed together, and wanted other families to experience it too. They chose coatis – curious and energetic like kids – as a mascot, and this unique child and family membership to the Museum was born.

From the start, the Coati Kids Club offered kids and their families a way to know the Museum more personally. A quarterly newsletter full of games and stories kept members in touch with Museum happenings. Members' Day events gave them behind-the-scenes experiences, like sneak previews of new exhibits, and opportunities to help out by building enrichment for the animals.

As it grew, the club began to offer eight events a year for member families. These hand-on programs offer in-depth exploration of Sonoran Desert natural history through close up encounters with animals and plants, outdoor adventures, and art.

We would love to have your child become part of the next generation of curious naturalists as a Coati Club member. Museum members can participate for only \$30! To learn more, visit us at desertmuseum.org or call guest services at (520) 883-1380.