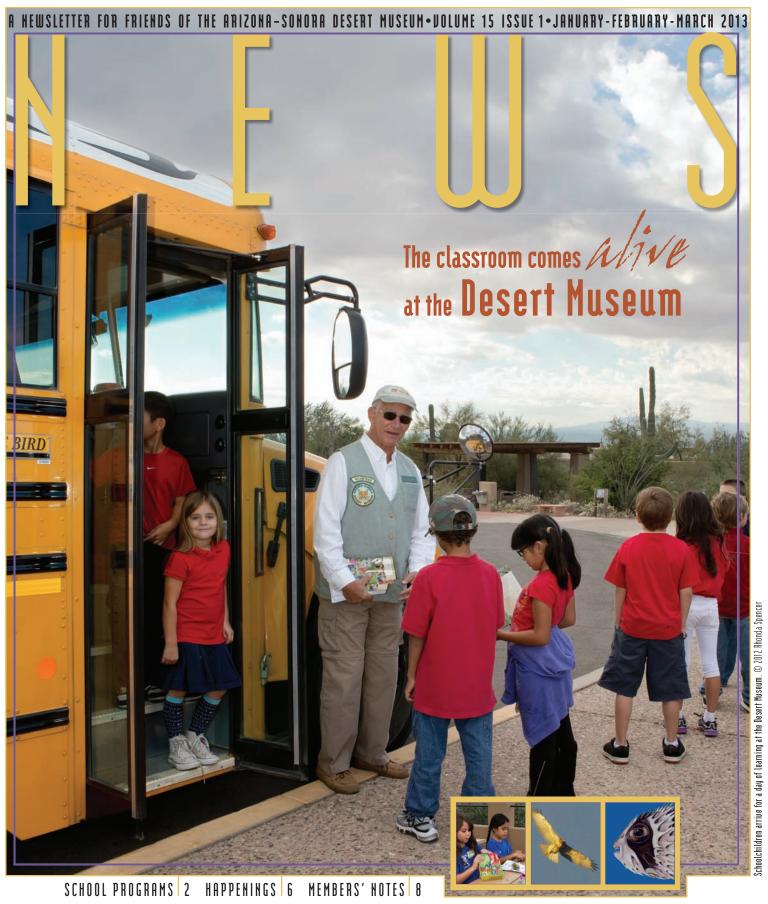
# ARIZONA-SONORA DESERT MUSEUM



—Teacher Copperview Elementary

# "I HAVE TAKEN THE DESENT MUSEUM CLASS TO THE DESERT JM FOR 9 YEARS AND IT VAYS BEEN MY FAVORITE 15 A LIVING CLASS VOOM

By Debra Colodner, Ph.D., Director of Conservation Education and Science

# Take a moment to think back to your elementary school days.

Can you remember anything about the first day of third grade? How about fourth or fifth? Any memorable lessons or projects from second grade? Okay, how about a school field trip?

My guess is that you can remember at least one of those trips pretty vividly. Whether it was a tour of the zoo, the local fire station, or an arts performance, most people can remember something they experienced or learned during a school field trip. The fun and excitement of a day away from the typical classroom environment help these memories last into adulthood.

# It's the ultimate field trip.

About 20,000 school children visit the Desert Museum with their classes each year. For the Museum, that's 20,000 chances to inspire wonder and learning about the Sonoran Desert. For the students, it's a chance to be outdoors with their friends and see animals and desert plants. For teachers, it's a chance to bring science concepts alive. Teachers come with varied learning goals for their students, depending on what subject they teach, where they are in their curriculum, and their own teaching philosophy. Some teachers ask students to pay attention to structure and function in the way plants and animals are put together. Some emphasize the differences and similarities among mammals, birds, reptiles, etc., and ask students to notice differences in the

various habitats at the Desert Museum. Others use the field trip as an experience to reinforce or practice writing, art, math, or a host of assorted science topics.

# Nature inspires learning.

The Desert Museum is a great place to make observations about nature that spark questions and further learning. The close proximity of simulated regional biotic communities, including a mountain woodland, a grassland, a desert, and a riparian zone, is a perfect

laboratory for comparing and contrasting the adaptations of and ecological relationships among plants and animals in each habitat.

Over the last two years, with funding from the Nina Mason Pulliam Charitable Trust and the JP Morgan-Chase Foundation, Museum education specialists have worked with local teachers to revise the activity guides we provide for school visits.

Third to fifth grade students can now participate in a Quest, a thematic treasure hunt to learn about desert



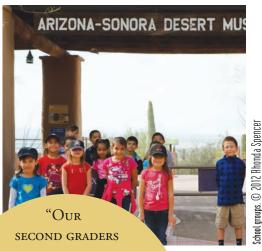
"STUDENTS WILL MAKE OBSER-VATIONS AND OTHER SCIEN-TIFIC ENTRIES (LABEL PICTURES, DRAW DIAGRAMS, OBSERVE, PREDICT, MAKE CONNECTIONS, ETC.) IN THEIR SCIENCE NOTEBOOKS."

> —Teacher Laguna Elementary









HAD SUCH A WONDERFUL
TIME AT THE DESERT MUSEUM
TODAY! WE HAVE DONE SOME OF
THE ONLINE ACTIVITIES THROUGH
YOUR WEBSITE AND WILL BE DOING
MORE THIS WEEK."

adaptations. Armed with a backpack of supplies and scientific equipment, student teams follow clues to various museum locations and complete activities that explore plant and animal adaptations. Each Quest wraps up with team reports and a live animal presentation. During their Quest, students use observation, critical thinking, and investigative skills.

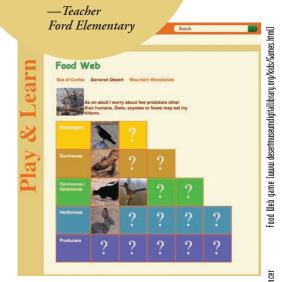
In the new sixth and seventh grade activity guides, students become "experts" on specific biotic communities displayed at the Desert Museum, learn about the diversity and food webs within each community, then report to their peers about what they have learned. The guides are not only aligned with the current life science academic standards, but address the coming science and common core standards as well by asking students to write and present within the science discipline, analyze systems, and engage in argument from evidence.

While at the Museum, teachers can also choose to have their students participate in one of 20 different classes and labs, on everything from reptiles to rocks and minerals. Before or after they visit, students can also prepare or review using some of the online games on the Museum's website: (www.desertmuseumdigitallibrary.org/kids/Games.html), including a Food Web Game, Desert Adaptations Game, Desert Zoodoku, and Seek and Find. They can also do research using the Museum's digital library.

# Making it happen one busload at a time.

Getting 20,000 students to the Desert Museum is no small feat. School buses, school budgets, and demands on teachers are more constraining than ever. Transporting and coordinating activities for this large number of young visitors is a tribute to dedicated teachers who jump over unimaginable hurdles to plan the trips and devoted parents who are commonly asked to foot the bill. It is also a tribute to a number of foundations that have underwritten school admissions at the Desert Museum over the last several years, most notably the Bert W. Martin Foundation, the Stonewall Foundation, the Nina Mason Pulliam Charitable Trust, and the JP Morgan-Chase Foundation.

Teachers continue to attest to the value of a Desert Museum field trip. They tell us that in addition to the science learning, they appreciate the opportunity to expose students to the beauty and wonder of the Sonoran Desert. For many students, their school field trip is the first time they have the chance to visit the Desert Museum, and for some, it is their first time outside of the city. These early experiences in nature are extremely important for developing an attitude of environmental stewardship later in life.





Did you visit the Desert Museum on a school field trip?

Share your field trip memories of the Desert Museum at facebook.com/desertmuseum.

## MAJOR GIFTS

Mr. and Mrs. Paul L. Baker Priscilla & Michael Baldwin Foundation, Inc. Mr. and Mrs. Archibald M. Brown Estate of Elizabeth Ann Dunseth Estate of Elizabeth Mayer The Stonewall Foundation

#### **MEMORIAL GIFTS**

In memory of Mr. and Mrs. Marshall Becker Mr. and Mrs. Stuart A. Berman Ms. Barbara Levinson

In memory of Jesse Stuart Carlson Mr. and Mrs. Alan Moore Mrs. Shirley B. Moore

In memory of Mary Davidson Ms. Beth Hand

**In memory of Adele Domont** Mark & Cathy Stanley

In memory of Mr. Peter Duerr Joe and Barbara Cornell Mr. Todd Katzner Ms. Sarah Kennedy Mr. and Mrs. Gail Skinner In memory of Miriam Clark Fletcher Anonymous

In memory of Mr. Walter G. Henderson Ms. Mary Morris

**In memory of Janice Hoff** Mr. and Mrs. Robert Friederich

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#### **HONORARIUMS**

In honor of

Virginia W. Ames & Martha A. Burgess Mr. George E. Price & Ms. Shirin D. Antia

In honor of Mr. Jesus M. Garcia and Ms. Sonya Norman ASDM's Spain Trip Participants

In honor of the birthday of Mrs. Deborah Howard Jacob Mr. and Mrs. Christopher Mathis

In honor of the 90th birthday of Mrs. Marcille Lynn Ms. Jan R. Bell

In honor of Mrs. Phyllis Wassenberg Mr. Chris Wassenberg

For information about gifts contact Brian Bateman, Executive Philanthropy Director, 520/883-3003

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.



Like Lots of Tucson Kids, the Desert Museum was central to Rick Small's life.

Now as president of the Stonewall Foundation he has become pivotal to the growth and vitality of the Museum! Established in 1987 as a Community Support Organization, the Stonewall Foundation has invested nearly \$800,000 in the Museum. "Early on we tended to choose projects like a sculpture, the aviary or hummingbird exhibit, but a decade ago we moved to educational programming realizing the impact we could make on children in the region," according to Rick. The Amigos del Desierto program, funded by the Stonewall Foundation, has served 21 schools and more than 10,000 children over the years. The "Amigos" program targets low income schools with a high proportion of English language learners and helps these students

develop a love and appreciation for their Sonoran Desert home. Each year, the Museum partners with a school to develop a year-long collaboration customized to the school's needs. The partnership usually includes multiple classes for all the students, professional development sessions with teachers, field trips to the Museum for students, teachers and families, and a special project, like developing a school garden, a tortoise habitat or overnight camping trips. Thank you to Rick Small and the Stonewall Foundation for making such an impact on young students.

# Giving Back to Mother Nature

By Brian Bateman, Executive Philanthropy Director



ELIZABETH "BETTY" MAYER DIED JUST HOURS BEFORE MIDNIGHT ON JUNE 23, 2012 —HER 84TH BIRTHDAY.

Her death ended her valiant battle against the cancer that kept her homebound for nearly two years. Before her death, Betty made it clear that she wanted to give back to Mother Nature. In her case that meant that half of her life savings was to be invested in the most vital needs of the Desert Museum.

"The first thing you need to know about Betty," according to Joan Booth, her friend and trustee, "is that she started from nothing. Everything she earned, she saved and carefully invested."

For the 40 years she lived in Tucson, the Museum provided a unique and wonderful place for Betty to share her Southwest home with family and friends. She was highly attuned to nature and held deep convictions about preserving wildlife and plants.

Born to German immigrant parents in Weehawken, New Jersey, Betty's father left the family when she was very young. Following the death of

her mother, she moved to Michigan to live with her half-brother at the age of 14. She enrolled at the University of Michigan on an active duty Air Force scholarship where she completed her bachelor's degree in business after her tour of duty in Germany.

She reached the rank of Lt. Col with 22 years of active duty before retiring from her post at Westover Air Force Base in Massachusetts, where she met Joan Booth. The two of them moved to Tucson in 1972 where they enrolled in real estate school. Joan pursued a 20-year career selling homes. Betty, on the other hand, sold just one home, decided she did not like it, and spent her time volunteering for a number of non-profit organizations.

"Betty was a quiet, very neat person, and she loved to read. She enjoyed travel but, in particular, she loved to show off the Museum to her Tucson visitors," according to Joan. "They would arrive in the morning when the gates first opened, explore all the exhibits, and then take a picnic lunch to enjoy at the nearby grounds."

HER FINANCIAL ADVISOR, CARL STAUSS, SAYS, "BETTY WAS A CARE-FUL STEWARD OF HER FINANCIAL RESOURCES AND ALSO GREATLY APPRE-CIATED THOSE, LIKE HER, WHO WERE STEWARDS OF THE ENVIRONMENT. SHE ALWAYS SPOKE HIGHLY OF THE DESERT MUSEUM AS AN IMPORTANT GUARDIAN OF OUR SONORAN DESERT. I feel very fortunate to have KNOWN BETTY, AND WITH EACH VISIT TO THE DESERT MUSEUM, I WILL REMEMBER BETTY GIVING BACK TO Mother Nature."

# Introducing

# the Desert Museum's Research & Conservation Team



(Lto A) Karen Krebbs, Kim Frnaklin, Clare Aslan © ASDM, Sloane Haywoor

THE MUSEUM'S RESEARCH AND CONSERVATION STAFF HAS WELCOMED SOME NEW TALENT, and the team is focused on various research and conservation efforts important to the Sonoran Desert region. Read more about their research at desertmuseum.org.

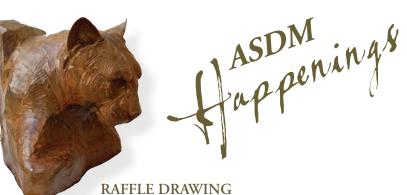
# Clare Aslan, Ph.D. Conservation Research Scientist

CLARE GREW UP IN ARIZONA, and says she is thrilled to be back in Tucson doing research in the Chiricahuas, White Mountains, and Gulf of California islands. Her focus is the ecosystems of the Sonoran Desert, and specifically the effect of environmental change on pollination and seed dispersal. Clare joins us after recently completing her David H. Smith Conservation Postdoctoral Fellowship at UC Santa Cruz, California, and in Hawaii.

# Kimberly Franklin, Ph.D. Conservation Research Biologist

Kim is a scientist immersed in BOTH THE THEORETICAL AND PRACTICAL ASPECTS OF BIODIVERSITY. Her studies include ecological processes that generate spatial variation in species

(Continued Page 7)



FOR THE 20TH ANNUAL DESERT GALA

Buy your raffle ticket today to win a sculpture by noted Tucson sculptor Mark Rossi. This year's bronze sculpture depicts the Desert Museum's icon, a mountain lion. The drawing will occur at the Gala on Sunday, April 28. You need not be present to win. Proceeds support education, research, and conservation programs at the Desert Museum. Tickets are \$20 each. To purchase tickets visit desertmuseum.org or call 520/883-3055.

#### RAPTOR FREE FLIGHT

Now through Sunday, April 14 10 a.m. and 2 p.m. daily This exciting program soars again in the Arizona Uplands. Come see a group of ravens, hawks, owls, roadrunners, and falcons as you could never see them in the wild — up close!



# MINERAL MADNESS MINERAL SALE AND FAMILY FUN! Saturday, January 19 – Sunday, January 20 Baldwin Education Building Open 9 a.m. – 4 p.m.

Open 9 a.m. – 4 p.m.

The Mineral Madness event at the Desert Museum is a chance for everyone, from the novice to the serious collector, to learn something new about minerals and rocks, and to find new treasures for their collections. Activities include a mineral sale with thousands of specimens, affordably priced. Learning stations throughout the Museum grounds will be open from 11 a.m. – 4 p.m. each day, including "Painting with Minerals" with the Museum's Art Institute. At each station, children can collect a free mineral specimen. Children should bring an egg carton for their collection, if possible.

#### **EXHIBIT**

HOWARD PALEY FIRST IMPRESSIONS January 19 – March 3, 10 a.m. – 4 p.m. Opening Reception: Saturday, January 19 2 – 4 p.m., Baldwin Gallery Artist Lecture: January 19, 1:30 – 2:00 p.m. Warden Oasis Theater

#### **EXHIBIT**

WOMEN POTTERS OF MATA ORTIZ January 26 – February 3
Opening Reception: January 25, 5 – 8 p.m. Baldwin Education Building
Open 10 a.m. – 5 p.m.
Join the celebration the women potters

of Mata Ortiz! Over 230 women potters, from young girls to their grandmothers, were interviewed, and 150 were selected to showcase their pottery. Meet these amazing women, view demonstrations, and purchase their works of art.

#### **EXHIBIT**

ART INSTITUTE STUDENT SHOW February 9 – March 9 Opening Reception: February 16, 2 – 4 p.m. Ironwood Gallery, open 10 a.m. – 4 p.m.

12TH ANNUAL MEMBERS' VALENTINE'S DAY DINNER Thursday, February 14, 6 – 9 p.m. Ironwood Restaurant Complex Save the date!

COPPER, SILVER, GOLD & LIFE MEMBERS — A Tour of the Warden Aquarium – Rivers to the Sea! Thursday, March 14, 4 – 6 p.m. Save the date!



#### **COATI PUPS PROGRAMS**

Coati Pups Preschool and Toddler Programs are for children ages 2 – 5 who are wild about the desert. All programs include on-grounds exploration, live animal encounters, a snack, and a craft your child can take home. For program dates, information, and registration, see desertmuseum.org/kids/toddlers or call 520/883-3025.

MUSEUM EXPLORERS CAMPS
Fox Camp: Entering grades 1 and 2
Bobcat Camp: Entering grades 3 – 4
Desert and Sea Camp: Entering grades 5 – 6
Two Sessions (Monday – Thursday)
July 22 – 25 and July 29 – August 1,
8:30 a.m. – 3 p.m.

Aftercare available from 3 – 5 p.m. Hands-on, minds-on day camps will open young eyes to the wonders of the Sonoran Desert Region. Museum Explorers observe live animals up-close, conduct science experiments, sample desert foods, hike in the desert, create desert art with the Museum's Art Institute, and visit animals behind-thescenes. Information and online registration at desertmuseum.org/kids/camp.

# EARTH CAMPS FOR MIDDLE AND HIGH SCHOOL STUDENTS

Middle School Dates: June 17 – 24 and 24 – 28 High School Dates: July 6 - 17 Application Deadline: March 15 Earth Camp focuses on this awe-inspiring planet, drawing connections from our homes, to our region, to the globe, and to what we can learn about Earth from space. Middle School Earth Camp is a day camp, with three camping overnights in the deserts and mountains of our region. High School Earth Camp is a 12-day field excursion, including a five-day wilderness rafting trip on the Green River in Eastern Utah. Earth Camp is a collaboration with the University of Arizona, Planetary Science Institute, and the Desert Museum. Full and partial scholarships are available via funding from NASA, JP Morgan Chase Foundation and private donors. For information visit desertmuseum.org/earthcamp.

# EXHIBIT THE SEA OF CORTEZ

March 16 – June 2, 10 a.m. – 4 p.m. Opening reception: Saturday, March 16 2 – 4 p.m., Ironwood Gallery
The Sea of Cortez and its surrounding landmass have long been a favorite place for scientific study and conservation efforts on behalf of the Desert Museum. In 2011, 30 professional artists traveled to San Carlos, Sonora, to sketch, paint, and photograph the unusual terrain of Nacapule, the Estero Soldado, and the beautiful Sea of Cortez. Enjoy their artistic journey.

# ADULT CLASSES AND TRIPS

Registration Information: Go to desertmuseum.org/adultclasses or call 520/883-3086. Prices are for ASDM members. Add 10% for non-members.

# **CLASSES**

## SANDHILL CRANES, RAPTORS, AND WATERFOWL

#### January 31

Thousands of cranes migrate from as far away as Alaska to winter in the desert grasslands and agricultural ponds near Willcox. \$70

## **MOUNTAINS, MINES, & MINERALS** February 16

Visit an old mining site and learn to identify malachite, pyrite, garnet, and other minerals that you find. \$70

# MAMMOTHS OF THE SAN PEDRO **VALLEY**

# March 9

Visit a mammoth kill site and learn about the Clovis Culture, see fossils of the megafauna that roamed Arizona 10,000 years ago, and collect gypsum crystals. \$70

# WILDFLOWER WALKS

#### March 13 or 16

Join this leisurely hike into a canyon in the Tucson Mountains to see colorful desert flora, \$36

## LANDSCAPING WITH CACTI & SUCCULENTS

#### March 24

Learn how and why people use spiny plants. The class will focus on irrigation, selection, planting, propagation, pest control, and fertilizing. \$36

#### **CHOLLA BUD HARVEST** April 6

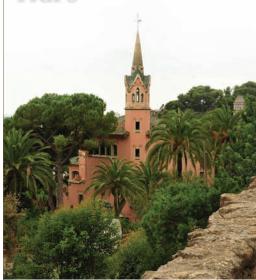
Participate in the centuries-old Sonoran Desert springtime ritual of collecting and preparing cholla buds. Learn about other versatile desert foods such as the nopal. \$65

# **HUMMINGBIRDS**

#### April 11 and 13

Hummingbirds, the smallest of North America's birds, endear us with their brilliant colors and rapid aerobatic antics. Join this lecture and day trip to southeastern Arizona. \$70

# **TRIPS**



#### BEST OF BAJA — WHALE WATCHING & NATURAL **HISTORY**

### February 4 – 12

Join Baja's Frontier Tours on a comfortably paced, scenic road trip featuring breathtaking forests of Boojum and immense cardon cacti, and, hopefully, brilliant spring flowers. Then, experience the friendly gray whales of Scammon's Lagoon. Fabulous fresh seafood! Call 520/887-2340 for details and registration; bajasfrontiertours.com \$2,795

## LAND OF THE HOPI AND NAVAJO April 20 – 26

Explore the stark sandstone geology and the ancient cultures of Arizona's Colorado Plateau. Visit the Hopi Mesas and homes of Kachina artisans, and walk a Hopi corn field. Step into Jurassic dinosaur tracks, find fossil oysters, and learn about the seas and sand dunes that covered this area millions of years ago. \$1690

## SPAIN: MOORS, CHRISTIANS, **OLIVES & WINE** September 16-29

Join the Desert Museum in an exploration of the Spanish cultural and agricultural roots of the Southwest. Visit Gothic cathedrals, Moorish castles and sunny beaches. During the fall grape harvest you will tour a rural winery, walk fields and orchards, and make paella. \$3650. Optional extension to Granada, the Andalusian countryside, and the windmills of La Mancha. Call 520/883-3030.

# The Desert Museum's Research & Conservation Team

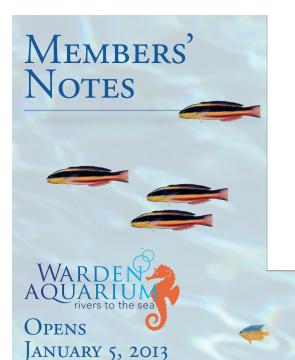
diversity, and land management strategies that limit the loss of biodiversity due to habitat loss and invasive species like buffelgrass. Much of her work is focused on the factors that regulate the diversity and structure of ant communities in the Sonoran Desert. Kim received her Ph.D. in Insect Science from the University of Arizona where she also completed a post-doctoral fellowship.

# Karen Krebbs Conservation Biologist

Karen's research on birds and BATS SPANS MORE THAN 25 YEARS AT THE DESERT MUSEUM. Karen is currently monitoring a maternity roost for lesser long-nosed bats in northern Sonora, and is studying bat populations in Arizona for the National Park Service (NPS), Arizona Game and Fish Department, The Nature Conservancy, and Tohono Chul Park. She is also monitoring bat populations during the winter in the Chiricahua Mountains. Karen has a B.S. in Wildlife and Fisheries Science.

# Claudia Polo, Ph.D. Resident Scientist

Dr. CLAUDIA POLO begins a longterm science residency at the Desert Museum as Project Leader on the Wildlife Conservation Society's new Bat Pollinator Corridor Project. With the collaboration of researchers involved with the Latin America Network for Bat Conservation, she has proposed conservation areas and management strategies for bat conservation and has developed maps for ecosystems and land use for a private reserve in South America. Dr. Polo earned her Ph.D. in Wildlife and Fisheries Conservation from the University of Massachusetts Amherst.



After several years of planning and nine months of construction, the newest exhibit will open in the new year.

When Tucson residents and visitors visualize the Sonoran Desert it's unlikely that images of massive rivers with six-foot minnows, or oceans teeming with whales, stingrays, eels, and thousands of invertebrates come to mind. Yet, a full understanding of the Sonoran Desert region as "the lushest desert on earth" isn't possible without recognizing the importance of the freshwater rivers that flow through it and the Sea of Cortez.

Due to the aquarium's petite size, visitor capacity will be limited. Thus a capacity management system has been devised in the hopes of providing a quality experience for all. There will be 15, 30-minute viewing times daily, and two ways to receive a viewing time: on a first-come, first-served basis upon arrival, or the option to make a reservation for a confirmed viewing time in advance via an online reservation system. Please visit desertmuseum.org and click on the Aquarium icon for details.

# Grant a Wish At the Desert Museum Today!

Pelican training balls, talon trimmers, lizard lights, and fish hot tubs? What's this all about you say? These are just a few of the items you might find on the Desert Museum Wish List. Be inspired to give unique and useful gifts that make all the difference to our plants, animals, and the staff that care for them! Visit desertmuseum.org and see what inspires you!

# The Desert Museum's LIST EXCHANGE POLICY

The Arizona-Sonora Desert Museum occasionally exchanges member name and address information, for one-time-use-only, with designated non-profit organizations to add members. If you prefer not to participate in this exchange, please opt-out by contacting the Museum's Member & Donor Services Department at: membership@desertmuseum.org or 520/883-1380 x123.

#### REGULAR HOURS

Open 365 days a year.
October – February 8:30 a.m. – 5:00 p.m.
March – May 7:30 a.m. – 5:00 p.m.
June – September 7:00 a.m. – 4:30 p.m.
June – August 7:00 a.m. – 10:00 p.m. on Saturdays

#### Admission

Museum members free
Adults (13 and older) \$12 June - August
\$14.50 September - May
Children (4 – 12) \$4 June – August
\$5 September – May
Children 3 years and younger are free
Ask about special group rates.

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#### Arizona-Sonora Desert Museum

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