Mountain Lines

MAGAZINE OF THE MCDOWELL SONORAN CONSERVANCY

Spring 2017

The History of the Preserve

From the past to the future

Spring Wildflowers

Presenting the most abundant desert wildflowers

One of the Preserve's Great Hikes

Experience Tom's Thumb Trail

McDowell Sonoran Conservancy

Mike Nolan, Executive Director

Welcome to the new *Mountain Lines!* This new and enlarged edition is a combination of the former McDowell Sonoran Conservancy *Mountain Lines,* and the McDowell Sonoran Conservancy Field Institute's science publication, *The Insider*. By combining the two we are better able to integrate our education activities with our science work and report on how both enhance our ongoing Preserve management. We hope it provides a more complete picture of the wide range and impact of the Conservancy's varied work.

As with both of the prior magazines, this one is written, photographed, edited, and designed by steward volunteers. The amazing array of talent that you'll see on these pages is a testament to the passion our stewards have for the Preserve and the work the Conservancy undertakes to protect it. I hope you find this new magazine an interesting and entertaining window into the work and impact of the McDowell Sonoran Conservancy.

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McDowell Sonoran Conservancy Debuts New Website

The McDowell Sonoran Conservancy debuted a new website that informs users about recreation, education, and research programs taking place in Scottsdale's McDowell Sonoran Preserve. See it at **www.mcdowellsonoran.org.** Visitors can find information on hiking, biking, or horseback riding, and the online calendar includes scheduled public hikes, educational seminars, and family activities.

On the cover: The trail to the base of the Tom's Thumb spire offers beautiful views along the way. The panoramic vista when you reach the base of the spire is well worth the work you do to get there. Photograph by Dennis Eckel.

About Us

The McDowell Sonoran Conservancy champions the sustainability of the McDowell Sonoran Preserve for the benefit of this and future generations. As stewards, we connect the community to the Preserve through education, research, advocacy, partnerships and safe, respectful access.

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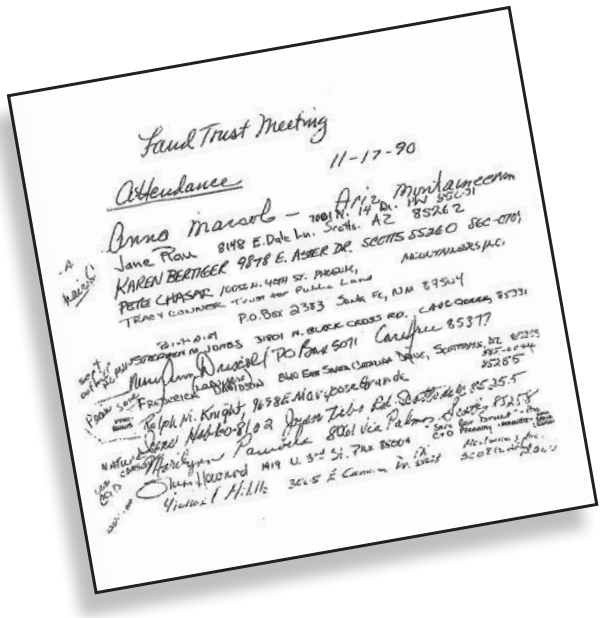
The sun rises over the northeastern part of the Preserve near Brown's Ranch. This area of the Preserve has many magnificent saguaros that are very old and very large. Photograph by Marianne Skov Jensen.

The Preserve and the Conservancy—Past, Present, and Future

By Mike Nolan
McDowell Sonoran Conservancy executive director

Scottsdale's crown jewel is the McDowell Sonoran Preserve. Although created in less than 25 years, the Preserve is one outcome of citizen concern for environmental protection that dates back to at least the early 1960s. By the early 1990s, the collective consciousness of Scottsdale's citizens favored balancing preservation of the desert and open space with growth, just as development in and around the McDowell Mountains was poised to begin.

Many saw the McDowell Mountains as an iconic Scottsdale landscape, the only mountains in the City of Scottsdale, and for decades, a recreational haven for residents and visitors from all over the Valley. Members of the Arizona Mountaineering Club, the equestrian community, and some homeowners-association activists joined concerned residents to share their desire to protect the mountains. From that diverse group, a movement was born.



In 1990, just 14 people attended the first public meeting to discuss the preservation of the McDowell Mountains. That historic meeting set in motion an effort that, over the course of 25 years, preserved over 30,000 acres of the McDowell Mountains and surrounding area. Photograph courtesy of the McDowell Sonoran Conservancy Archives.

McDowell Sonoran Land Trust

In January 1991, Karen Bertiger and Jane Rau signed the articles of incorporation for the McDowell Sonoran Land Conservancy, creating a nonprofit Arizona corporation. Bertiger and Rau, along with Peter Chasar, constituted the initial board of directors. The new organization began business using the name McDowell Sonoran Land Trust

The three initial directors and a small group of citizens founded the Land Trust to address a shared concern, the need to protect the McDowell Mountains and surrounding desert as natural open space for future generations to enjoy and appreciate. They dreamed of raising money to purchase land that the organization would hold in public trust—a popular notion of land conservation through private action.

But the task of raising enough funds to preserve the McDowell Mountains was beyond the capacity of a small group of citizens. Success would require citizen support through their city government. And that would require advocacy.

The Land Trust directors set about working to convince Scottsdale citizens, council members, corporations, land owners, developers, and anyone else who would listen that the preservation of the McDowells was important, and that the natural desert was the city's heritage which should be protected for future generations.

Ultimately, they were successful. Scottsdale's City Council formed a McDowell Sonoran Preserve Task Force, agreed on boundaries for the new Preserve, and established it legally through a new ordinance. To fund land acquisition, a new 0.20% sales tax was proposed by the City and soon approved by Scottsdale voters. Later council action expanded the Preserve boundary to the north, and voters approved an additional 0.15% sales tax for land acquisition, Preserve amenities such as trailheads, trails, and the like. The Preserve acquisition effort was underway.

The City of Scottsdale promised its citizens that the Preserve would be accessible for everyone's enjoyment for this generation and future generations. Today the Preserve provides hikers, mountain bikers, and equestrians the opportunity for exercise and spiritual renewal in unrivaled desert surroundings. Photograph by Dennis Eckel.

Preserve Stewardship and Applied Science

Meanwhile the Land Trust was beginning to turn its attention to a new challenge: educating citizens about the new Preserve through public hikes and helping to build and maintain trails for safe access. Volunteers were needed for this work and soon were being actively recruited and led by Chet Andrews. Under Andrew's guidance a group of volunteers arose who took their name from the work they did—stewards of the Preserve.

Formal training for stewards began in the fall of 1998. The first class of volunteers [above] graduated 17 trained stewards. Some of them posed for a photograph with Carla [second from right] and Art Decabooter [with the hiking pole]. Carla and Art have been long-time advocates of the Preserve. Chet Andrews [far right] is known as Steward #1. Photograph courtesy of the McDowell Sonoran Conservancy Archives.

The steward program grew as training became important, and stewards organized around regions of the Preserve. The thrust of the organization turned from advocacy to Preserve management under trained stewards, and the Land Trust changed its name to the McDowell Sonoran Conservancy. Since the first steward class in November 1998, more than 1,000 citizens have gone through orientation and training programs, and more than 650 still actively volunteer their time. In 2010, stewards reorganized themselves into programs based on activity, which continues as the organizing principle today.

In 2012, the Field Institute began a project to monitor ground-dwelling arthropods in the Preserve. Arthropods are a group of animals that includes insects, arachnids, myriapods, and crustaceans. Stewards were trained to collect arthropods from pit-fall traps sunk in the ground, and have been collecting quarterly ever since. The number and kind of arthropods collected over time give clues to the health of the Preserve. With their short life span, arthropods give early warning signs of change in the environment. Photograph by Marianne Skov Jensen.

In 2010, to help achieve key management objectives established by Scottsdale's Preserve Ordinance, and realizing that the flora and fauna of the Preserve were poorly known, the Nina Mason Pulliam Trust awarded the Conservancy a three-year grant to conduct an ecological inventory. The Pulliam Trust was promised not only a completed inventory, but that the Conservancy would use the inventory results to launch the McDowell Sonoran Conservancy Field Institute within the organization. Its work would be dedicated to applying specific scientific knowledge to Preserve monitoring, restoration, and management. A citizen science program evolved out of the steward programs to provide highly skilled technical support to the research efforts. Today, results of Field Institute research have been published in peer-reviewed technical journals, and scientists from around the state have designed and led projects to help understand the natural communities, human impacts, invasive species, and other critical environmental issues that affect the Preserve's health.

The Conservancy today is devoted primarily to science-based stewardship, educational hikes and programming, visitor welcoming and safety, overall excellence in urban preserve management, and volunteer training and deployment. It is in some ways worlds away from the grass-roots advocacy group of 25 years ago. But at its core, it is still an organization that runs on passion for the Preserve, for protecting the land, and for sharing its values with the community.

Volunteers have been responsible for trail maintenance since the creation of the Preserve into the present day. Photograph courtesy of the McDowell Sonoran Conservancy Archives..

Future Challenges and Opportunities

The past ten years have been marked by rapid growth of the Preserve and its amenities. Since 2006, Preserve acreage has more than doubled. Trail miles grew from 32 to 182, and six major trailheads were added. Estimated annual visits to the Preserve climbed from 50,000 to 750,000.

Managing and responding to this rapid growth of the Preserve, its amenities, and its visitation has been the Conservancy's premier challenge over the last decade. In response, the Conservancy grew rapidly to maintain its core services from 130 stewards providing 11,000 hours in 2006, to 600 stewards providing 56,000 hours in 2016.

The next decade is likely to present a different set of challenges as the physical growth of the Preserve slows and eventually reaches "build out" where all the planned acquisitions and amenities are in place. Scottsdale plans to build one more major trailhead near the intersection of Pima Road and Dynamite Boulevard. Fraesfield Trailhead and Granite Mountain Trailhead will also soon receive enhancements. Another approximately 30 miles of

More and more visitors come to the Preserve every year on foot, mountain bikes, and horses. The challenge for the Conservancy is to manage all these visits so that everyone has a safe, enjoyable visiting experience. At the same time, the Field Institute is working to protect the Preserve from degradation caused by increased traffic. Photograph by Barry White.

The buildings at the Preserve's major trailheads are designed to blend into their surroundings. The Lost Dog Wash Trailhead, seen here at sunset, is just one of the trailheads around the Preserve that are built to provide visitors with environmentally friendly amenities. Photograph by Bruce McFarland.

trails are planned. These activities will mean that growth will continue over the next three years.

Beyond those physical additions, most of the future challenges for the Preserve are likely to revolve around the impact of rapidly rising visitation. In the last five years alone, the number of visits to the Preserve has increased by about 200%. As it becomes better known as a nearby, accessible, and beautiful area to hike and ride, the number of users is expected to continue to rise.

Research conducted by the Field Institute has demonstrated that as trail use increases, plant diversity and soil crusts adjacent to the trail decrease. To mitigate against this impact of increased visitation, more aggressive restoration of trailside habitat may be required in the future. The work needed to simply maintain the trails will also increase as the number of visits rises.

The opportunities for the Preserve to fulfill an educational function will continue to abound, and the Conservancy is well-positioned to increase its role in this area. Demand for school programs is likely to increase, with more children enjoying tours and activities in the Preserve. Events such as our Junior Citizen Science Festival could expand and provide opportunities for STEM (science, technology, engineering, and mathematics) education for children across the community. Demand for hike and mountain-bike tours may increase.

The Conservancy will have to adapt to meet these new challenges. Success will require an organization with a strong financial foundation, a robust and diverse steward program, excellent ongoing training and orientation, and an ethic of preservation and restoration that celebrates the role of people in a preserve, both as users and as stewards of a heritage we will leave for future generations to enjoy.

What Does It Mean to Be a Steward?

By Jacques Giard
McDowell Sonoran Conservancy master steward

"I want to give back." These words express what stewards with the McDowell Sonoran Conservancy embody—a caring spirit combined with generosity of deed.

My own experience very much reflects these two values. I was already hiking regularly in Scottsdale's McDowell Sonoran Preserve before joining the Conservancy. If anything, I considered the Preserve to be an extension of my own backyard and, as such, I acted as a kind of caretaker, all the while taking in the beauty of the place. So, when a steward on the trail suggested that I consider joining the Conservancy, the decision was an easy one. After all, I was only being asked to do what I was already doing, but now I would wear a blue shirt while doing it.

There's more to being a steward than just wearing a blue shirt and spending time in gorgeous surroundings. The steward who originally got me involved with the Conservancy once addressed the question of what it means to be a steward, and provided an excellent perspective. Being a steward means many things but before anything else, it means volunteering. In other words, you have decided to do what you do—greet visitors at the trailheads, patrol the trails, educate visitors, advocate for the Preserve, do trail construction and maintenance, help with administration—because you want to, not because you have to. And because you do these things willingly, you do them with a smile. Stewards are not known for their frowns!

Stewards called "Pathfinders" host the major trailheads. They welcome visitors, help them choose a hike, and answer questions about visiting the Preserve. Photograph by Marianne Skov Jensen.

Volunteering also means sharing. With every New Steward Orientation class, I never cease to be amazed by the expertise that stewards bring to the Conservancy and share. Consequently, everyone—the Conservancy, our fellow stewards, and the general public—benefits from the diversity of this extraordinary talent pool.

But let's not forget the principal reason why we are stewards in the first place. It is to sustain the 30,000+ acres of pristine Sonoran Desert for this and future generations. As stewards, we recognize our mission and want to ensure that everyone gets to enjoy it as much as we do.

Is there more to being a steward than volunteering, sharing,

The Conservancy's Tour program leads frequent hikes throughout the Preserve. Hikes are open to the public and sometimes feature an educational theme, such as safety in the desert, edible desert plants, or history of the area. Steward-only hikes are popular among stewards as get-togethers with friends old and new. Photograph by Lynne Russell.

Stewards and guest speakers present educational talks at the trailhead amphitheaters on Sunday afternoons once a month during the cooler weather. Members of the public learn facts about the Sonoran Desert and Scottsdale's McDowell Sonoran Preserve. The presentations include hands-on activities featuring Preserve plants and animals. Photograph by Lynne Russell.

and preserving? Yes, of course, there is. It means learning new things. That has certainly been the case for me. When I first hiked the Preserve, I knew little about its flora and fauna or its ecology and geology. As a result of the Conservancy's education program, I now appreciate the Preserve much more because of what I have learned as a steward.

Being a steward also gets me out of the house and encourages me to get more exercise. As I said, I was already hiking in the Preserve before joining the Conservancy. However, I do it more often now because I have a greater sense of purpose.

Then there are the people I have met through the Conservancy and with whom I have become friends. They have taught me a great deal over these past eight years and have enriched my life. (I only hope that I have reciprocated in kind.)

Lastly, all of these benefits—volunteering, protecting a special place, learning new things, getting exercise, making new friends—are thanks to my association with an exceptional organization, the McDowell Sonoran Conservancy. It has become an exemplar of a citizen-led movement in urban preserve management, and is serving as a model for other communities across the country. How great is that!

In the end, stewards—650 of us—do all of this and more while having fun. This is what it means to be a steward with the McDowell Sonoran Conservancy.

Once a year, the Field Institute's Citizen Science program sets up hands-on education stations for school children during its spring Junior Citizen Science Festival. Knowledgeable stewards focus on educating visiting students about the Preserve's flora and fauna. Once a month during the cooler months, stewards from the Nature Guides program set up similar stations called Trailside Naturalist Stations to educate the general public. Photograph by Lynne Russell.

Stewards help build and maintain 182 miles of trail within the Preserve. For those who do this work, it is a labor of love. No amount of money can rival the exhilaration of working in the desert among beautiful flora and astonishing mountain vistas. Photograph by Lynne Russell

School Children Enjoy the Junior Citizen Science Festival

By Steve Dodd
McDowell Sonoran Conservancy master steward

Students smile for science. Photograph by Lynne Russell.

The smiles and excitement on the faces of over 200 young students really told the story of the second annual Junior Citizen Science Festival, hosted by the McDowell Sonoran Conservancy Field Institute, the McDowell Sonoran Conservancy, and the City of Scottsdale. Scottsdale Mayor Jim Lane declared, "The City of Scottsdale is proud to declare Friday, March 10, as Junior Citizen Science Day in cooperation with the McDowell Sonoran Conservancy." Mayor Lane continued, "We're thrilled to collaborate on such an inspiring event that helps young students become more curious about science and our local ecology in the heart of the McDowell Mountains. Thank you to U-Haul, Cox Communications and the Scottsdale Charros for their generous support and underwriting that allow more children to become Junior Citizen Scientists." The event, held March 10 at the Lost Dog Trailhead in Scottsdale's McDowell Sonoran Preserve, introduced elementary school-age children to the Sonoran Desert and to the principles of the scientific process. The festival featured more than 16 interactive, fun-filled stations with related activities in the ecology, natural history, and human history of the Sonoran Desert, and showed children how both adult and junior citizen scientists study the environment.

"The event is open to all children, but special emphasis is placed on Title 1 schools in Scottsdale and the Valley in the hope that we can offer unique, hands-on outdoor education to children who may not otherwise visit the Preserve," explained Melanie Tluczek, Field Institute assistant director, who spearheaded the festival. "We had four busloads of students attending, and a large number of families from neighborhoods closer to the trailhead."

Children participating were given fun backpacks with donated educational toys and books from Cox and U-Haul, along with information related to the trailside activities, plus a field notebook with learning activities that relate to each of the stations. The activities in the field notebook mimicked observations that a scientist or naturalist would make during a field study. The activities directly aligned with State of Arizona STEM (science, technology, engineering, and math) education standards. Children had their field notebooks stamped at the stations they visited and earned a special Junior Citizen Scientist certificate.

Premier Sponsor, U-Haul, our sustainable business partner, provided a clever cartoon map of the event route for children, teachers, and families. Event participants were encouraged to visit as many activity stations as possible and collect stickers. Upon exiting the event, students were given a fun U-Haul toy truck and were entered in a prize raffle for a custom U-Haul bike.

The children and coaches from Playworks AZ gather under the welcoming banner and show their enthusiasm. They were among the 225 students in all that attended the Junior Citizen Science Festival. Photograph by Lynne Russell.

Members of the Cox Communications team [above middle] worked, had fun, and found time to pose. Cox Communications was a premier corporate sponsor of the festival. Photograph by Lynne Russell.

The crew for U-Haul, [bottom] a premier corporate sponsor of the festival, provided their expertise and equipment in handling much of the festival apparatus. Photograph by Lynne Russell.

The amazing array of subjects at the stations included activities on birds, reptiles and amphibians, arthropods, mammals, animal homes, geology, archaeology, and ethnobotany. Liberty Wildlife brought a live red-tailed hawk and a great horned owl for visitors to view and interact with, and Scottsdale Community College's Center for Native and Urban Wildlife brought a Sonoran Desert tortoise and chuckwalla. The River of Time Museum in Fountain Hills brought two types of high-powered telescopes provided by the Fountain Hills Astronomy Club. The children looked into one type to view solar flares and into the other type to view the McDowell Mountains at various magnifications. CAP LTER (Central Arizona-Phoenix Long-Term Ecological Research) showed students how to record the variation in temperature around trails and below vegetation, tools that are key to understanding urban ecology.

Technology was on display as well. The Conservancy partnered with Cox Communications, our friend in the digital age and one of the major sponsors of the event, and ExplorMor Labs, a startup from Arizona State University, to develop cards showing three-dimensional images of six different Sonoran Desert plant and animal species. An instruction panel on the back of the cards allowed children to download an app to a mobile device. The device is then pointed at the card, bringing the image of the species to life. Children can then click through a number of pop-up buttons to learn more about each species. Each child went home with his or her own packet of cards and this

What's inside a saguaro? [left] One of the many interactive trailside tables at the festival lets you see for yourself. Photograph by Dennis Eckel.

Volunteer guides [below] answered questions and escorted visitors around the festival. Photograph by Lynne Russell.

Opportunities to interact with some of the desert's denizens included petting this chuckwalla brought by Scottsdale Community College Center for Native and Urban Wildlife. The chuckwalla made a lot of new friends at the festival. Photograph by Dennis Eckel.

The McDowell Sonoran Conservancy is grateful to these important sponsors for their generous support!

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unique educational tool will be distributed at upcoming Conservancy family events.

EcoListen, an acoustic ecology lab from Arizona State University, brought virtual reality equipment. The students used 3D goggles and headphones to become fully surrounded by the sights and sounds from various parts of the Preserve. EcoListen has been working with the Field Institute for the past year to make visual and auditory recordings of locations in the Preserve. They also do this in some of the state and national parks in the west, to bring the outdoor experience to people who may not be able to get outside.

"The event is a huge undertaking, and made possible only by the involvement of our Conservancy steward volunteers and our corporate sponsors who provide funding and other assistance," added Tluczek.

Tluczek explained that in addition to a small core team of steward volunteers who planned and supervised the event, the interactive stations were operated primarily by stewards from the Conservancy's Citizen Science and Nature Guide programs. She pointed out that volunteers from every Conservancy program worked at set up and take down, logistics, support, and shepherding small groups of children through the festival.

"It's a major task just getting that many third, fourth, and fifth graders off the buses, organized into small groups, getting them through all the stations and then getting them back on the right buses," she said. "But once again, our volunteers made it look easy."

Tluczek said more than 130 steward and corporate sponsor volunteers helped to make the festival a success. "We can't thank our sponsors enough, for both their monetary and volunteer support," she said.

Students [above] look through telescopes provided by the Fountain Hills Astronomy Club to compare what the McDowell Mountains look like using various magnifications. Photograph by Lynne Russell.

This student [right] not only enjoyed nature, he got to experience virtual reality too. These EcoListen 3D goggles with headphones provide interactive presentations of the Preserve and multiple national and state parks in the West. Photograph by Lynne Russell.

A great horned owl [above] shown by a volunteer from Liberty Wildlife delights students and adults alike. Liberty Wildlife rehabilitates injured wild animals, then releases them back into the wild. Photograph by Dennis Eckel.

A trailside table devoted to arthropods [left] fascinated students interested in the Sonoran Desert's creepy-crawlies. Photograph by Dennis Eckel.

Everyone enjoys seeing a bird's nest and the so-called saguaro boot [above] is a special one! The boot formed when the saguaro secreted a sap that hardened the lining of the large hole created in it by a woodpecker. When the saguaro died, the boot that provided a nest for many woodpecker families remained behind after the cactus decayed. Photograph by Lynne Russell.

The deer skull and deer antlers capture the attention of these children. Those items were just several among hundreds displayed at the interactive trailside stations. Photograph by Dennis Eckel

Premier corporate sponsors included Cox Communications and U-Haul both of which provided funding and help in operating interactive stations at the event. U-Haul also provided a truck for the event, and dollies and equipment to make set up and take down easier. Additional funding was provided by the Scottsdale Charros. Marketing support was provided by Arizona SciTech Festival, including designating the festival as an organization signature event. In addition, the City of Scottsdale made the Lost Dog venue available for the festival and provided marketing support and city Preserve staff to work at the event.

Participating Partners

Arizona State University

CAP LTER (Central Arizona-Phoenix Long-Term Ecological Research)

EcoListen

ExplorMor Labs

Fountain Hills Astronomy Club

Liberty Wildlife

Playworks Arizona

River of Time Museum

Scottsdale Community College Center for Native and Urban Wildlife

This Project Rocks!

By Daniel Gruber
McDowell Sonoran Conservancy legacy steward

If you were looking for a rock to use as a paper weight, which one would you pick? Many people would choose a quartz rock. Did you know that quartz can be found in Scottsdale's McDowell Sonoran Preserve? (Don't take any home; it's against the law.) Milky colored translucent quartz is the most prevalent quartz, and veins of it are visible throughout the Preserve. In 2014, two of the veins became the subject of a study by the McDowell Sonoran Conservancy Field Institute.

Led by Brian Gootee, research geologist with the Arizona Geological Survey (AZGS), a citizen science team from the Field Institute identified two sites containing large quartz veins for the study. After detailed ground mapping, collecting samples, recording data, and performing photo documentation, the team photographed the sites from above by walking a tethered weather balloon with an attached camera over both locations. The maps, aerial photography, and other data were converted into a geologic map using a computer in the McDowell Sonoran Conservancy's office.

Analysis and interpretation of the samples were done by Gootee, and he and Daniel Gruber, Field Institute citizen science project leader, summarized the work and interpretation in a technical paper that included detailed geologic maps. The AZGS published their paper in 2015 as an Open File Report in its online document repository. This is one of six Field Institute papers on various topics published in peer-reviewed technical journals.

The quartz-vein project is one of several highly successful projects that demonstrate the capabilities of the Field Institute and its citizen science program. These projects, whose results have yielded valuable data for all involved, have allowed the Field Institute to partner with scientists in various disciplines to conduct other studies in the Preserve. Such studies benefit both our scientific partners and the Conservancy. Scientists obtain a large group of trained citizen scientists eager to carry out field work. The Conservancy acquires the data it needs to scientifically manage the Preserve. And volunteer citizen scientists love participating in this interesting work. It's a win-win situation for everyone involved!

Milky quartz is a crystal and is the most common variety of quartz. Its white color comes from gas and/or liquid trapped inside the crystal during its formation. Photograph by Dennis Eckel.

Hot Dog!

By John Loliet, Scottsdale's McDowell Sonoran Preserve natural resources coordinator at Brown's Ranch Trailhead, and Kelly Hayes, assistant natural resources coordinator at Pinnacle Peak Park

Every year dogs are rescued from Scottsdale's McDowell Sonoran Preserve because of overheating. By understanding your dog's physiology and following these rules, you and your dog can hike happily and safely.

- Give your dog plenty of rest and water. Carry water and a collapsible bowl just for him.
- Choose a hike within your dog's ability and hike early in the day when it's cooler.
- Don't be fooled by the air temperature. The temperature at ground level is a lot hotter than the air temperature. To offer some perspective, the U.S. National Park Service reports that the highest ground temperature ever recorded was 201 degrees in Death Valley, even though the air temperature there was only 128 degrees.
- Pavement, sand, and rocks can be too hot for dogs to walk on. Dogs that are hiking on hot surfaces can suffer painful blisters on their paws. By placing the backside of your hand on the ground, you will feel what your dog feels.
- Although your dog cannot talk to you, he can tell you when he is getting overtaxed. Watch his behavior. If he changes his gait and lies down frequently, he is telling you he is overheated. Don't be fooled if he continues to get up and hike with you because that's his nature. He will continue until he can't go any longer. Then, it's too late.
- Heatstroke is life-threatening. When a dog is panting heavily and drooling, when gums and tongue color change to bluish purple, bright red, or become pale, he is overheating. His eyes become glazed, his heartbeat and pulse become elevated, and his body temperature (normally 102 degrees) rises to above 105. He will collapse when his body temperature reaches 109. Seizures, vomiting, diarrhea, and finally unconsciousness will follow. All this can happen in a matter of MINUTES, not miles.

Your dog has always been there for you, so be there for him. Hike early in the morning when it's cooler and keep him from becoming a hot dog. Photograph by Dennis Eckel.

Our recommendation is this: when the outdoor temperature reaches 90 degrees, it's too hot to hike with your dog. If the temperature stays below 90, then it's happy trails for you and your best friend.

Beautiful vistas reward hikers on the Tom's Thumb Trail. Photograph by Dennis Eckel.

Great Hikes in the Preserve: Tom's Thumb Trail

By Barbara Pringle
McDowell Sonoran Conservancy master steward

If you're looking for a hike that rewards both body and soul, then look no further than Tom's Thumb Trail in Scottsdale's McDowell Sonoran Preserve. Tom's Thumb is a prominent granite spire that tops a high ridge located in the northeast section of the Preserve. "The Thumb," as it's known locally, is visible for miles around.

Want a great cardio workout? Tom's Thumb Trail delivers, climbing 600 feet in the first mile, and over 1,100 feet in 2.2 miles to the Thumb. Because of the steep elevation change, this trail is rated by the City of Scottsdale as extremely difficult and is not recommended for the novice hiker. The trailhead is located at an elevation of 2,813 feet, and the trail climbs to the Thumb at 3,925 feet.

One of the best places to spot the beautiful mariposa lily (Calochortus kennedyi) *is at the intersection of the Tom's Thumb and East End Trails. Photograph by Marianne Skov Jensen.*

Do stunning vistas inspire you? As you climb, to the east you'll spot the Verde River watershed and beyond it, Four Peaks mountain wilderness. High crests and overlooks offer panoramic views in all directions. You ascend through giant granite boulder outcroppings, which present irresistible photo opportunities.

Maybe you're a flora and fauna aficionado. Because this area is at a higher elevation than many other Preserve areas, you'll find a lush upper Sonoran Desert environment with plants that don't grow at lower elevations, such as the brilliant red-orange Mariposa Lily *(Calochortus kennedyi).* Be on the lookout for deer, bobcats, jackrabbits, roadrunners, and a wide variety of raptor species, including a protected nesting site for peregrine falcons.

Let's Go Hiking!

Begin at the trailhead, which includes plenty of parking and restrooms but NO WATER. Tom's Thumb Trail is not recommended for horses or bikes. McDowell Sonoran Conservancy Pathfinder volunteers are available at the trailhead in the morning and on weekends from mid-September through most of May to answer visitor questions. In addition, Conservancy stewards periodically lead hikes to the Thumb.

The trail starts out with a mild-to-moderate climb to the intersection with the Feldspar Trail (trail marker TT2), after which it begins to get steeper. At trail marker TT5 (3,385 feet), your climb intensifies as you hike a series of narrow, steep switchbacks. Happily, there are a couple of scenic overlooks where you can stop, catch your breath, and take in the beautiful vistas.

The trail grade moderates as you climb to the intersection with the East End Trail (3,607 feet). Stop here and take a look southeast down the East End Trail for beautiful views into the Preserve's expansive, unspoiled interior.

Tom's Thumb Trail is a smooth, well-compacted, eroded granite surface, making it easier on the feet than some of the rockier trails found in other areas of the Valley. Conservancy stewards worked with Scottsdale trail-construction crews to build the trail, and City staff and Conservancy volunteers continue to keep the trail well-maintained and safe for hikers.

For a brief visual overview of the Tom's Thumb Trail, search the City of Scottsdale's website for a link to the trail video produced by the City. This is the first of many planned videos, created to help viewers better understand and appreciate the wide range of trails available in Scottsdale's McDowell Sonoran Preserve.

Giant granite boulder formations at Tom's Thumb make wonderful photo opportunities. Photograph by Dennis Eckel.

Protecting Native Biodiversity Isn't Easy

By Dr. Helen Rowe
McDowell Sonoran Conservancy Field Institute director

Over half of Scottsdale's McDowell Sonoran Preserve's 80-mile boundary is surrounded by urban development, making it easily accessible to incursion from nonnative plants. Recent surveys by the McDowell Sonoran Conservancy Field Institute show that over 60.5 acres of the Preserve are currently dominated by two invasive grasses—bufflegrass *(Pennisetum ciliare)* and fountain grass *(Pennisetum setaceum)*. These invasive grasses present two major problems—they increase fire hazard and displace native plants.

Humans brought these grasses to Arizona, along with many other nonnative plants and animals over many decades. Buffelgrass, introduced into the United States in the 1930s as livestock forage,

Conservancy volunteers set up plots in Quartz Wash in the southern part of the Preserve for a project that will compare the success of different techniques for removing fountain grass (Pennisetum setaceum), a nonnative species harmful to the Preserve's ecosystem. Photograph by Leona Weinstein.

did not initially thrive in the desert. Then in the 1980s, it began to expand rapidly. Fountain grass, introduced into Arizona as an ornamental landscape plant, was well established in the Tucson area by the 1940s.

Buffelgrass is a perennial bunchgrass considered to be a major threat to biodiversity in the southwestern United States and Australia. Buffelgrass is apomictic, meaning it produces seeds without using sexual reproduction. The seeds are dispersed by the wind or dropped to the ground. It also reproduces vegetatively sending rhizomes (lateral shoots) underground and stolons (lateral stems) along the surface. New plants grow from the rhizomes that send grass shoots up to the soil surface, and from the stolons that send their roots below the surface. The preferred habitat of buffelgrass is valleys and low slopes with recently disturbed areas, but it will also grow on steep rocky hillsides. The low water requirements for buffelgrass emergence and its ability to capture more water resources than native plants give buffelgrass a highly competitive advantage in arid environments. Buffelgrass also seems to be able to adapt more rapidly to environmental changes than native species.

Fountain grass in Arizona prefers sandy soils in desert riparian areas and washes, but is also found in grasslands, canyons, rocky slopes, roadsides, and disturbed sites. Like buffelgrass, it is an apomictic, wind dispersed, perennial bunchgrass. However, unlike buffelgrass, fountain grass does not spread vegetatively.

Buffelgrass and fountain grass are highly productive and present a significant fire hazard. Both grasses dramatically increase the fuel load for fire consumption compared to native communities, and therefore increase the threat of wildfire. The threat is particularly acute in the Sonoran Desert, where the ecosystem is not fire adapted. This means that when a desert fire destroys native plants, reestablishment is slow. Buffelgrass and fountain grass, on the other hand, are fire adapted, and readily reestablish themselves after fire. Several studies have clearly documented an increase in their abundance after fire. The cycle of invasive grass species increasing fire load and frequency change ecosystem conditions in a feedback loop that leads to invasive grass dominance. This loop has been dubbed a grass fire cycle.

Buffelgrass (Pennisetum ciliare) *in the Preserve presents a fire hazard and dominates native desert plants wherever it grows. Photograph by Steve Jones.*

Even in the absence of a fire threat, both nonnative species have been shown to displace native species and reduce plant biodiversity where they invade. Thus, native plant communities invaded by buffelgrass demonstrate less native species richness. Buffelgrass has been implicated in the die-off of the native woody species, the yellow palo verde, due to the consumption of shallow water by these bunchgrasses.

A sea of fountain grass (Pennisetum setaceum) fills the Preserve's Quartz Wash crowding out native desert plants. Photograph by Steve Jones.

Fountain grass (Pennisetum setaceum) *produces lots of seeds that help it to invade natural habitats where its dense stands of grass will successfully compete with native species, displacing the native plants. Photograph by Steve Jones.*

This grasshopper mouse does not make a cuddly pet.
Photo by: Randall D. Babb, Arizona Game & Fish Department

Finally, in a study of 14 sites in Saguaro National Park near Tucson, Arizona, soil nutrients such as carbon and nitrogen were elevated twofold in sites with buffelgrass compared to sites without buffelgrass. Nitrogen has been shown to have an even more negative effect on desert native plant species in the Sonoran Desert than buffelgrass itself. Buffelgrass is on the Arizona noxious weed list.

Like buffelgrass, fountain grass competes successfully with native species for shallow water. Its presence contributes to increased fire frequency, and its buried seeds germinate after fire. Fountain grass is listed as a noxious weed in Hawaii and Nevada, but although research indicates that fountain grass will continue to thrive in Arizona's climate, it is not yet listed on Arizona's noxious weed list.

Over the past three years, the McDowell Sonoran Conservancy Field Institute has been surveying and mapping nonnative plant species in the Preserve in order to better understand their distribution, and to better understand how to manage these grasses. Over the same time period, the Field Institute developed an Ecological Resource Plan (ERP) with the City of Scottsdale. The ERP serves to prioritize conservation needs, including nonnatives, in the Preserve. In Fall 2015, the Field Institute initiated a study group of staff and stewards to search peer reviewed literature and determine the best practices for removing and preventing reestablishment of buffelgrass and fountain grass. Given what was learned in other environments, and the rapid spread of these grasses in the Preserve, control of these two perennial grasses was recommended as a high priority for conservation of the Preserve.

Buffelgrass (Pennisetum ciliare) *has invaded Scottsdale's McDowell Sonoran Preserve. It threatens native plant species and is proving hard to remove. Photograph by Steve Jones.*

As a result of studying the scientific literature, the study group worked together to develop a nonnative species strategic plan for the Preserve and surrounding areas. Strategic plans, a common approach in integrated pest management, help managers prioritize actions given limited resources. The study group reviewed plans from Australia, Tucson, and Texas, and developed a strategy that combined removal of dispersed populations, and monitoring of the grasses; designed a field study to test different removal techniques in the Preserve; and prioritized surveys for the Preserve perimeter and along major roads near the Preserve.

Although there has been substantial research on buffelgrass and fountain grass, the group found no published papers that compared the efficacy of various removal treatments on controlling the nonnative plants with the treatment effects on native vegetation over a long period. Thus, the group developed an experiment to compare common removal methods in a field study to determine which treatment can

Fountain grass (Pennisetum setaceum) *will establish itself in recently disturbed ground outside the Preserve and then move into the Preserve to displace native plant species. Photograph by Steve Jones.*

best control the invasive species and protect native plant species at the lowest cost. The experimental treatments will be a combination of pulling, mowing, and herbicide repeated annually. We are seeking funding to launch the experiment.

There was one positive finding from the literature search. Given the longevity and robustness of native seeds in the soil, native plant species can dominate post treatment vegetation after the removal of buffelgrass. Ultimately, the removal treatment results will be integrated into removals elsewhere on the Preserve and regionally, so that managers and volunteer teams throughout the Valley know the most effective and relevant integrated weed management approaches.

The Field Institute is undertaking the daunting effort of nonnative grass removal because the Preserve is one of the most biologically diverse open-space areas in the Phoenix Valley. It hosts over 378 species of plants, 200 species of vertebrate animals, and countless invertebrates. The Preserve is also home to six species of animals listed as Species of Concern by the U.S. Fish and Wildlife Service. Those riches alone make the Preserve worth conserving. When you also add on the magnificent views and the trails for hiking, biking, and horseback riding, you have a remarkable place where it is justifiable to line up the volunteers and take a stand against the invaders. This work will greatly improve our capacity to protect this sensitive Sonoran Desert habitat for the long term.

U-Haul, celebrating 50 years of being headquartered in the Valley, proudly served as a premier sponsor of the 2017 Junior Citizen Science Festival. Our appreciation goes out to the City of Scottsdale and the McDowell Sonoran Conservancy for all they do to promote sustainable initiatives and preserve our rich environment. We enjoyed the chance to share with students, teachers and families while communicating the importance of conservation and protecting natural resources.

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These wildflowers were photographed near Granite Mountain, a great place for seeing the spring wildflower display. Learn about some of the wildflowers that bloom throughout Scottsdale's McDowell Sonoran Preserve in the wildflower article, "Decked Out in Wildflowers", following this page. Photograph by Lynne Russell.

Join Our Circle of Friends

Through your support as a member of our Circle of Friends, the McDowell Sonoran Conservancy can continue to protect and preserve everything you enjoy about Scottsdale's McDowell Sonoran Preserve. Your contribution is vital to keeping the Preserve beautiful and a place to be enjoyed by this and future generations. This shared appreciation of our Sonoran desert is why we invite you to become a Friend of the Preserve by returning the membership form below. You may also make your gift online at **www.mcdowellsonoran.org**. Just click "Donate Now."

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The common rounded brittlebush (Encelia farinosa) *shrub is three feet or more in height and width. It produces sprays of yellow flowers on stalks that grow well above the green-white leaves and stems. It is usually an early-flowering shrub. Photograph by Marianne Skov Jensen.*

Decked Out in Wildflowers

By Steve Jones
botanist

If you post photos to social media sites, please add the hashtag #MSC_AZ.

The McDowell Sonoran Conservancy Field Institute encourages you to join the Preserve's iNaturalist project and post observations there.

This winter's weather conditions have produced a beautiful spring wildflower display. Sunrise Trail between SR15 and SR17 has always been one of the best areas in Scottsdale's McDowell Sonoran Preserve to see a good display. A scouting trip there in mid-February showed many of the expected species in various stages of development. Mexican poppies, lupines, bluedicks, and phacelia were just beginning to flower, while desert chicory and lesser yellowthroat gilias were not far behind. The southeastern slope of Granite Mountain (Bootlegger and Granite Mountain Loop Trails) is another good wildflower hotspot, and we saw most, if not all, of the same flowers we saw at Sunrise Trail. Granite Mountain and Sunrise Trail also feature flowering shrubs such as brittlebush, globemallow, chuparosa, and desert lavender. Besides these hotspots, just about any trail in the Preserve will have some of the same wildflowers we found in February.

While you are enjoying the wildflowers, remember to stay on the trails at all times—that perfect camera shot is not worth trampling other vegetation, and the flower will likely be found further along, closer to the trail. Picking flowers is not permitted, so please leave the flowers to complete their life cycle and produce seeds for the next good wildflower season.

Coulter's lupine *(Lupinus sparsiflorus)* is commonly found throughout the Preserve. The plant has palmate leaves with narrow leaflets, and produces a spike of blue-purple flowers. The spikes of Coulter's lupine grow to over a foot tall. The flower's white central spot turns red after pollination.

The **lesser yellowthroat gilia** *(Gilia flavocincta)* is a slender plant with clusters of pink-violet flowers about one-half inch across. The tubular flowers have yellow inner throats. Cobwebby hairs grow below the flowers and on the highly divided basal leaves.

The white-flowered **desert chicory** *(Rafinesquia neomexicana)* is over a foot tall, often emerging from beneath a protective shrub. Each petal has five teeth at the end, and the undersides of the petals have purple streaks. The flowers are over an inch across.

The very common **desert globemallow** *(Sphaeralcea ambigua)* is shrub growing three to four feet high. It produces wands of cup-shaped apricot flowers with yellow staminate columns in the center of each flower. Leaves and stems are covered with branching hairs.

Bluedicks *(Dichelostemma capitatum)* are also known as desert hyacinths. Their long, narrow, onion-like leaves with tall stalks that can reach two feet are topped by clusters of blue-purple (rarely white) lily-like flowers. These flowers often germinate under a shrub, then grow taller than it.

Large and showy **chuparosa** *(Justicia californica)* shrubs grow up to five feet tall and bloom in the spring with many tubular red flowers. The name comes from the Mexican word for hummingbird, which loves this plant for its nectar. It is found on slopes and in boulder piles.

The early-flowering **desert lavender** *(Hyptis emoryi)* is a tall shrub (over four feet) with clusters of blue-purple flowers that are very attractive to bees. It is found predominantly in granite boulder piles in the northern part of Scottsdale's McDowell Sonoran Preserve and along washes throughout the entire Preserve.

Coulter's lupine

Lesser yellowthroat gilia

Desert chicory

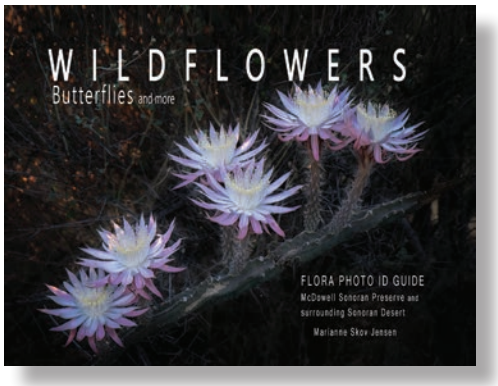
Globemallow

Bluedick

Chuparosa

Desert lavender

Photographs by Marianne Skov Jensen.



Wildflowers, Butterflies and more

This updated version of the *Flora Guide for the McDowell Sonoran Preserve* by photographer Marianne Skov Jensen features 25 additional species, updated identifications and descriptions, illustrations of plant and flower parts, and many new photographs, including butterflies. It is available from the McDowell Sonoran Conservancy. The price is $20 with 100% of the proceeds going to the Conservancy.

Small Cat, Big Attitude

By Susan Aufheimer
Field Institute certified citizen scientist

An adult bobcat weighs between 15 and 30 pounds, not much more than the domestic Maine coon cat that can reach 25 pounds. But no domestic cat has the muscle, teeth, and temperament of the bobcat. Pound for pound, the bobcat has them all beat.

Bobcats live throughout North America. Here in the Sonoran Desert, we see them frequently in our neighborhoods. One female is known to raise her family hidden in a wash outside a walled community. She brings her kittens over that wall to play in a tree. What a delight to see! However, that mother bobcat also teaches her babies to hunt. Watching the kitten play with an injured rabbit is a little hard to take, even though mom-cat is teaching her baby how to survive.

Bobcats are carnivores, which means they eat an all-meat diet. They have sharp claws and large tearing teeth to bring down their prey and rip it apart. You'll notice that bobcats have white patches on their ears, which are typical of big cats such as tigers. Apparently, these patches look like big eyes to predators and discourage attacks from the rear.

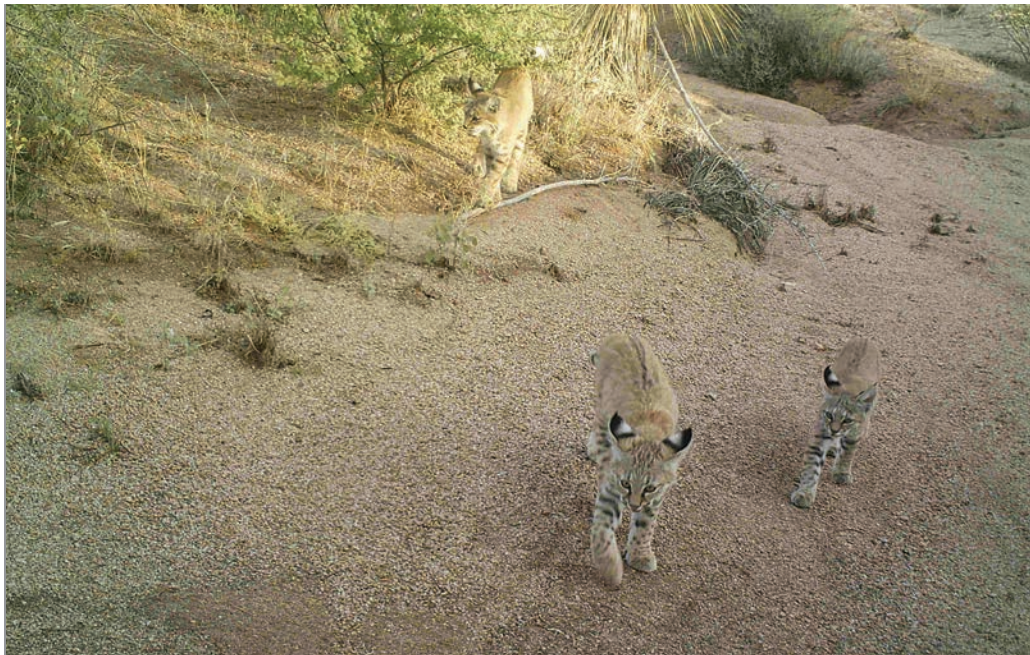
This stately bobcat was caught on camera holding court in the backyard of a home located just north of Brown's Ranch Trailhead. As humans encroach on their habitat, bobcats learn to live along side of us. But don't be fooled. They are fierce wildcats that can take down a small deer if the opportunity presents itself. Photograph by Dennis Eckel.

What's the "bob" in the bobcat name? That term refers to the cat's tail, which is bobbed or shortened. A bobcat's tail can be as short as two inches and as long as eight.

At the McDowell Sonoran Conservancy Field Institute, researchers study wildlife to find out how animals move from place to place and how urban development affects their lives. One such study uses cameras to photograph the movement of desert animals passing through a particular stretch of Scottsdale's McDowell Sonoran Preserve. Citizen scientists then analyze the photos to determine what species and how many animals use that pathway. While the study has yet to yield overall conclusive results, one thing is for certain—bobcat kittens are as cute as they can be!

A closer look at this bobcat reveals a lean, athletic body with powerful back legs that enable it to jump six feet up a tree or over a wall. A bobcat can live up to 15 years and the femaile can produce one to two litters of as many as six kittens every year. Photograph by Dennis Eckel.

Bobcat kittens stay with their mothers for about 11 months during which time they are taught essential survival skills. Here bobcat kittens exploring a Preserve trail are caught on camera by a Field Institute camera trap. Their mom follows close behind keeping them safe from predators. These kittens are fair game to owls, coyotes, foxes, and even adult male bobcats. Photograph courtesy of the McDowell Sonoran Conservancy.



McDowell Sonoran Conservancy
2016 Annual Report

Photograph by Dennis Eckel.

From the Chairman and Executive Director

Thanks to your support, the positive impact of Scottsdale's McDowell Sonoran Conservancy continued to grow during 2016. Mid-year we celebrated the 25th anniversary of the founding or our organization and the many successes we've enjoyed since then. From a small but energetic volunteer base of citizen advocates, the Conservancy has evolved into a science-based land management organization for one of the America's largest urban preserves.

In 2016, our steward program continued to expand. We recruited 142 new stewards, who with our existing stewards volunteered a total of 57,443 hours during the year, a 13% increase over 2015. Notable growth took place in our Patrol Program, Nature Guides, and Citizen Science. We enhanced our community family events and youth education efforts during the year, providing ten local Title 1 schools with educational field trips to the Preserve. The trips give children the opportunity to experience the desert using all their senses. Our Family Sonoran Sunday "Fun Days" offered education activities for the entire family through opportunities to participate in interactive programs that featured the unique vegetation and wildlife of the Sonoran Desert.

Our research center, the McDowell Sonoran Conservancy Field Institute, continued its innovative work of applied science to maintain the ecological values that make the Preserve special. We launched major research projects to study wildlife movement within the Preserve, began a multi-pronged effort to remove high-priority invasive grass species, and completed a study of human impacts on trails. Other Conservancy Field Institute highlights included two first-ever events: a day-long symposium in the Fall that brought together researchers from across disciplines who are working in the Preserve, and a Junior Citizen Science Day, which provided hands-on, STEM education opportunities for children through innovative activities throughout the day.

Financially, 2016 was a challenging year. Revenue, including contributed hours and services, reached $1.83 million, 16% higher than just two years ago. Contributions of all kinds accounted for the majority of revenue during the year (98%), and the Conservancy continues to rely on charitable giving to fund its operating expenses. Those expenses increased to $2.1 million. The deficit was offset in part by multi-year pledges recognized in prior years, but planned to be spent during 2016. Spending on programs represented 86% of all expenditures, with fundraising at 9% and general/administrative spending at 5%. These numbers, summarized on page 35, are from our full, audited 2016 financial statements available by contacting the Conservancy office.

The McDowell Sonoran Conservancy Board, staff, stewards, and partners work together to share ideas and expertise, inspire one another, build public support, and find better ways to be good Preserve stewards. We are happy you are a part of our efforts. Thank you for your friendship and support.

Greg Kruzel
Chairman, Board of Directors

Mike Nolan
Executive Director

Photograph by Dennis Eckel.

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Photograph by Marianne Skov Jensen.

We gratefully acknowledge our supporters who fund our ongoing work to maintain and protect Scottsdale's McDowell Sonoran Preserve for this and future generations. (Gifts and Pledges received from July 1, 2015–June 30, 2016)

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Photograph by Lynne Russell.

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Photograph by Marianne Skov Jensen.

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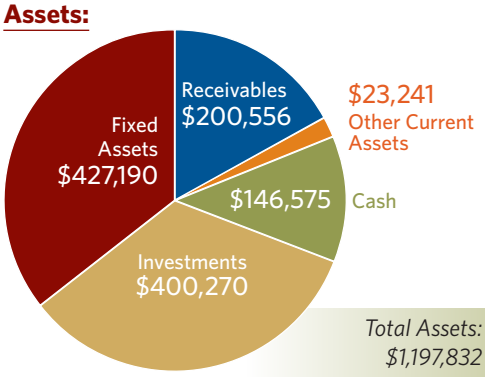
How We Measure Success

Financial Position

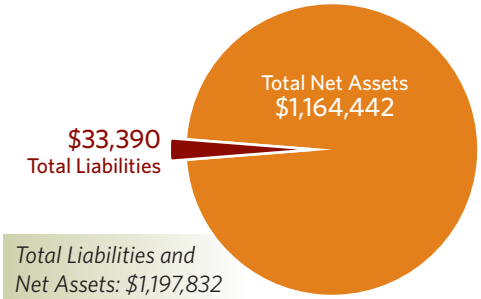
as of June 30, 2016

Assets:



Total Assets: $1,197,832

Liabilities and Net Assets:



Total Liabilities and Net Assets: $1,197,832

Statement of Activities

as of June 30, 2016

2016 Revenue:

73% Contributed VOLUNTEER Services

23% Cash & Pledges
4% In-Kind Donations
1% Program Service Revenue and Special Events
(1%) Investments

Total Support and Revenue: $1,832,616

2016 Expenses:

86% Program Services
5% Management and General
9% Fundraising

Total Expenses: $2,095,698

Audited financial statements available upon request.

Notable Achievements

- Provide leadership in regional open space conservation planning through Central Arizona Conservation Alliance
- Launch major research projects on preserve wildlife movement corridors, control of invasive plant species, restoration of degraded habitats
- Completed study of human impacts of trail use
- Created and enhanced interactive community family events and youth education programs
- Expanded Sonoran Sunday education events
- Increased volunteer hours 13% year over year to manage expanding Preserve

A Vision for Sustainability

By Melanie Tluczek
McDowell Sonoran Conservancy Field Institute assistant director

For the McDowell Sonoran Conservancy, sustainability is the foundation of the vision for Scottsdale's McDowell Sonoran Preserve. Sustainability can be defined as "using resources in a way that does not deplete them," and "the ability to be used without being destroyed."

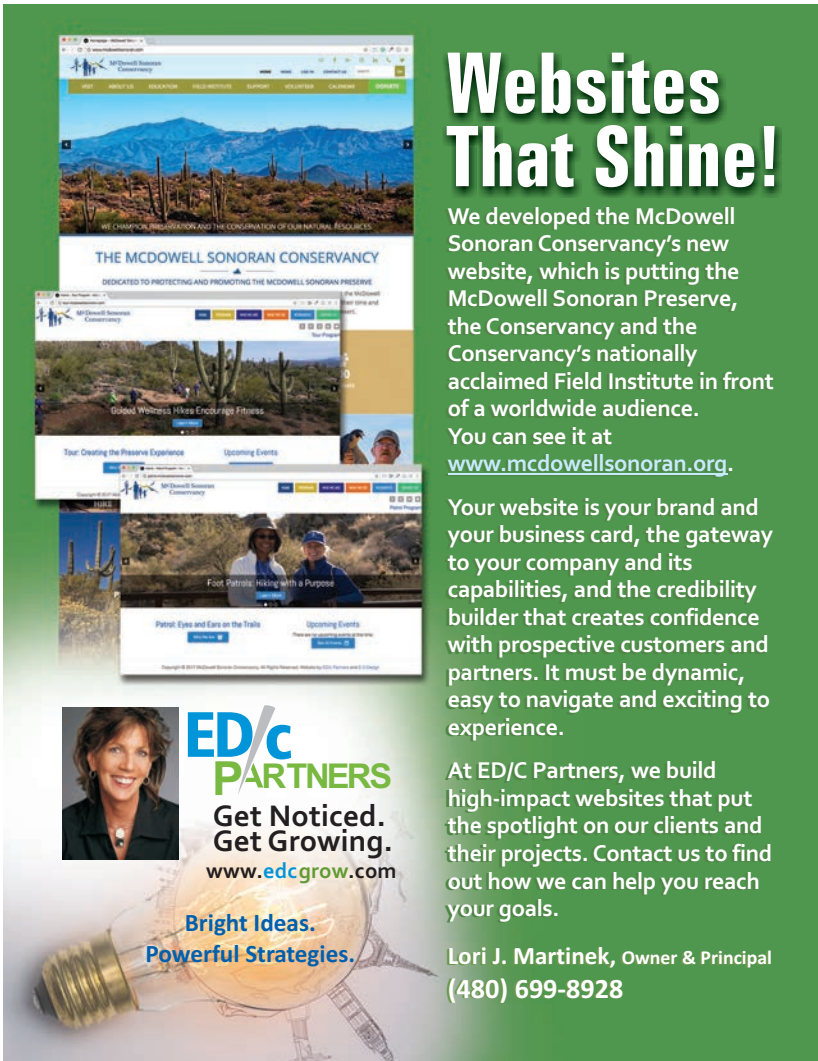
To us, sustainability means thinking long-term about how we can work to keep the 30,100-acre Preserve diverse and thriving in perpetuity. Accomplishing this requires combining knowledge of the Preserve's natural resources with an understanding of how to sustain those resources, and communicating their importance to the next generation.

The northern part of Scottsdale's McDowell Sonoran Preserve contains dense stands of many of the oldest and largest saguaros in the Preserve. Photograph by Barry White.

The Preserve is home to over 750 different types of plants and animals, one of the most complex geological formations in central Arizona, and evidence of numerous cultures dating back 7,000 years. But there are over 700,000 visits to the Preserve each year, as people hike, bike, and ride horses along 200 miles of trails. So how do we continue to support community use of the Preserve while protecting its diversity and unique qualities?

Some ecological principals come into play. First, maintaining the high level of ecological diversity (the number of different plants and animals) makes an area more resilient to change and better able to bounce back after catastrophic events, such as fire. Next, maintaining ecological corridors (movement pathways for large animals such as deer and mountain lions) is critical to maintaining their access to food, water, and mates. When larger animals disappear, it has widespread effects on other animal and plant populations.

However, none of this is possible without the support of the community. So, the Conservancy brings people to the Preserve for guided hikes, provides public lectures, involves people in citizen science, and reaches out to youth through hikes and a Junior Citizen Science Festival. The more the citizens of the Valley understand and care for the Preserve, the more likely it is that we will fulfill our mission of maintaining it for this and future generations.



This Land Is Your Land!

By Blythe Sweeney
McDowell Sonoran Conservancy chief development officer

This '60's child fondly recalls a popular folk song, "This Land Is Your Land," music and lyrics by Woodie Guthrie. The lyrics say, "This land is your land, This land is my land . . This land was made for you and me." Most of us feel this way about Scottsdale's McDowell Sonoran Preserve.

Over 750,000 visitors annually experience the majesty of the McDowell Mountains and surrounding Sonoran Desert while enjoying the many programs and services made possible by the volunteers and staff of the McDowell Sonoran Conservancy. But as the Preserve continues to expand, so does the need for giving our time, talent, and financial treasure. Don Shawl, Conservancy steward and major donor, shares, "I believe the Conservancy needs time, talent, and treasure to survive. I enjoy giving my time in patrolling our Preserve. But, I also realize we can't survive without giving talent and treasure too. I hope to give my talents to help develop an endowment fund for the future. I also believe it is important to give some of my treasure to sustain the Conservancy this and every year."

"Prior to moving to Scottsdale, for years I sadly watched the deterioration of South Mountain Park and its trails," says Dr. Stephen W. Brown, Conservancy board member. "Now, every day I give thanks for the Conservancy's care and its championing of our pristine Preserve. The Conservancy with its research and education programs has become one of my gifting priorities." BJ Tatro, master steward, adds, "Just look at the development that encroaches on the mountains virtually everywhere you look in the Valley, then look to the McDowells and relish the fact that what you see is just that—the mountains."

Dan Gruber, legacy steward, imagined the McDowell Sonoran Conservancy Field Institute in 2005. It took a few years to became reality. In 2009, the Conservancy accepted Gruber's founding donation and leveraged it into a grant from the Nina Mason Pulliam Charitable Trust that supported the Field Institute's initial flora and fauna surveys. Gruber noted, "My subsequent contributions have focused on supporting specific research initiatives valuable for the Preserve, and lately, graduate fellowships for work that will produce useful results." He continues, "I believe in supporting projects that will deliver continuing value over time. I want to help create something significant and enduring, something that we accomplish together. Our Conservancy has abundant opportunities for investment in research and education. That's why I've made the Conservancy a substantial beneficiary in my estate plan," says Gruber.

Tom Hartley, Conservancy board member states, "There is no shortage of important reasons to offer financial support to the mission of the Conservancy. From preservation of the Sonoran desert's unique flora and fauna, to maintenance of its trails that provide the best outdoor recreation in the region, to offering school children interactive education programs about the Sonoran Desert, our Conservancy has so much to be proud of. But all of this requires continued investment of time and treasure," explains Hartley. "The work of the Conservancy," he continues, "also gives assurance that the Preserve's spectacular views and vistas for the visitors to the northeast Valley will never be changed by new development."

This land IS your land. So, please consider a financial investment today.

Hikers meander through a wonderland of brittlebush flowers in Scottsdale's McDowell Sonoran Preserve. Photograph by Marianne Skov Jensen.

McDowell Sonoran Conservancy

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Golden Mexican poppy (*Eschscholzia californica ssp. mexicana*) mix with purple distant phacelia (*Phacelia distans*). Mexican poppies are showy flowers with highly divided blue-green leaves. Phacelia flowers form in clusters of violet to almost white flowers at the end of an unfolding curled stem. Its leaves are deeply, and doubly, lobed, and have glandular hairs. Both flowers are common in the Preserve. Photograph by Marianne Skov Jensen.