



MCDOWELL
SONORAN
CONSERVANCY

Mountain Lines

MAGAZINE OF THE MCDOWELL SONORAN CONSERVANCY WINTER 2021

**30 Reasons Why
We Love the
Conservancy**

**The Evolution
of the McDowell
Sonoran
Conservancy's
Mission**

**Spark Your Inner
Scientist in the
Great Outdoors**





Justin Owen, CNAP

As we head into 2021, we are excited to be celebrating our 30th birthday! In January 1991, an inspiring group of local advocates had the passion and drive to envision what is now Scottsdale's McDowell Sonoran Preserve. They created the McDowell Sonoran Conservancy (formerly Land Trust) to drive their vision into reality. Over the last 30 years we, as an organization, have evolved, and we hope you will enjoy reading our feature article on the evolution of our mission. We are proud and

humbled that many of those early advocates continue to have strong connections to the Conservancy. We hope you will join us in looking back 30 years to remember how this amazing organization started.

It will be interesting to see what 2021 has in store for us. While the pandemic has been challenging for all of us, there have been some positive outcomes as we have been driven towards online learning more quickly than we had planned. A year ago, how many of us knew what Zoom, Google Meet, and Microsoft Teams were? Now we all hop onto these applications to share, learn, teach others, collaborate, and connect. Our personal connections have never been more cherished.

Like many others, we have relied on the mental and physical health benefits of natural open spaces. We encourage you all to spend some time enjoying them.

We appreciate your continued support of the Conservancy. Stay safe, and I look forward to seeing you out on the trails. ▲▲

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The Evolution of the McDowell Sonoran Conservancy's Mission

By Dan Gruber,
McDowell Sonoran Conservancy Legacy Steward

Introduction

Change is natural and necessary over time. The McDowell Sonoran Conservancy has existed for 30 years, and the political, social, economic, and conservation environment has changed dramatically. Scottsdale's McDowell Sonoran Preserve was created and largely completed during that period. If the Conservancy's focus had not changed over that time, the organization would have become irrelevant.

This is not a history of the Conservancy; it is an outline of some of the major formative steps and evolutionary changes that have led to where we are today. Although the Conservancy's staff and many still-active stewards have been instrumental in these transitions, this outline focuses mainly on the role of the executive directors and selected former stewards in the organization's evolution.

This evolution brought us to the focus areas in the current mission: The McDowell Sonoran Conservancy preserves and advances natural open space through science, education, and stewardship.

Summary

- The Conservancy has made a number of significant transitions in emphasis over its history. Many occurred because of changes in the needs and opportunities in the Preserve as it developed.
- Some of these transitions were initiated by stewards, most were reflected in the steward organization, and all had general steward support when they happened.
- Advocacy, stewardship, and education have long been, and continue to be, core elements of the Conservancy's purpose.
- Science has been a major focus for almost half the organization's history.
- Conservancy advocacy always has focused on all of Scottsdale. Sharing the benefits of our science, education, and stewardship with the community beyond Preserve users and with conservation organizations and land managers beyond Scottsdale has been actively pursued for almost a decade.

At each transition, the Conservancy has expanded its perspective and capabilities without losing sight of why it started. Stewards have played a central role in this evolution.

Conservancy 1.0 – Advocacy

At the Conservancy's inception in 1991, the Preserve did not exist. The main focus of the early organization, led by Executive Director Carla (her full legal name), was advocacy for creation of the Preserve. The original educational focus was advocacy – raising community awareness and



Carla, our second Executive Director, played a core role though the advocacy process to drive the creation of the Preserve.

About Us

The McDowell Sonoran Conservancy preserves and advances natural open space through science, education, and stewardship. We create a culture that ensures, preserves, and values natural open spaces for all to enjoy.

Connect with us:



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Steward #1 Chet Andrews and McDowell Sonoran Conservancy co-founder Jane Rau were key to establishing the Conservancy.

rallying support. The organization did not engage in stewardship or science because there was no Preserve in which to do so.

The first formal volunteer training was the development of a trail-building team by former steward Jerry Miller (which evolved into today's Construc-

tion and Maintenance program). The first organized training of volunteers to support the small but growing Preserve was organized by "Steward #1" Chet Andrews, E.D. Carla, and others in 1998 (the kernel of today's Steward Experience program). These were the earliest educational efforts focused internally, while community advocacy work continued. Stewardship activities were very limited because there were few trails and no official trailheads yet.

Education evolved in several forms. An informal guided hike program had been started by early board member Annie Collins, but in 2003 former steward Fred Klein made the program more formal with planned hikes open to the public (the Guided Hike program). Around 2004, Chet Andrews and other stewards with the support of staff began offering to the public some of the educational material already used for steward training (the Education program).

Conservancy 2.0 – Stewardship

The first official Preserve trailhead, Sunrise, was opened in 2005. Around 2006, with the completion of the Lost Dog Wash Trailhead and additional trails nearby, then-Preserve Director Bob Cafarella met with the Conservancy board. He laid out plans for future trails and trailheads and reminded the Conservancy of its commitment to help the City of Scottsdale maintain the Preserve. The need to support the growing Preserve with formal patrolling (the Patrol program), expanded construction and maintenance assistance, and shortly thereafter with steward-conceived trailhead hosts (the Pathfinder program) led to an acceleration in the recruiting, training, and deployment of stewards. In 2009, stewards initiated and implemented a comprehensive redesign of the steward organization to support this growth.

Under Executive Director Ruthie Carll, advocacy continued because land acquisition and protection still were needed, and education in the form of guided hikes and public programs expanded. With the opening of the Gateway Trailhead in 2009 and shortly thereafter the Bajada Nature Trail, education expanded to include interpretive docents and youth and family programs (the Nature Guides program).

Conservancy 3.0 – Science

In 2008, the first professionally-supervised science project involving volunteers took place in the Preserve. The success of this steward-conducted



Education comes in many formats. Our trailside ambassador crew provides key information and safety tips for visitors. Photo by Lynne Russell

work led E.D. Carll and stewards to create the Field Institute in 2010. The purpose of the Field Institute was to develop science-based information to support Preserve management decisions. By 2012, field research activities, including a comprehensive flora and fauna survey of the Preserve, had expanded to the point that the Citizen Science program was established.

Advocacy continued as the City was making aggressive acquisitions of State Trust Land to add to the Preserve. Stewardship continued to grow with ongoing Preserve expansion and the opening of more trails and trailheads. And education on the trails and in classrooms continued to expand with the formalization of educational hikes and implementation of the

natural history lecture sequence. The Pastfinders group emerged to conduct research and provide community education related to the region's human history.

Conservancy 4.0 – Regional Engagement

The Field Institute (now Parsons Field Institute) staff and Citizen Science stewards initiated development of the Ecological Resource Plan (ERP) for the Preserve in 2013, modeled on planning documents for national parks. In the course of developing the ERP, Executive Director Mike Nolan and Field Institute staff convened local conservation organizations and land managers to explore common

interests and concerns. At around the same time, Field Institute staff and Citizen Science stewards were among the founding members of the Central Arizona Conservation Alliance (CAZCA) sponsored by the Desert Botanical Garden, planned as a knowledge-sharing hub for regional conservation organizations. E.D. Nolan and the Field Institute staff decided to engage regionally through CAZCA, and since then the Conservancy and stewards have played a leading role as members of the CAZCA Steering Committee, in developing the Regional Open Space Strategy published by CAZCA in 2018, and as a regional center of expertise for non-native plant removal and native plant restoration. In the latter role, Field Institute staff



Mike Nolan recognized the need for regional collaboration, photographed here with Christine Kovach, one of the Preserve Pioneers.

and Citizen Science stewards provide training to and work with volunteers and staff from other conservation organizations and land managers across the Valley.

Around this time, Conservancy staff and stewards worked with the managers of the Desert Mountain development in north Scottsdale to create safety-related plans and protocols for the development's trail system. More recently, our Conservancy worked with the White Tank Mountains Conservancy on the initial development of their volunteer program. We currently are conducting projects with Maricopa County Parks and Recreation to identify degraded lands in selected regional parks, building on work done in

2018 in the Preserve.

Our educational offerings increasingly draw people from throughout the northeast Valley, and we have presented programs in Phoenix, Fountain Hills, Tempe, and Rio Verde. Our youth activities target schools not only in Scottsdale but school districts throughout the Valley.

Conservancy 5.0 – The Preserve and Beyond, Preserve Visitors and Beyond, Scottsdale and Beyond

From its beginning, the Conservancy understood that the creation, funding, and sustainability of the Preserve depended on mobilizing the

entire community, not just potential Preserve neighbors and users.

Over the years, the Conservancy has offered educational programs in many Scottsdale locations and nearby areas. We believe that as people better understand the desert's natural and human history, they will be more likely to preserve it in Scottsdale and elsewhere. Many of our activities are publicized regionally, and our longstanding *Mountain Lines* periodical is distributed far beyond Scottsdale. Field Institute experimental results are published in peer-reviewed scientific journals so that the results can be shared and used widely.

Under Chief Executive Officer (C.E.O), formerly Executive Director



Construction and Maintenance, our first formal program, has evolved over the years and often rights cacti that have toppled in addition to ensuring the trails stay in such great shape.



Youth education is key to inspiring future stewards of the land. Photo by Lynne Russell

Justin Owen, the Conservancy has recognized that its applied research, desert-focused education, steward organization, and stewardship protocols all are potentially useful in arid lands throughout the nation and the world. Even as the organization continues to focus primarily on supporting the Preserve and the central Arizona region, it is increasingly mindful of how its work could be beneficial elsewhere.

None of these increasingly outward-focused activities has diminished the Conservancy's commitment to protecting and enhancing the Preserve and the experience of

Preserve visitors. All the Conservancy's direct service programs continue to prosper. Our work in and for the Preserve continues and is supported by our contract and partnership with the City of Scottsdale, initiated by E.D. Carll and the Conservancy board and subsequently enhanced by E.D Nolan and C.E.O Owen.

The Conservancy's regional, national, and global activities build directly on what is done and learned here – successes that other organizations can learn from and use in their own conservation work. The Conservancy also remains acutely aware that the continued success and existence

of the Preserve requires ongoing support from all Scottsdale residents, not just the portion that directly benefits from or uses it. Also, support for preserving open space anywhere, especially in urban areas, depends on continued broad public support for conservation and preservation, ideas that we champion.

The Conservancy's future lies in the Preserve and in other arid land open spaces, in serving Preserve visitors and also those who don't or can't visit, and in Scottsdale and other communities that want to preserve natural open space. ▲▲



Share the Trails so We All Enjoy This Magical Place

By Barbara Montgomery-Ratcliff,
McDowell Sonoran Conservancy Lead Steward

Horses differ in how they react to hikers and bikers, so it is always best to ask the rider how to act around their horse. Photo by Jenny Powers

When a hiking friend and I are out on the trails, invariably one of us will stop and proclaim, “We are so lucky to be in the Preserve!” The other will often answer, “It feels like it is just for us!”

Of course, Scottsdale’s McDowell Sonoran Preserve isn’t “just for us.” The Preserve sees more than 750,000 visits a year. Visitors come to hike, bike, run, ride their horses, or climb a rock face. Scottsdale’s Preserve Ordinance states that the Preserve is meant for all these very different activities. Therefore, for the Preserve to work as envisioned, all of us must share the trails. Experience tells us that we do that best by being

courteous, cooperative, and by communicating with others.

Being courteous means recognizing how we are similar to other visitors – valuing natural open spaces – and recognizing that our differences reflect how the Preserve contributes to the quality of life for our diverse community. We see this respect in action when bikers, hikers, and equestrians help each other, whether it is by providing directions, a bottle of water, or a map or offering to take someone’s picture.

Being courteous isn’t enough. We often don’t realize that our behavior can negatively affect others on the trails. We’re happy to be hiking with

friends and stopping to point out the views, but we may not realize that we are blocking the trail for others wanting to pass us. We are exhilarated by speeding down a trail with just the right amount of challenge as we round a turn, only to see surprised hikers



Lead biker preparing to yield by slowing the group before they reach hikers. Photo by Jim Tillinghast



Friendly communication with others on the trail adds to everyone’s enjoyment. Photo by Jim Tillinghast

scramble to the side.

To avoid these kinds of problems, we need to cooperate with others by following Preserve rules. The basic rules apply to everyone. When by yourself or in a group, don’t take up more than half the trail. Travel at safe speeds, slow down, go single file in congested areas, and, where your sight line is limited, call out to others you want to pass. Yield to horses and ask the rider what other things you should do. When in doubt, give the other the right-of-way. Other rules



The Preserve’s scenery is captivating but it is safer for hikers to stand along one side of the trail when they stop to enjoy the view. Photo by Jim Tillinghast

apply to specific visitors: bikers must yield to everyone else, and bikers and equestrians should tell those they pass if others are coming behind them and how many. Visitors with pets must control them with a leash and clean up after them. Those with children need to keep them close and on the trail. If we all cooperate with each other in following these and other rules, we will make the Preserve a safer place for everyone.

How can you learn about these rules? Pay attention to Preserve signs. Ask for clarifications from stewards. Look them up in Scottsdale’s Code of Ordinances, Chapter 21, Article III (<http://bit.ly/COScode>). The McDowell Sonoran Conservancy coordinates educational events called Share-the-Trails Days, during which stewards are stationed in the parking lots, at the trailheads, and on the busy trails to review the rules and answer questions. As one steward volunteer explained, “Even though most of our hikers, bikers, and equestrians are courteous,

we all need to be reminded of trail etiquette and safety so that our natural spaces can be enjoyed by all.”

Finally, communicating back and forth with others on the trail enhances everyone’s safety and enjoyment. Our communication can warn others of danger (“I saw a rattlesnake a quarter mile up the trail”), prevent collisions (“Runner coming up on your left”), and offer help (“Would you like to look at my map?”). However, effective communication requires a message and a response. For example, after a biker calls out “Biker coming on your left,” he should look for a sign that he has been heard and, if not, stop before passing.

Practicing the three Cs of courtesy, cooperation, and communication gets us beyond our user group perspective. It promotes thinking about our impact on others and being mindful of ways we can work together to share the Preserve’s wonderful trails. ▲▲



Stopping to offer help to others on the trail is not only courteous; it contributes to the safety of others in the Preserve. Photo by Jim Tillinghast



Pre-COVID-19, our steward team taught 600+ third grade students about their place in our ecosystem. Through a standards-based educational event that met their curriculum, students spent time in nature while also having fun. Photo by Lynne Russell

30 Reasons Why We Love the Conservancy

By McDowell Sonoran Conservancy stewards

In January 2021, the McDowell Sonoran Conservancy proudly celebrates our 30th birthday. How much has changed and how far we have come in the 30 years since our Preserve Pioneers had the vision and drive to help create Scottsdale's McDowell Sonoran Preserve! Today, our focus is on the three core pillars of Science, Education, and Stewardship to empower people to be stewards of the land.

As part of our 30th birthday celebrations, we asked stewards to tell us why they love the Conservancy. Below are 30 reasons they shared, which mirror why so many of us happily include being a Conservancy steward as part of who we are.

- The Conservancy is awesome!
- The ability to make an impact on preserving our beautiful Sonoran Desert.

- Helping preserve a piece of nature that will remain unspoiled and available for generations to come.
- Enjoying the beauty of nature with physical and mental good health thrown in at no extra charge! How awesome is that?
- "I love being a steward because it is an opportunity to spend more time in my 'Happy Place' and give back to the community."
- The opportunity to engage at multiple levels.
- Being able to identify needs and develop tools to advance the mission of the Conservancy.
- "I had a business partner that retired, sat in front of the TV watching and became boring. It was inspiration to me to do the opposite."
- The sense of accomplishment

when completing a project.

- "As a Legacy steward, I love the Conservancy because it gives me so many options and levels to be involved. I have witnessed the evolution of the Conservancy's mission over time and am as proud today to support its work as I was 27 years ago."

Building relationships:

- The sense of community with a diverse group of people.
- So many relationships just waiting to be discovered.
- Meeting so many fun, positive, and caring people who love the outdoors!
- "I have a new family in my fellow stewards. Their enthusiasm and welcoming attitude have nurtured



Many stewards appreciate the friendships they create through our steward program. Photo by Lynne Russell



There is always time to have fun! Photo by Lynne Russell

- me and allowed me to find my way."
- Seeing joy on faces and increased self-esteem when visitors have finished an event.
- Creating friendships with a multitude of like-minded, awesome people.
- "I get to meet people who like to join me for a cold beer after a hike."
- "The Conservancy is awesome because I am making friends while educating people about the beauty of the desert."
- A sense of pride when a guest thanks us for the work we do.
- "Provided an easy transition into

- retirement. Toward the end, work got in the way of my volunteer work."

Educate myself and others:

- Positively influencing management of nature while doing things we love.
- A way to share our love of the outdoors with visitors from around the world.
- Teaching people new ways to enjoy the Sonoran Desert.
- Introducing people to this magical place (such as a young first-time visitor to Brown's Ranch, who said, "Cool, we saw a rattlesnake. It's

- not Disneyland!")
- Learning new skills and discovering talents we didn't know we had.
- "Learning! I have learned something every day as a steward."
- Using our skills, talents, and interests to benefit our natural world and people.
- Being a volunteer is highly educational and fun.
- Engaging as a steward stops cognitive decline in retirement.
- "Enjoying myself! I am having so much fun learning, educating, and participating in the activities."

We are so grateful for everyone who makes the Conservancy what it is. Here's to the next 30 years! ▲▲



The Conservancy provides abundant opportunities to educate ourselves so we can help educate others. Photo by Lynne Russell



Hands-on youth education helps our younger community learn through experiments to drive engagement. Photo by Lynne Russell

The Evolution of Interpretive Signage

Scott Hamilton,
Natural Resources Manager, City of Scottsdale



On the view deck at Fraesfield Trailhead, a map shows the mountains you can see in the distance to help orientate yourself.

The interpretive signs at Scottsdale's McDowell Sonoran Preserve trailheads serve the primary function of connecting our visitors to the place they are visiting. These signs are an important means of educating the public about various elements of the Preserve, including the rules and regulations, personal safety preparedness, and the rich natural and cultural history. We have learned a lot over the past 26 years with how to best present these messages to the public and have done so within a shifting landscape of

how people interact with and absorb educational messages. There is a common belief that our attention spans have continued to

shrink as technology and social media have advanced, some saying that our attention spans are now shorter than that of a goldfish. I haven't seen

many goldfish in the Preserve recently, but we have certainly taken steps to get our most important messages in front of people in a way that they can quickly digest the information with limited time commitment. If the information feels overwhelming, people will just ignore it and move on. Imagine the feeling you get when you go to a website that is heavy with text. If you are like me, you cannot get your mouse to



The eye-catching signage at Granite Mountain Trailhead shows the life phases of the iconic saguaro.



The new pollinator signage at Fraesfield Trailhead allows visitors to learn about things they might see along the trails and also understand the interconnectedness of our ecosystem.

the red "X" quick enough to escape the time commitment to digest it. I move on to something with less text and more appealing graphics.

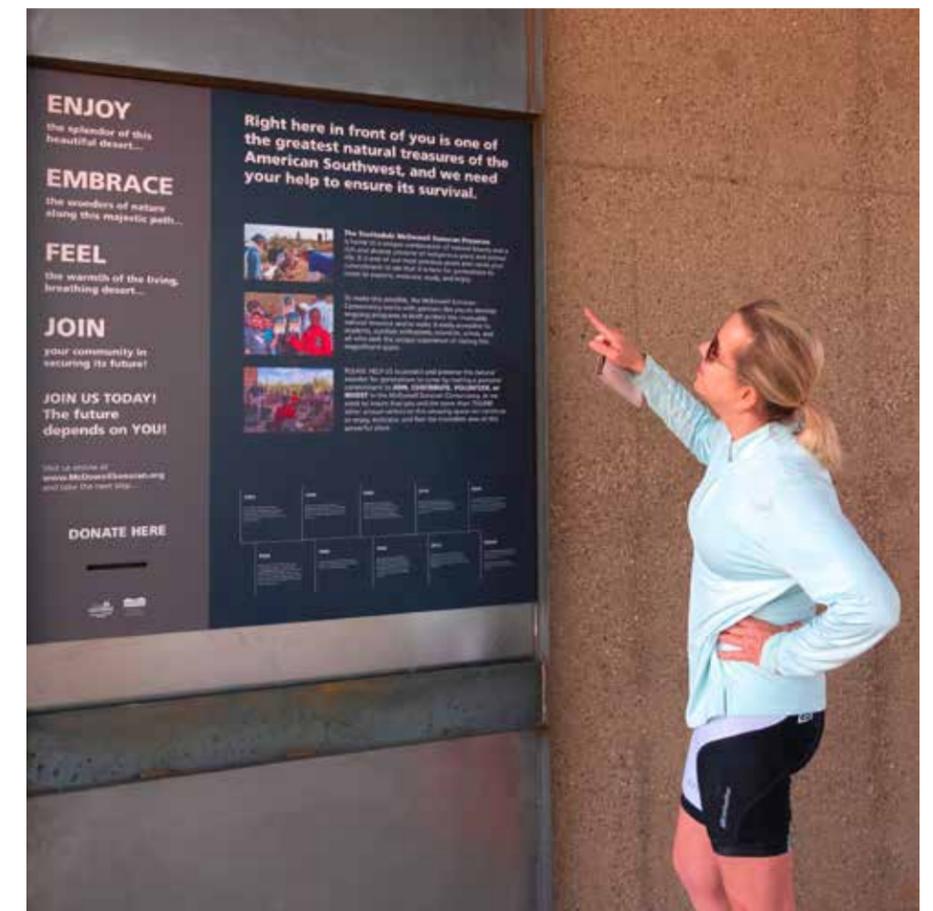
Excellent illustrations of our advancements in messaging are the interpretive and regulatory signs installed last year at the Granite Mountain and Fraesfield trailheads. The team of content producers from the McDowell Sonoran Conservancy and the City of Scottsdale worked closely with the graphic designers from Smith Group to create signs that were visually appealing, have limited text, and are able to be digested on multiple levels, depending on the time commitment the visitor is willing to invest. We were guided by an overarching principle expressed in the wayside Exhibit Guidelines of the National Park Service: "...few people come to parks for the express purpose of reading."

A great example of our efforts is the interpretive sign panel at the Fraesfield Trailhead on the importance of pollinators. The sign panel keeps text to a minimum and includes engaging photos and captions. It can be digested on several levels, depending on the interest level of the visitor. The main heading of "Plants Need Pollinators" is clear and easy to understand. If a visitor does nothing but read this simple three-word heading, he/she has learned something. If the visitor chooses to invest a bit more time in studying the panel, he/she can read the main headings across the top of

the sign. From this, the visitor will quickly learn five important aspects in the relationship between plants and pollinators. Or the reader's eye may go directly to the engaging photos and associated captions, which provide some of the basic elements of the importance of pollinators.

Over the many years of planning and creating sign panels in the Preserve, we have honed the design in two primary ways. Providing panels with engaging images and less text

and providing information that can be absorbed on various levels attracts people with varying levels of interest and amounts of available time. By employing these strategies, we enrich the experience of the user and develop a more engaged and educated user base. This ultimately improves understanding of the natural and cultural resources of the Preserve, which in turn will build support for the protection of these resources for years to come. ▲▲



Signage that provides tips for visitors about how to stay safe while enjoying the Preserve are an important aspect of trailhead education.

*Guided by Conservancy stewards, a group of hikers descend into Coyote Canyon.
Photo by Dennis Eckel*



Coyote Canyon – A Photo Journey

By Jim Tillinghast,
McDowell Sonoran Conservancy Steward

A serene geologic treasure lies hidden in Scottsdale's McDowell Sonoran Preserve.

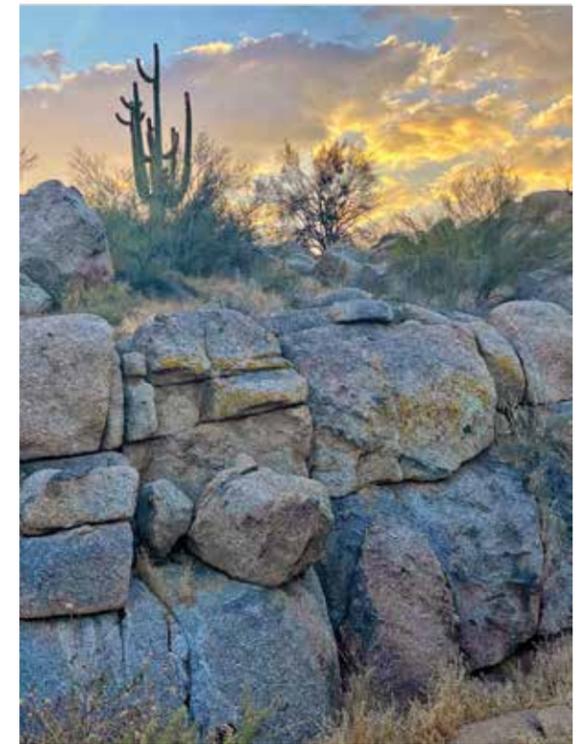
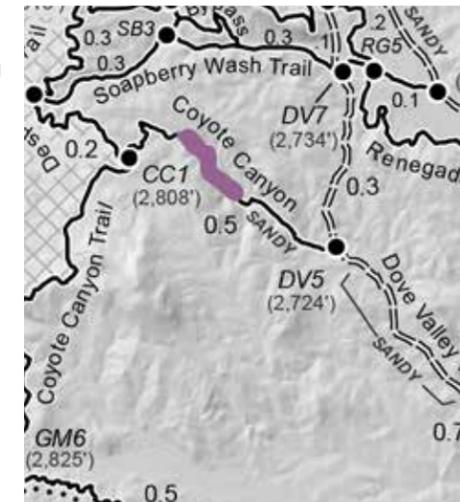
Prepare for a longer hike as it is 3.2 miles from the trailhead on the scenic Bootlegger Trail, Granite Mountain Loop, and Coyote Canyon Trail to marker CC1, which is the start of box canyon section of Coyote Canyon Trail. The box canyon section of the trail is 0.5 miles one-way.

You can either head back the same scenic way (7.4 miles total) or take in the western side of Granite Mountain Loop (8.4 miles total or 9.0 miles if you add a short side trip to Balanced Rock). If you want the shortest way back, you can make a loop by continuing along the sandy Dove Valley Trail and then south on 136th Express back to Granite Mountain Trailhead (6.0 miles).

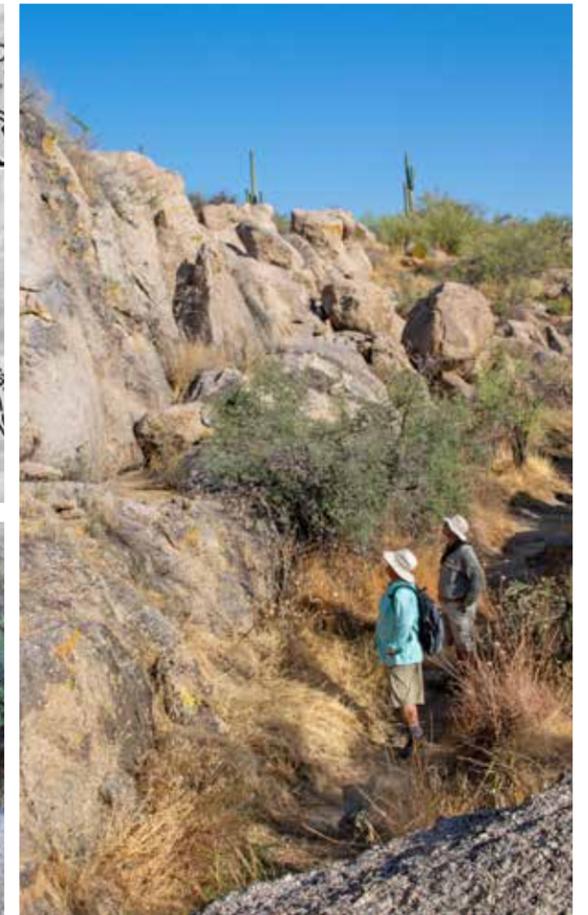
Logistics

Use Granite Mountain Trailhead for access to Coyote Canyon. There is no drinking water at the trailhead, so bring water!

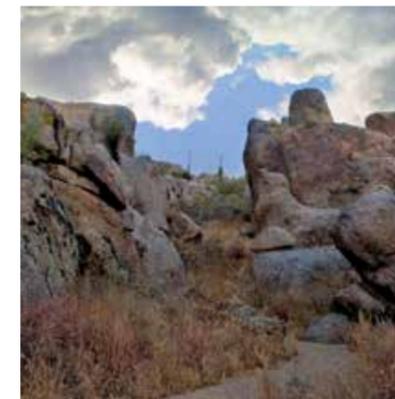
The Preserve is open from sunrise to sunset, and entry is free. Dogs, on leash, are permitted, but motor vehicles, including e-bikes, are not. All trails are shared by hikers, bikers, and equestrians. ▲▲



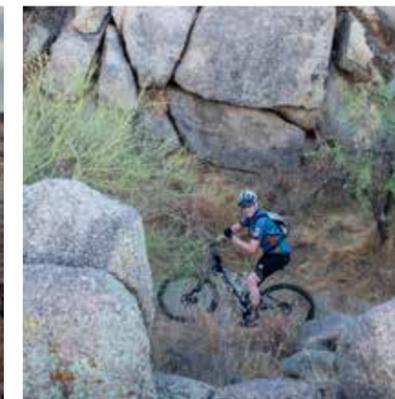
Enjoy the majesty of the granite boulders.



The peace and serenity of the area should be savored.



Granite boulders guard south entry to the canyon.



This unique trail helps you get away from it all.

The trail leads you through a small box canyon. Photos by Jim Tillinghast



Ever wonder what causes that special smell in the desert when it is about to rain? See if you can identify which plant causes this next time you are out in the desert. Photo by Dennis Eckel

Spark Your Inner Scientist in the Great Outdoors

By Nicole Kallman,
McDowell Sonoran Conservancy Education Manager

What makes a scientist? A fancy degree? A white lab coat? A knack for Excel spreadsheets? Looking at the Oxford Dictionary's definition of a scientist, one is "a person who is studying or has expert knowledge in one or more of the natural or physical sciences." Contrary to what most people think, lack of expertise does not preclude you from being in the scientist club. Expertise and understanding are certainly necessary if you're going to be building

rocket ships or developing vaccines, but anyone can be part of the amateur scientist guild if that person has curiosity and a willingness to explore the world around them.

So we are curious scientists wanting to learn more about the natural world. What better place to start observing than the great outdoors, one of the greatest sources of inspiration and creativity for both artists and scientists alike? In 2020, we discovered learning truly transcends beyond

the traditional classroom. The world itself provides opportunities for us to continually learn and grow throughout our lives, even if we never return to formal educational institutions. Nature is an incredible teacher, stirring the curiosity of scientists for millennia, and while our understanding of the world around us has grown significantly over time, there is still room for surprise and wonder every time you step outside.

What are some ways you can be a scientist in your everyday life?



Don't forget to use your sense of touch to explore things around you. Be careful as many things in the desert have spikes!

- Use your senses. Using your senses of sight, smell, and sound connects you to your environment. When you're outside, whether in your neighborhood or Scottsdale's McDowell Sonoran Preserve, what do you see? What sounds do you hear? Are there any smells you notice? Observing your environment is the first step towards discovery.
- Ask questions. Based on what you observe with your senses, what questions do you have? Your questions are leading you to a deeper understanding of the natural world.
- Investigate! You may not have fancy test tubes or a laboratory to conduct experiments in, but you have the power of the internet! Oftentimes, a quick entry into a search engine will yield the answer to your question. Or, perhaps, it will lead you on a deep dive into even more complex topics



Use all your senses when you visit natural open spaces to appreciate your surroundings. Ever wonder how these cacti survive, especially with so little rain this year?

that you had initially questioned. That's the beauty of science. Science is a never-ending cycle in which you continually expand your knowledge and understanding of the world around you.

If we take care of it, nature will always be here to inspire and excite. We can connect with nature in an incredibly tangible way, yet it always provides something new to spark our curiosity. So go forth, my fellow scientists. Pack your water, first aid, and snacks, and don't forget your curiosity. ▲▲

Hike with a Naturalist – Anytime!

Tiffany Sprague,
McDowell Sonoran Conservancy
Parsons Field Institute Manager

Do you ever wish you could bring a naturalist on your hikes to tell you what all those plants and animals are? You can! A simple application called iNaturalist connects you with a community of naturalists who can help identify any living (or formerly living) thing you see in nature. You also create a personal record of when and where you saw different species, and your observations can be used by scientists (including at the McDowell Sonoran Conservancy) to better understand and protect our world. It's a win-win-win!



iNaturalist gives you access to experts and allows you to determine what you have found during your visit.

You can access the program via the internet or download an app on your phone. Snap a picture and upload it to iNaturalist, then take a guess at what you saw. No clue? No worries! The app will suggest an identification based on the image(s) you upload. Then a community of naturalists will help confirm the identification.

Observations you make while in the Preserve and other regional areas will help us! We can better understand the distribution of flora and fauna in the area and work to protect native species.

Try it out! Visit www.iNaturalist.org to set up an account, and then get out there and start observing! ▲▲

What Bird Was That?

By Rick Pearce,
McDowell Sonoran Conservancy Master Steward
and Core Leadership Team Chair



The American kestrel (Falco sparverius) is a small, colorful falcon that hovers for prey on rapidly-beating wings. Photo by Lynne Russell

Have you ever noticed a bird flying by or perched in a tree and wondered what kind it was? Or maybe you have heard a melodic bird song and wanted to identify the “artist.”

With an abundant variety of wildlife present in the Sonoran Desert, birds are often the most accessible for observation. Birds seem to be everywhere. Most are active during daylight hours. Many have distinctive songs or calls. Colors range from subtle to vivid.

Birdwatching can be as simple or

as complicated as you care to make it. It is an activity that can be enjoyed for a few minutes at a time or for as long as you like. You can watch birds from your house or yard, in your neighborhood, at parks, or in more open natural areas. You can do it alone, with family or friends, or join organized groups for birding events. You can make a game of seeing who can spot the most species.

Sophisticated equipment is not required. In fact, the first requirements are not equipment at all. Among the most important factors are vision and

hearing. No matter how good your vision is, a pair of binoculars is essential to getting good, close-up views. Many birds are small, move quickly, and are found in dense vegetation. Also, birds are frequently heard before they are seen, so learning to listen carefully is a skill to practice.

You might say, “Okay. The idea of enjoying and identifying birds appeals to me, but how do I get started?” There are apps for that! Plus, there are excellent field guides, either in print or digital format. Any of these will provide



Two woodpeckers common in central and southern Arizona are the Gila woodpecker (Melanerpes uropygialis; left) and the gilded flicker (Colaptes chrysoides; right). Photos by Lynne Russell

good descriptions, photos, marks to look for in the field, and discussions of behaviors such as nesting, diet, and range. You can quickly learn which birds are year-round residents in your area, which are migrants that pass through briefly on their way to or from breeding grounds, and which are seasonal residents – some in winter and some in summer. If you use these resources to look up birds you have seen or heard, you will be surprised how rapidly your knowledge will grow.

When you are in the field, wear



The verdin (Auriparus flaviceps) is a southwest specialty. They are approximately 10 cm long, gray, and have a yellow face and rufous epaulets. Photo by Lynne Russell



Costa's hummingbird (Calypte costae) is around 8 cm long; the male is very colorful with a purple or amethyst throat and crown. Photo by Lynne Russell

neutral-colored clothing and move slowly and quietly. You won't always have an unobstructed view of a bird in the open. You might hear a call but not be able to locate the bird. Watch for movement, the flick of a tail or a sudden disturbance of leaves on a small branch. Try not to stare solely at where you think the bird is. Let your peripheral vision detect motion in the general vicinity. Once you catch some movement, then you can zero in on the location.

“You say I need binoculars. Aren't



Arizona's state bird is the cactus wren (Catherpes mexicanus). At 18 cm long, this vocal wren has a white eye stripe. Photo by Lynne Russell



The curve-billed thrasher (Toxostoma curvirostre) has pale orange eyes, and you may well hear their characteristic two-note call. Photo by Lynne Russell

they expensive? And how do I know which ones to buy? I am confused.” Sure, they can be expensive, but they don't need to be. You may acquire a serviceable pair of binoculars for less than \$50. The more features you want, the more they will cost, of course, but features such as high quality optics and waterproof construction are not necessary for most purposes. Only buy what you need; you can always upgrade the features if you find your birding is becoming more serious.

Following price, the most important things in binoculars on which a casual birder should concentrate are power (magnification) and field of view. Magnification of 6 to 10 times is fine for most birding. A lens diameter of 42 to 50 mm will give adequate field of view.

So what are you waiting for? As the weather warms and the spring migration takes place, the opportunities abound. More than 175 species of birds have been recorded in Scottsdale's McDowell Sonoran Preserve alone. How many can you find and identify? ▲▲



Stewarding Through COVID-19

By Gina Clark,
McDowell Sonoran Conservancy Steward

Social distancing while working in the field ensures we can continue our important work but also maintain our stewards' safety. Photo by John Loleit

Throughout the pandemic, our stewards have remained very engaged and busy. As the saying goes, "when life gives you lemons..." the inherent positive nature of our amazing stewards made lemonade.

If you were in Scottsdale's McDowell Sonoran Preserve this spring and/or summer, you likely spotted McDowell Sonoran Conservancy stewards in their blue shirts hiking, biking, and riding horses on the trails. These stewards answered questions, gave directions, monitored trail conditions, and kept visitors safe, all while social distancing. Conservancy leaders realized early on that the trails were going to get very busy as a result of work, school, and gym closures. Based on data from trailhead counters, we may well surpass one million visits

into the Preserve in 2020, a significant increase over prior years.

Our Construction and Maintenance team tackled projects with small groups that allowed for social distancing. The team lifted fallen cactus plants, improved trail drainage, and helped with fire abatement at trailheads. They also partnered with the City of Scottsdale to remove small cacti from the Pima Dynamite Trailhead



We kept the teams smaller but still serviced our off-trail cameras, which help us assess habitat connectivity and the impact of urbanization on wildlife.

area where new facilities are under construction. These plants will later be included in the final landscape design.

Conservancy stewards supported a multitude of ongoing Citizen Science projects. Small groups of trained stewards participated in both bird and butterfly counts, completed plant surveys, conducted experiments to address non-native plants, and mapped degraded lands. They also converted thousands of handwritten measurements from the plant surveys into a digital format that will be used as the basis for statistical analyses. Our wildlife camera team didn't let a pandemic stop them from moving forward with their work. The team tested ways to reduce the number of false positives (images with no animals in them) to improve project efficiency. We also participated in a nationwide

wildlife camera project called "Snapshot USA" to assess wildlife trends across habitats throughout the country.

"Redesigning" and "reimagining" were key words

for the Conservancy during this time. Stewards worked tirelessly to redesign our new stewardship orientation class, Stewardship 101. A new program called Sonoran Desert 101 was fine-tuned and will be incorporated in the steward qualification process. This course covers key elements, including geology, ecology, history, flora, and fauna. And, of course, stewards became comfortable with technology. From our online youth education offering, Conservancy Kids, to attending virtual meetings on Zoom and Google Meet, stewards embraced technology.

In February 2020, we ran our last Stewardship 101 program before the pandemic caused us to cancel these events. With the help from his mentor, one new steward completed the steward qualification process quickly and was poised to jump into multiple



Face coverings have become the norm for all of us. Having them in hand when hiking is helpful in case we cannot adhere to social distancing.

activities. Sadly, this plan changed with the cancellation of our activities, but he still managed to spend many hours being the "eyes and ears on the trails," helping with multiple construction and maintenance projects, and partici-



Righting fallen cacti remains a crucial part of what we do.

pating in our remote degraded lands mapping. When asked his thoughts about becoming a steward just as we were forced to pivot, he said, "I am truly amazed by how rewarding my

hours have been. I can look back on the year and see the incredible value the Preserve is to the people who partake in what it has to offer. The Preserve acted as a refuge from the day to day issues of the pandemic, especially in the early days of COVID-19. I could see it in the eyes of the visitors when we crossed on the trail. Our pulled-up buffs were the only reminder of what was in the 'outside' world, and they could get lost in the beauty and peacefulness of the desert."

These are just a few highlights of the work that Conservancy stewards completed during the COVID-19 spring and summer. Although stewards are anxious to get back to work with the public, these activities kept them busy and engaged and moved the Conservancy forward in these challenging times. ▲▲



Learning control while on your bike is essential as you hit the trails. Photo by Lynne Russell

Need to Fine-tune Those Bike Skills?

By Wendy Wilson,
McDowell Sonoran Conservancy Steward and Licensed Canadian National Mountain Biking Coach

Riding a bike is “old hat,” isn’t it? You did it as a kid. How hard could it really be to get back in the saddle and just ride?

The McDowell Sonoran Conservancy offers a no-fee mountain bike clinic once a month from October through April to show you how easy it can be to regain your skills and joy for riding.

For you, the clinic may reinforce old skills or teach new ones to give you confidence moving forward (pun intended). Check our website for the



Our experienced bike stewards teach practical tips to help you be safe while enjoying your ride. Photo by Wendy Wilson

dates we offer these clinics and select a date that works for you. Then fill out the liability waiver online, come out to Scottsdale’s McDowell Sonoran Preserve, and enthusiastic stewards will greet you. Bring a helmet and mountain bike in proper working order; we check the saddle height and tire pressure for you! Bring water and a snack. We’ll help you determine additional items you need for future rides on your own.

At the clinic, you will participate in drills to develop and practice specific skills. You will then connect these skills together, so you feel confident when riding. Topics such as braking, shifting, cornering, obstacles, speed, body position, and much more are covered. Afterwards, you will use these skills on a group ride in the Preserve. Riding around cacti will become easy, and the Preserve will become your new favorite place.

During the group ride, participants pair with knowledgeable stewards, so you always have someone to talk to. They will reinforce the skills learned while riding in front or behind you and also teach the important communication skills for mountain biking etiquette on multi-use trails.

What if you are an experienced rider? Come add to your knowledge and/or skill base. You can never stop learning, even if it’s one new thing or something you had forgotten. The whole reason I went into mountain bike coaching was because I wanted to know more. One riding course led to one written course and so on, until I had my Canadian National Coaching License.

After you enjoy our clinic, and practice your skills, you will be ready to join other Conservancy rides, meet new friends, and learn to love the Preserve – but in different ways. We offer Women’s Rides, during which we practice several riding skills, chat, and laugh. We also offer several educational rides during which you ride from trail to trail learning fascinating things about the Preserve. Our full perimeter Brown’s Ranch Ride will push you to higher levels. New this year is “Learn the Line;” it is clinic-like but more advanced and will give you the confidence to know



We are fortunate to have a great team of experienced mountain bikers who want to teach others to be safe. Photo by Wendy Wilson

which line to take and how to ride it in specific places.

A Cycling Life by Shane Robitaille sums up mountain biking:

- The wind*
- The speed*
- The rush*
- The need*
- The adventure*
- The play*
- The downhill*
- The way*
- The momentum*
- The uphill*
- The motion*
- The thrills*
- The landscape*
- The chase*
- The sweat*
- The race*
- The freedom*
- The bold*
- The way*
- To stay gold*

There’s a saying that you can’t buy happiness but you can buy a bike, and that’s pretty close!

We hope to see you at one of our clinics or other rides. Our clinics are currently on hold due to COVID-19, but we will restart these as soon as it is safe to do so. Please check our website mcdowellsonoran.org for our full schedule of events, including these clinics. ▲▲



After the teaching and practical tips, we head out on the trails for a short ride to put those tips into practice. Photo by Wendy Wilson



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Connect with us:



The Scottsdale McDowell Sonoran Preserve is owned by the City of Scottsdale and is managed through a unique partnership between the City of Scottsdale and the McDowell Sonoran Conservancy. Our shared goal for the Preserve is to maintain it in a natural state while providing appropriate recreational and educational opportunities for this and future generations.

Jacket Required.

Vests, fleece jackets, and gaiter masks to gear up for winter.

Visit conservancymerchandise.org to purchase your swag today!



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