

Mountain Lines

MAGAZINE OF THE MCDOWELL SONORAN CONSERVANCY

FALL 2023



FROM THE CHIEF EXECUTIVE OFFICER



Kelly McCullough, Interim CEO

Fall is always a welcome season in the desert. And after last summer's record-breaking temperatures, we can appreciate the cooling temperatures as activity ramps up in the Preserve.

This September marked the 100th class of new stewards! Over the years, over 1,600 caring citizens have stepped up to become stewards of our wonderous and unique Preserve. Partnering with our small but mighty staff, they care for and study the land and share what they learn with visitors, the community, and peer organizations.

This summer, we saw the damaging
Diamond Fire scorch nearly 2,000 acres of
protected desert, including nearly 300 acres in
the Preserve. Our team is partnering with the
City of Scottsdale and the McDowell Mountain
Regional Park to mount a collaborative restoration effort.

We have two exciting announcements to share. First, the new "My McDowells" photo contest will encourage everyone who takes to the trails to take their best shots and share the beauty of our desert.

And, coming in April 2024, Tour de Scottsdale is back! We are proud to revive the Tour Scottsdale for the benefit of the Conservancy and the entire Phoenix community. Local nonprofit organizations will create fundraising teams to support their causes, empowering us all to do better, together.

I hope you enjoy reading about the great work of the Conservancy. This issue of Mountain Lines covers much that you can look forward to this fall and beyond. And remember, without support from dedicated conservationists like yourself, none of it would be possible.

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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:









Cover photo: The trails from the Pima Dynamite Trailhead offer a variety of options for all trail users. Photo by Dennis Eckel

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Nearly 270 Acres of Preserve Land Burned During Recent Diamond Fire

By Trevor Heffner, McDowell Sonoran Conservancy Communications Coordinator



he recent Diamond Fire set nearly 2,000 acres of Sonoran Desert ablaze, including about 270 acres within Scottsdale's McDowell Sonoran Preserve. The June fire started in North Scottsdale and burned northwest of the McDowell Mountains. Incident land response came from one U.S. Forest Service Hotshot Crew, three Arizona Department of Forestry and Fire Management Type 2 Hand Crews, 10 engines, and two water tenders. In addition, air response came from a lead plane and large air tankers used to control the fire 1.

The area burned in the Preserve is known as the "Gooseneck," which makes up the narrowest part of the Preserve and provides important habitat linkage for animals moving between the northern and southern parts of the Preserve near East Rio Verde Drive. Conserving this corridor was a concern even prior to the fire due to an increase in surrounding urban development, a major road between the "Gooseneck" and the northern part of the Preserve, and a previous wildfire.

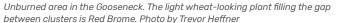
While some ecosystems (e.g. many coniferous forests or prairies) are

fire-adapted, the Sonoran Desert is not. Sonoran Desert plants are typically found in clusters with open spaces between them. Historically, these open spaces helped reduce the risk of high-intensity fires. However, over the past decade, humans have introduced invasive plants from other arid regions of the world.

Invasive plants like buffelgrass, fountain grass, and red brome have filled these open spaces, outcompeted native plants for space and resources, and increased the fuel load and likelihood of hotter, larger, and more

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Burned area in the Gooseneck. Notice the burn scars in a cluster pattern. The Red Brome that previously filled the gaps has burned away. Photo by Trevor Heffner

frequent wildfires.

The City of Scottsdale, with McDowell Sonoran Conservancy support, led an assessment of fire severity and saguaro damage along with damage to other cacti. While many cacti were lost in the fire, there is hope that some saguaros may make a recovery if damage from the fire was less than 30 percent. The Conservancy will help to document survival rates for saguaros and other species in the burn

While up to 80 percent of pre-fire ground cover was burned in some areas, the soil was not completely scorched, allowing many animals to hide and survive. The post-burn soil condition will also enable some plants to come back from their roots or seeds.

The Conservancy is committed to ensuring the desert burned in the Diamond Fire is restored to a healthy, native state – and you can help us! Spread the word about removing invasive plant species, follow us on social media for updates and resources, and consider donating to support our ongoing research and initiatives.

Together, we can ensure that the Sonoran Desert is here for generations to come.

According to the City of Scottsdale, here is what to do if you see a brush fire break out:

- Report brush fires immediately by dialing 911. Never assume someone else will make the call.
- Back your car into the garage or park it in an open space facing the direction of escape. Shut doors and roll up windows. Leave



Wildfires also impact the quality of habitat and availability of resources like food and shelter for wildlife like the Sonoran desert tortaise

keys in ignition. Close garage doors/windows. Disconnect automatic garage openers.

- Confine pets to one room. Make plans to care for pets in case you must evacuate.
- Follow instructions of emergency personnel. If advised to evacuate, do so immediately.
- Wear protective clothing, sturdy shoes, cotton or wool clothing, long pants, long-sleeved shirt, gloves, and handkerchiefs to protect your face.
- Lock your home. Tell someone when you left and where you're going. Choose a route away from fire hazard. Watch for changes in the fire's speed and direction 2.

1 Reference:

https://inciweb.nwcg. gov/incident-information/ aza4s-diamond-fire

2 Reference:

https://www.scottsdaleaz. gov/fire/wild-fire-prevention/brush-fire



Removing invasive grasses manually is a painstaking and labor-intensive, but effective, method of control. Photo by Tiffany Sprague

When the Smoke Clears

The Resiliency of Nature, with a Bit of Human Intervention, is Pivotal to Post-burn Recovery

By Trevor Heffner, McDowell Sonoran Conservancy Communications Coordinator

frequent and intense with increasing climate change, the modern Sonoran Desert is witnessing a transformation. The ecological disruption caused by more frequent wildfires than the ecosystem is equipped to handle is particularly challenging for the Sonoran Desert's delicate balance, where native plants and animals have adapted to survive in this arid environ-

Here, we'll explore the effects of wildfires in the Sonoran Desert ecosystem, focusing on its resilience

ment over millennia.

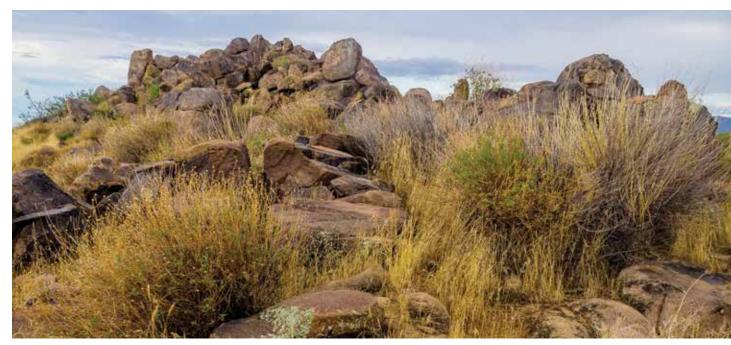
and the human intervention needed to facilitate a healthy and native recovery post-burn.

Effects of Wildfires

One of the most significant challenges in the aftermath of wildfires is the proliferation of invasive grasses. Non-native species, such as buffelgrass and red brome, have found a foothold in the burned areas due to the lack of competition and the addition of nutrients from the burnt plant material. These aggressive invaders

pose a threat to the survival of native flora and fauna, as they outcompete and displace indigenous plants that are essential to the desert ecosystem.

Wildfires can be devastating to the Sonoran Desert's diverse wildlife. Many species have evolved with fireadapted behaviors, but the increasing frequency and intensity of fires are disrupting these natural patterns. Smaller animals, such as reptiles and rodents, may struggle to find refuge during a wildfire, leading to population declines and imbalances within the food web. Larger animals, like javelinas,



Red Brome and other invasive grasses fill the gaps between native plants, increasing the available fuel load for wildfires. Photo by Jacques Giard

may lose critical habitats and face food shortages in the aftermath of a fire. Furthermore, migratory birds and insects may find their essential stopover points destroyed, leading to disruptions in their journey and potential declines in their populations.

Prevention and Post-burn Initiatives

While wildfires are a natural part of many ecosystems, the unprecedented frequency and intensity of modern wildfires necessitate human intervention to facilitate the restoration of the Sonoran Desert's health and biodiversity. In the McDowell Sonoran Preserve, it takes collaboration between the McDowell Sonoran Conservancy, the City of Scottsdale, and many other partners to implement effective management and restoration initiatives.

One management focus is combating the spread of invasive grasses. Extensive efforts are underway to remove these plants from the Preserve and may involve manual removal, controlled burns in non-wildfire seasons, and the use of selective herbicides where appropriate. Preventing the dominance of these non-native species allows native vegetation to reestablish and thrive.

Restoration initiatives focus on replanting native vegetation in the burned and degraded areas. By reintroducing indigenous plant species,



The White-winged Dove's migration is timed to align with the yearly saguaro blooms. With fewer saguaros, they lose a crucial resource they depend on to make their long journey successfully. Photo by Lynne Janney Russell

the Preserve can regain its ecological balance and provide food and shelter for native wildlife.

Continuous monitoring of native wildlife is crucial to understanding the long-term effects of wildfires and restoration efforts. The Conservancy is currently conducting a Wildlife Biodiversity Study using wildlife cameras placed at 60 different sites in the Preserve, as well as tracking 22 Sonoran desert tortoises through the use of GPS trackers and telemetry equipment.

As wildfires continue to impact the Sonoran Desert, the Preserve stands as a testament to the strength and resilience of nature. However, human intervention is pivotal in promoting a healthy and native recovery postburn. Through the implementation of strategic restoration efforts, removal of invasive species, and vigilant wildlife monitoring, the Preserve can continue to thrive as a sanctuary for native flora and fauna, safeguarding the beauty and biodiversity of the modern Sonoran Desert for generations to come.

Meet the Specialists



Meet the Specialists

he professionals employed at the McDowell Sonoran Conservancy include experts in conservation, biodiversity, education, and program management. Our staff members partner with hundreds of knowledgeable and skilled volunteer stewards to conduct dozens of conservation, education, and recreation projects, research studies, and activities each season.

Meet some of our amazing boots-on-the-ground specialists here!



Brian Whitehead, Senior Program Manager

Bio: I have a Bachelor of Science in Environmental Science and a Master of Natural Science in Biology from Southeast Missouri State University. I came to the Conservancy with nearly 10 years of experience as an interpretive park ranger with the National Park Service. During that time, I lived in five different states and five different national parks where I often worked with volunteers. Since joining the Conservancy when I moved to Arizona in 2022, I've supported the activities of our steward volunteers as they promote natural open space.

"I began my career volunteering for the National Park Service and since then I've had a passion for helping volunteers use their time and talent for rewarding goals."

Jessie Dwyer, Biodiversity Manager

Bio: I was born and raised in Arizona and have loved animals ever since I can remember. I have a Master of Science degree in Applied Biological Sciences from the College of Integrative Sciences and Arts at Arizona State University. There I evaluated the effect of urbanization on bat habitat use across the Phoenix-metropolitan area.

At the Conservancy, I manage experimental and long-term wildlife research projects for key species groups, such as bats, birds, butterflies, ground-dwelling arthropods, ground-dwelling vertebrates, and reptiles, with the goal of monitoring and maintaining wildlife populations in the Preserve and beyond in perpetuity. I work closely with citizen scientists, regional and global partners, and various stakeholders to conduct rigorous and comparable research, evaluate the impact of anthropogenic stressors on wildlife populations, and recommend and implement management practices to sustain a healthy ecosystem.

"I've always wanted to save animals, so I feel incredibly honored for the opportunity to understand and conserve Sonoran Desert wildlife in this ever-changing world."



Meet the Specialists



Mary Fastiggi, Restoration Manager

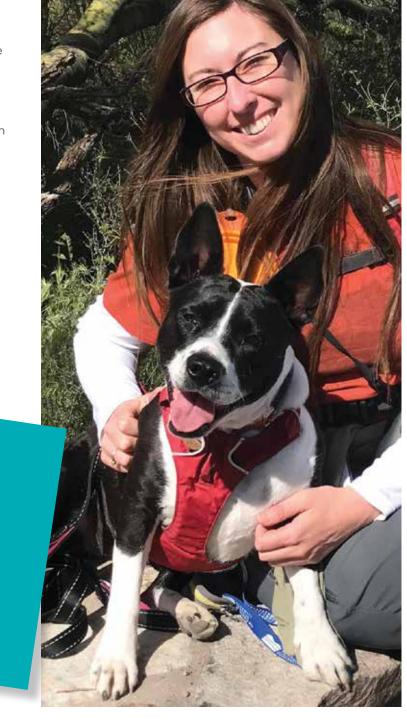
Bio: I started at the Conservancy in 2019 and have loved every minute. I moved to Arizona from the Midwest in 2017 to pursue my Master of Science degree from the School of Sustainability at Arizona State University. I have more than 15 years of experience designing and implementing both citizen science and environmental education programs, including working with diverse groups of volunteers on habitat restoration projects, wildlife monitoring, invasive species removal, and urban green infrastructure projects. I love working in such a dynamic field where I get to do hands-on projects and research with excited volunteers.

"I love connecting people with nature. I'm so lucky to have my career at the Conservancy also be my passion - working to help protect and conserve the Sonoran Desert alongside such talented and passionate people is a one-of-a-kind experience."

Jen Bruening, Education Manager

Bio: I am a native Arizonan and grew up in Cave Creek. I graduated from Arizona State University with a Bachelor of Science degree in Biological Sciences in 2015 with many credits from Scottsdale Community College.

At the Conservancy, I work with the youth education team to develop and facilitate interactive and inquiry-based programs for K-12 grade students. When I am not collaborating with stewards or educating students, I spend my time hiking, birding, kayaking, or simply just sitting in nature with my dog, Lilo.



"I have always felt so much joy from being a spark that connects a child to nature. Then to have the support of the Conservancy? I am still in awe."

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Not just for Bikers: The Pima Dynamite Trails offer Many Options to All Trail Users

By Won Fogel, McDowell Sonoran Conservancy Master Steward, and Robin Ferguson, McDowell Sonoran Conservancy Steward



Horses are a common sight on the trails from the Pima Dynamite Trailhead. If you encounter them, step to the side of the trail as they have the right-of-way on the trails in the Preserve. Photo by Dennis Eckel

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Mountain bikers leave from the Pima Dynamite Trailhead to explore the many twists and turns in this area. Photo by Dennis Eckel

Ith the moniker of a mountain bikers' heaven, it is often considered that the

trails from the Pima Dynamite Trailhead are best explored from two wheels while peering over a set of handlebars. Well, think again, this area has plenty of options for those who prefer to travel on foot (or on hooves).

Dedicated on November 13, 2021, this is the newest trailhead in Scotts-dale's McDowell Sonoran Preserve. The trailhead can be accessed from either North Pima Road or East Dynamite Boulevard, making it the only trailhead in the Preserve with two entrances.

Many of the trails in this area were created by bikes (human-powered and motorized) whose riders cycled and groomed these trails long before the area became part of the Preserve.

Today, the trails from the Pima Dynamite Trailhead are still a favorite spot for

For a hardy workout, follow Hawknest Trail to Scorpion, Snake Eyes and Dara Sara Trails. Photo by Dennis Eckel

mountain bikers, including many stewards who host guided bike tours. But if you prefer a slower pace, here are a few areas you will want to check out:

Starting from the trailhead, you can take Rawhide Wash Trail, a 4.2-mile-long trail ending at Brown's Ranch Road Trail. Hikers can make serious time on this trail as it has little evaluation. It offers nice desert views and access to other popular trails along the route including Rock Tank Trail, Axle Grease Trail, and Hawknest Trail.

Rock Tank Trail is a short connector trail that will take you to Scorpion Trail, and more importantly, Scorpion Point where, after a gradual elevation climb of 250 feet, you will be rewarded with an awesome 360-degree view.

Axle Grease Trail is approximately 4.7 miles and is a favorite amongst mountain bikers because of all the twists and turns.

Hawknest Trail is approximately
12.1 miles long and will take the most
enthusiastic trail users to 136th Street,
the east end of the Preserve. You can
access the Basalt Ridge Overlook and
see many examples of vesicular basalt,
volcanic rocks with characteristic holes
formed by escaping gases as they rocks
cooled. Or, take the Hawknest Trail to
Hackamore or Cloudburst Trails to see
more of the desert landscape in this
part of the Preserve. So many options!

While hiking in this area, you will notice that some of the ocotillos are as tall as two-story buildings and many of saguaros have taken on their own personality...some boxing, some dancing, some even looking like they are trying to run away from the heat.



Sidewinder Trail features interesting boulder outcroppings and challenging options. Photo by Dennis Eckel

The Pima Dynamite Trailhead is a great option for out-of-town guests who want to get a peek at a crested saguaro but may not be up to a strenuous hike. At the trailhead, start on Latigo Trail and follow the signs to Sidewinder Trail. After about a mile, you will be explaining that no one really knows why this saguaro decided to take on the look of a slice of cauliflower. Stay on Sidewinder Trail a bit further to get to Sidewinder Overlook, an area that allows visitors to climb some granite and get a great view of the northern Preserve.

There are several relatively flat areas on the trails near the Pima Dyna-



Visit the crested saguaro on Sidewinder Trail, about a mile from the Pima Dynamite Trailhead. Photo by Dennis Eckel

mite Trailhead, making it a perfect place to spot many of the Preserve's fauna (okay, wildlife) friends such as Gambel's quail, white-winged doves, mule deer, coyotes, rock squirrels, black-tailed jackrabbits, desert cottontails, and Sonoran Desert tortoise. You may even cross paths with some creatures you rather not encounter like the western diamondback rattlesnake and Gila monster (poor name as they are so pretty to look at). And don't get nervous if you feel like you are being watched from the rocks, because you are! Lizards and chuckwallas like to keep an eye on visitors.

If you want a fun activity for kids, and kids at heart, count the number of zebra-tailed lizards as you hike. Our hiking group counted 31 in a 1.7-mile stretch heading back to the trailhead along Powerline Road.

These trails are not just for bikers!

If you start a hiking adventure at the

Pima Dynamite Trailhead, be prepared;
you may need to add some extra time to
weigh all your options.

Dedicated to Stewardship for 25 Years and Counting...

By Brian Whitehead, McDowell Sonoran Conservancy Senior Program Manager

he McDowell Sonoran Conservancy, the City's official partner in managing Scottdale's

McDowell Sonoran Preserve, is a place where stewardship has been taken seriously for nearly 25 years. As we begin the new season with our 100th class of new stewards, it's appropriate to pause and look back on the role stewardship has played since the very beginning.

As defined by the Merriam-Webster dictionary, stewardship is "the careful and responsible management of something entrusted to one's care."
When that something is a public resource, stewards must also be willing

to pass that responsibility to the next generation.

The Conservancy, which began as the McDowell Sonoran Land Trust in 1991, was a grassroots organization of citizens who advocated for the creation of the Preserve. By 1994, this group had convinced the voting public to support a sales tax increase, allowing the City to purchase the first pieces of land, thus officially creating the Preserve. As the area of protected land grew, so did the scope of the Conservancy, which continued in advocacy, but had also begun stewardship programs like trail building, debris

Then: Members of Class 1 in 1998 on a trip in the Preserve. Left to right: Dick Rosler, Art DeCabooter (Chair of the Preserve Commission), Darcey Thomas, Janie Gomez-Terry, Art Agosto, Tom Walsh, Carla, and Chet Andrews. Photo provided by McDowell Sonoran Conservancy

cleanup, hiking programs, restoration efforts, and educational programs.

As noted in the following excerpt from Joan Fudala's book, *The People's Preserve: How Scottsdale Created the McDowell Sonoran Preserve, a focused curriculum* (now called Stewardship 101 Orientation) was created to prepare volunteers for stewardship.

"Partnering with Scottsdale Community College in the fall of 1998, the Land Trust began training volunteer Preserve stewards who would, in conjunction with the City, be caretakers of the Preserve. The Trust's Mountain Lines newsletter described the steward course as preparing participants for volunteer jobs that included 'observing changing conditions in the Preserve, reporting violations, removing trash, chatting with visitors, and keeping track of safety and maintenance needs. Experts will discuss flora and fauna, archaeology and geology, first aid, fire prevention, community preservation efforts, and stewardship procedures.

"The stewardship course was developed, designed, and implemented by Carla, the first executive director of the McDowell Sonoran Conservancy, and Land Trust board member Chet Andrews, who became the head of the steward program. The first steward class of 18 graduates included: Art Agosta, Chet Andrews, Carla, Joan

Clark, Jon Coffey, Nancy Dallett,
Virginia Dotson, Jim Engstrom, Mary
Flick, Janie Gomez-Terry, Lee Johnson,
Richard Kautz, Bev Kinsey, Roy Kinsey,
Carl Koch, Dick Rosler, Darcey Thomas,
and Tom Walsh."

At graduation, the newly trained stewards were presented a diploma that included a sentiment written by Carol Schilling:

"With you, we share stewardship of the McDowell Sonoran Preserve. Care for the land with the eye of an eagle, the heart of a mountain lion, the constancy of sunrise, with a father's sternness and a mother's tenderness that we may guard the sanctity of these mountains and fragile Sonoran Desert to present them unscarred to our children's children."



The McDowell Sonoran Conservancy provides stewards many educational opportunities including Stewardship 101 classes which is required to become a Conservancy steward. Photo by Dennis Eckel

Now, 25 years after the first class of stewards graduated, we look forward to another busy season at the Preserve with Steward Class 100, a milestone and testament to our commitment to stewardship. There have been more than 1,600 stewards who have participated in this multi-generational care-taking mission. In fact, last year

550 stewards logged volunteer hours.

Stewardship takes many forms, and you can find out how to support our mission to preserve and advance natural open space through science, education, and stewardship by visiting our website at www.mcdowellsonoran. org.



Now: Members of Class 100 in September of 2023. Stewardship 101, at the Conservancy office. Photo provided by McDowell Sonoran Conservancy

Welcome Back, Tour de Scottsdale!

By Vickie McWatters, McDowell Sonoran Conservancy Director of Development & Marketing

he McDowell Sonoran Conservancy is bringing back the Tour de Scottsdale. After a short hiatus due to COVID, this prestigious annual event, originally developed by DC Ranch, will host cyclists from all over the globe as they embark on a thrilling journey through the breathtaking landscapes of Scottsdale, Arizona. Slated for April 13, 2024, Tour de Scottsdale will generate critical funds to support the Conservancy as well as other Phoenix-area nonprofit organizations.

The Conservancy will join efforts with Perimeter Bicycling Association of America, Inc. to produce an unforgettable experience. Renowned for its challenging yet scenic courses,

the Tour de Scottsdale 2024 will undoubtedly push the limits of cyclists at all skill levels. Routes range from a beginner-friendly, half-metric century (32 miles) course to a formidable, metric century (62 miles) course. Riders will navigate picturesque vistas, rolling hills, and exciting descents around the beautiful McDowell Mountains, providing a thrilling cycling experience within the splendor of Scottsdale's beautiful Sonoran Desert landscape.

By participating, you can showcase your cycling prowess and support local nonprofit organizations at the same time. Tour de Scottsdale aims to spread a positive impact across the Valley by partnering with local charities that create fundraising teams to support

their causes. Participating charities are not required to contribute to the cost of the event, so the funds they raise are theirs to keep! We are thrilled to announce our title sponsor for 2024 and 2025, HonorHealth, a local, nonprofit health organization.

Register today to support
your favorite nonprofit, including
the Conservancy, by visiting www.
tourdescottsdale.org. There, you will
find information about the event,
participating charities, and registration
instructions. Be sure to secure your
spot early as registration fees increase
as the event gets closer.

Contact our event management team at Vickie@McDowellSonoran.
org or 480-998-7971 x110 if you have questions or require further assistance.
The team will ensure your Tour de
Scottsdale 2024 experience is seamless and enjoyable, from registration to finish line.

Mark your calendars and get ready to pedal your way through an unforgettable adventure! Tour de Scottsdale looks forward to your participation, as we come together to celebrate the spirit of cycling and make a positive impact on our community.



 $Heading\ south\ on\ Pima\ Road\ from\ Cave\ Creek\ on\ a\ previous\ Tour\ de\ Scottsdale\ race\ .\ Photo\ by\ Dennis\ Eckel$



The Busy Nightlife of Ringtails, Arizona's State Mammal

By Karen Hajek, McDowell Sonoran Conservancy Steward

f the hundreds of diverse wildlife species that roam the desert habitat of Scottsdale's McDowell Sonoran Preserve, few are as captivating as Arizona's official state mammal, the ringtail (Bassariscus astutus).

By day, rock climbers worldwide are drawn to the challenges of the McDowell Mountains. By night, under the moon and stars, those same boulders and canyon walls become the playground for ringtails.

The ringtail is a cat-sized carnivore, measuring between 12 and 17 inches in length with a long, bushy tail that is almost as long as its body. The

tail, which features as many as 16 alternating dark- and light-colored rings, is what gives the animal its name. The critter sometimes is referred to as a ringtail "cat," but it's actually a member of the raccoon family (*Procyonidae*), which also includes the coatimundi.

Ringtails are versatile creatures that thrive in diverse habitats, from arid deserts and rocky canyons to woodlands and riparian areas. They are primarily found throughout the

western United States, including
Arizona, California, Nevada, and Utah.
Its range also extends into parts of
Mexico. They are highly adaptable
animals, equally as comfortable
dwelling in rock crevices as they are in
trees or underground burrows.

Ringtails are excellent climbers, using their semi-retractable claws to cling to smooth rock surfaces. They can also rotate their hind feet 180 degrees, which allows them to quickly descend headfirst out of rocks and trees to avoid predators. The purpose of the ringtail's tail is unknown, although it's believed to be used to foil predators, as well as provide balance in its movements.



Ringtail (Bassariscus astutus) from the Greek, Bassariscus meaning "fox" and the Latin, astutus meaning "cunning." The ringtail resembles a fox with its brown and gray fur, triangular-shaped head, and long whiskers. Photo by Randall D. Babb

The ringtail is a creature that is primarily active at night. Their large, round eyes — each one surrounded by a white ring — are specifically adapted to reflect moonlight for better nighttime vision. The ringtail's pointed ears rotate independently, allowing it to hear and locate even the faintest of sounds. It's this keen sense of hearing that helps them to evade predators such as bobcats, coyotes, and greathorned owls.

A ringtail won't hesitate to add variety to its diet in the form of rodents, birds, amphibians, invertebrates, and native fruits. This varied diet allows them to adapt to seasonal fluctua-

tions in food availability throughout their habitat. Their sharp claws and excellent climbing abilities enable them to raid birds' nests and scavenge for insects in the crevices of tree bark. Ringtails are especially fond of white-throated woodrats (commonly called packrats) and will live in their dens after eating them.

Ringtails are solitary creatures, except during the mating season. Males and females briefly come together during the spring



Ringtails occupy a variety of habitats, including arid deserts, cooler oak woodlands, and lush riparian areas. They do not hibernate and will routinely seek new den locations as they move through the habitat looking for food. Photo by Bruce Taubert

to mate. At this time, daytime observations of ringtail activity are more likely. After mating, the males and females go their separate ways. Females give birth

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McDowell Sonoran Conservancy wildlife camera photo of a ringtail taken in January 2023. An interesting trait of the ringtail is its range of vocalizations which includes chirps, barks, and growls. Perhaps future installation of passive monitoring, such as video cameras or sound recorders, will add to the understanding of ringtail life in the McDowell Sonoran Preserve. Photo provided by McDowell Sonoran Conservancy Wildlife

to litters of one to four offspring called "cubs," which reach full size at about 30 weeks.

The ringtail is seldom seen, but it is not rare. The animal is listed as a species of "Least Concern" by the International Union for Conservation of Nature.

The McDowell

Sonoran Conservancy's

Wildlife Camera Project
successfully captured ringtail activity in early 2023. Perhaps
future installations of passive
monitoring devices, such as video
cameras and sound recorders, will

contribute to greater understanding of ringtail life in the Preserve.



A newly designed (March 2023) Arizona driver's license with an image of a ringtail, Arizona's state mammal. The ringtail was selected by Arizona schoolchildren over the javelina, white-tailed deer, and desert bighorn sheep in 1986. Photo provided by the Arizona Department of Transportation

A Researcher's Guide to Connecting with Wildlife

By Jessie Dwyer, McDowell Sonoran Conservancy Biodiversity Manager

I f you enjoy spending time in the nearby outdoors, you may have been fortunate enough to observe wild animals that inhabit Scottsdale's McDowell Sonoran Preserve. Maybe you saw a herd of deer in the distance, a desert cottontail hopping across the trail, the flash of a coyote running, or a rock squirrel sunning on a boulder. And if you were really lucky, maybe you encountered more cryptic species like Gila monsters and American badgers.

The creatures inhabiting the
Preserve are not always easy to spot.
But thankfully, there are many ways to
connect with Sonoran Desert wildlife,
many of which you can do without
disturbing these animals.

First, there are signs of wildlife all around us, like scat (poop!), tracks, burrows, and disturbed earth or vegetation. Scat can give you an idea of the size and diet of the animal. The size and shape of a soil burrow can tell you whether it's a coyote, badger, or desert tortoise. A bed down area (plus an intense smell) is evidence of a collared peccary (javelina) party. Next time you are in the Preserve, look around for signs of wildlife. There may be more evidence of these creatures than you thought!

Second, we can view and study wildlife in their natural habitat without ever touching them. A common way to monitor wildlife is through "camera"



Camera traps enable us to capture photos of more rare and elusive species, like the American badger (Taxidea taxus). Photo provided by McDowell Sonoran Conservancy

trapping," which uses motion- and heat-triggered cameras to document wildlife activity. This passive monitoring technique is beneficial in multiple ways. Once configured, wildlife cameras operate without a human needing to be present. Therefore, a large landscape can be surveyed with many cameras operating simultaneously. In addition, camera trap study designs can be adapted to answer different research questions. For example, the area chosen, the settings, and the placement of the camera will influence whether the camera will capture a wide variety of species or target a particular species of interest. Lastly, with camera traps, we can better understand wildlife by studying their behavior without the impact of human presence.

To understand the effect of environmental and anthropogenic (i.e., human) factors on wildlife populations in and around the Preserve, the McDowell Sonoran Conservancy designed a camera trap study using global standards and adaptations to our region. The design places more than 60 cameras across the Preserve to conduct annual surveys in the spring and fall seasons. The upcoming 2023 fall deployment is part of a regional survey effort, Snapshot USA. Snapshot USA is a national collaborative survey using camera trap images and metadata to track relative abundance and create distribution maps for significant wildlife species across the United States. Through this initiative, organizations around the nation deploy cameras in a variety of ecoregions and across an urban-rural gradient. Data



The effort that stewards put towards scouting locations, placing cameras, deploying cameras, and retrieving cameras is essential for the functioning of the Conservancy's Wildlife Camera Project. Can you spot the well-camouflaged camera trap that the camera team installed on this tree? Photo by Jessie Dwyer

from this initiative provides a snapshot of the wildlife community each year.

By sharing the landscape and recreating consciously, humans can coexist with wildlife by giving them the space and freedom to exist in their natural habitat. You can help keep wildlife wild by staying on the trails, entering the Preserve only when it's open, and keeping your distance when you do encounter wildlife. Although coexisting with wildlife does not involve

direct contact with these incredible species, we can still connect with them on the occasional special encounter and through photos from camera trapping. The Conservancy continues its commitment to maintain biodiversity in the Preserve and beyond, in hopes that we will continue to have the honor of interacting and connecting with the wonderful desert species with whom we share the landscape.



Staying on the trail is a great way to coexist with wildlife – enjoying the landscape while allowing them the space and freedom to exist in their natural habitat. Photo by Dennis Eckel

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Share your photographic experiences exploring the Preserve. Taken at Scenic View on Granite Mountain Loop Trail. Photo by Dennis Eckel

The team at the McDowell Sonoran Conservancy is thrilled to announce the "My McDowells" photo contest. If you enjoy admiring the natural wonders of the Scottsdale's McDowell Sonoran Preserve from behind a lens, this contest is for you.

The Preserve is a haven for nature enthusiasts, photographers, and adventurers alike. Spanning more than 30,000 acres, the Preserve boasts a diverse array of flora, fauna, and stunning desert landscapes that offer a feast for the eyes. Recognizing the passion and creativity of the Preserve's visitors, we've launched the "My McDowells" photo contest to encourage visitors to capture and share their unique experiences in the Preserve.

Participation in the contest is

simple, and everyone can enter their photos. Whether you are a seasoned photographer, or an amateur with a passion for nature, all you need is a camera or smartphone to start capturing the magic of the Preserve. The contest features multiple cate-

gories, including flora, fauna, desert landscapes, and people. This variety of categories allows participants to showcase the Preserve's many facets and share their perspectives on its abundant beauty.

In addition to the regular catego-



Wildflowers, Teddy Bear Cholla, and Poppies. Photo by Lynne Janney Russell



Conservancy steward Jason and his dog.

ries, the "My McDowells" photo contest will include special, seasonal categories that celebrate the unique features of the Preserve throughout the year. For example, one seasonal category will be wildflower season, which will allow



Each month, a winner is chosen for each category. The winners' photographs will be displayed on the Conservancy's various social media platforms and featured in our monthly email newsletter. This recognition allows participants to share their passion for nature and photography

with a broader audience, inspiring others to explore and appreciate the Preserve's splendor.

Harris's hawk (Parabuteo unicinctus) lifting off. Photo by Lynne Janney Russell

Of course, no contest would be complete without enticing rewards. Winning photographers will be rewarded with free, Conservancy-branded merchandise, providing them with a tangible reminder of their achievement and a token of appreciation for their contribution to promoting the beauty of the Preserve.

Beyond the thrill of winning prizes, the "My McDowells" photo contest fosters a sense of community and connection among nature lovers and conservation enthusiasts. So, what are you waiting for? Grab your camera or smartphone, and head out to the Preserve. Awe-inspiring sights await your lens, and who knows, you might just become the next "My McDowells" photo contest winner!

Participate each month at www. mcdowellsonoran.org/my-mcdowells.



participants an opportunity to capture



Desert Spiny Lizard (Sceloporus magister). Photos by Lynne Janney Russell



15300 N 90th Street, Suite 400 Scottsdale, AZ 85260

CONSERVANCY

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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.

Hats On.

We've got your head covered.

Visit conservancymerchandise.org to purchase your swag today!



M C D O W E L L S O N O R A N C O N S E R V A N C Y

