

MCDOWELL
SONORAN
— CONSERVANCY —



Mountain Lines

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This issue of the Mountain Lines is themed "Understanding Conservation." Terms like "sustainability", "preservation", and "conservation" are common in today's daily conversations and yet many of us struggle to actually define them.

Because of this, our Mountain Lines committee thought it was important to explore these core concepts: Preserving the natural world for future generations, sustaining the community by providing easy access to nature, and conserving this precious resource by carefully managing its use. This seemed to be the perfect theme for our fall issue!

If, after learning more about these concepts, you would like to be a part of stewarding the Preserve and our community, I invite you to consider volunteering with MSC or making a gift to support our work. With your support, we will continue to meet our mission of completing and sustaining the Preserve.

See you on the trails!

Ruthie

MEET THE NEW EXECUTIVE COMMITTEE

Chairman, Oliver Smith

Oliver, a graduate Gemologist and president of Oliver Smith Jeweler is a member of the Scottsdale Charros and the Scottsdale Rotary Club, past President of the Board of the Scottsdale/PV YMCA, and a graduate of Scottsdale Leadership.

Vice Chairman, Tom Headley

Tom has built a career helping to create and grow companies in the medical device industry. He has a BS in Engineering from Stanford and an MBA from Harvard. He continues to pursue entrepreneurial interests and volunteers as a mentor with ASU Technopolis.

Secretary, Peter Rusin

Peter, the Executive Director of Health World, earned a Master Degree in Public Health and has a distinguished career in the health industry. He is a member of the Scottsdale Charros and is active with the Paradise Valley and Scottsdale School Districts.

Treasurer, Jack McEnroe

Jack holds an MS in Business (Finance) from Colorado State. After 3 yrs. as an officer in the Air Force, he spent 25 yrs. working in large, complex organizations after which he formed a highly successful financial management consulting company. Jack has served on, or been an advisor to, several nonprofit boards.

Past Chairman, Con Englehorn

Con, a real estate broker specializing in farms, ranches, and rural land in the southwest, is the owner of Headquarters West, Ltd. He is on the board of the Valley of the Sun YMCA, the Arizona National Livestock Show, Project Central - Rural Leadership Program, and the Stepping Stone Foundation.

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Cover Photo: M. Gottlieb

About MSC

The McDowell Sonoran Conservancy champions the completion and sustainability of the McDowell Sonoran Preserve for the benefit of this and future generations. We connect the community to the Preserve through public and private partnerships, environmental education and stewardship.

Mountain Lines

MSC BOARD OF DIRECTORS:

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- Peter Rusin, Secretary
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To Preserve or To Conserve: Is That the Question?

By Barb Pringle, MSC Steward; MSPC Promotions Committee

We open space advocates often call ourselves “conservationists.” We talk about “preserving” the land for ourselves and future generations. We want to “save” it so that we can occasionally escape the cacophonous mandscape around us. We want our kids to feel “connected” to natural places, not just to video games, iPods and Facebook postings.

But how we approach this goal has been the subject of intense debate. Preservationists and conservationists used to stand on opposite sides of a very big canyon in their views on the environment. John Muir, who founded the Sierra Club in 1892, advocated the aesthetic preservationist approach. He believed in preserving nature for its inherent value and wanted to create inviolate sanctuaries free from human use or impact. His contemporary rival, U.S. Forest Service head Gifford Pinchot, coined the term ‘conservation’ in 1907 to describe his view that the environment must be managed to ensure sufficient natural resource supplies for present and future generations. He believed that conservation meant the “greatest good to the greatest number for the longest time.”

So who was right? Let’s go a little further and examine broad definitions of these two seemingly incompatible words:

To Preserve:

- To keep something protected from anything that would cause its current quality or condition to change or deteriorate
- To keep up or maintain something in a specific, unchanging state
- To treat or store in such a way as to protect from decay

To Conserve:

- To keep something, especially an important environmental or cultural resource, from harm for use by the community
- To use something sparingly so as not to exhaust supplies

When you **preserve** something, you make attempts to keep it as it is. You keep it intact. You keep it safe, protecting it from being harmed or destroyed.

When you **conserve** something, you use it wisely. You make sure it isn’t wasted. You don’t want to deplete available resources to the point that things will drastically change. You realize that you cannot literally keep things as they are, but you manage that change to preserve what is valuable.

What can other disciplines tell us?

It’s interesting to look at the concepts of “preserve” and “conserve” as they apply to different fields. You can probably think of other examples.

People who “preserve” a historic building want to keep it from being destroyed or demolished. People who “conserve” a historic building want to improve it in some way so that it is stable and



Photo by M. Jensen

able to withstand time and perhaps manmade influences like air pollution.

Art conservation is another illustrative discipline. This is the “study, preservation and restoration of works of art and cultural material,” says Buffalo State University of New York’s website. Notice that the word ‘preservation’ is part of the definition of ‘art conservation.’ Art conservators preserve works of art so they can be studied, used in education, and saved for future generations to enjoy. Saving them entails careful implementation of appropriate treatment – i.e. conservation management.

Why does this matter?

Borrowing from Shakespeare (again), is this discussion about preserving or conserving mere sound and fury, signifying nothing? Ruthie Carll, MSC Executive Director, doesn’t think so.

“Think of the Preserve in the context of this debate. We try to preserve it when our actions are geared toward keeping it the way it is – a healthy ecosystem- by prohibiting housing developments, and enforcing the ordinance preventing people from harming it with motorized vehicles. But we conserve it when we remove invasive plants, remediate old jeep roads, build limited trails for passive recreational enjoyment and construct environmentally-sensitive structures to conserve water usage. We even do both at the same time – i.e. conserve an area where rare wildflowers grow, in order to preserve the flowers from harm and the native ecology from change.”

It seems that the historical either/or construct (man is part of nature vs. man is apart from nature) has evolved. Most would agree that there is no reasonable possibility of achieving the ultimate preservationist’s goal – wilderness free of human influence. But we also agree that man, unmoored from limits, can gravely harm the environment. So what has developed is a third way, a view that lovers of open land must sometimes conserve and sometimes preserve, depending on the needs of the land. Understanding those needs is in essence the science of ecology and the focus of everyone involved in protecting our Preserve. Help us as we help preserve and conserve this beautiful land. 🌿

The Preserve as a Resource: A Human Journey from Past to Present

Thanks to the following for their contribution to this article: MSC Stewards Len Marcisz (Native American and ranching history), Larry Levy (military and mining history), and local historian and author Joan Fudala (early Valley and Scottsdale development history).

When thinking about the history of the Preserve, we realize that we look at it today through a very different lens than did earlier inhabitants. Our ancestors had different priorities than we do and we benefit by trying to understand them. Two of our MSC stewards and a noted local historian and author weighed in to help us trace how the land was used and viewed by our predecessors.

Native Americans in the Preserve

The earliest documented users of the McDowells were nomadic groups of hunter-gatherers known today as **Archaic Peoples**. An Archaic rock shelter near Brown's Ranch studied by archaeologist Tom Wright is estimated to be circa 7,000 B.C. These people traveled in small bands, lived in brush, rock or open shelters and hunted large and small game for its protein content. Deer, rabbits, bobcat, packrats, snakes, tortoises, birds and probably insects were targets. Gathering focused particularly on saguaro and prickly pear fruits, cholla buds, paloverde seeds and mesquite pods. The latter were especially prized for their sweet taste. Rocks were quarried for basic tools and the remains of these quarries can be found throughout the McDowells, especially in the Lost Dog drainage. Rudimentary agriculture – planting seeds in washes, returning to harvest – was practiced. Because of their nomadic lifestyle and limited numbers, Archaic people had virtually no impact on the desert.

The Archaic culture began to fade during the period of 1 A.D. to 500 A.D. and a new culture emerged – the **Hohokam**. This culture included more agricultural development featuring irrigated fields and larger agricultural communities that evolved into pueblo-style living. The Hohokam farmed along the Salt and Verde Rivers and grew corn, beans and squash. To supplement, they made forays into the Preserve to gather the same plants and hunt the same animals as the Archaic Peoples. However, the Hohokam would establish a series of base camps near the mountains, dig or build storage pits and stay in the field longer. This was a more efficient use of human energy. Sadly, the undoing of the Hohokam culture came from over-irrigation (resulting in alkaline soil and reduced yields), periodic floods that destroyed their canal system, and the invading **Yavapai** culture. The Hohokam cultural evidence in the McDowells fades between 1200 and 1450 A.D. Like the Archaic People, they used the land for survival, taking food off the land. Within the Preserve itself, it is hard to conclude that their impact had any lasting effect on the Sonoran ecosystem.

The Yavapai were hunter/gatherers like the Archaics and used many Archaic and Hohokam hunting and gathering camps and even retooled their broken arrowheads. They were suppressed by the U.S. Army in the 1870s and eventually confined to three reservations in Arizona, the closest being the Kwevokopiah band east of Fountain Hills.

Ranchers and Cowboys

Ranching in the Preserve did not begin in any meaningful way until the late 1880s. The first rancher of note in Scottsdale's side of the McDowells was Frank Frazier (after whom Frazier Springs is named). By the early 1900s, ranching was developing in the desert flatlands and the McDowells were being eyed as a good place to run cattle. Edwin Orpheus Brown bought the DC brand in 1917 and his ranch holdings eventually reached 44,000 acres upon which he ran 3,000 to 5,000 cattle.



William "Doc" Crosby,
originated the DC Brand

Traditional ranching began to decline in the 1950s as feed lot cattle operations took hold. It also became increasingly profitable for investors to acquire land in anticipation of profits from urban development. By the early 1960s, cattle-ranching was nearly gone from the McDowells.

The land was viewed primarily as a commodity. For the ranchers it was a place to run cattle. If it had water and grass it was good; if not, it was useless. Erosion control to counteract landscape damage from cattle tracks was considered pointless. This doesn't mean, however, that the ranchers did not love the land. They did, just not in the sense that a modern conservationist would love it.

Military

Arizona's build-up of military posts began after the Civil War to protect miners and other settlers from increasingly hostile Native Americans. Ft. Whipple in Prescott was the main supply center and was a link to Camp (later Fort) McDowell. Supply wagons had to travel a long, indirect route between these camps, a fact noted by General George Stoneman. In 1870 he ordered engineers to build a wagon road to cut the time of travel between Forts. This became known as the Stoneman Road and marks the first European-style impact on our Preserve.

Stoneman Road passed through the present day Preserve from the McDowell Mountain Regional Park along a north-westerly line, leaving Scottsdale near the Carefree Airport. Soldiers and civilians who used the road were prone to littering, particularly whiskey bottles and cans. Portions of the road continue to be used today, but other impacts have disappeared with little to no remaining trace. For military, the land was viewed as a resource to be used as needed.

Early Developers

Early settlers and post-World War II developers in Scottsdale and Phoenix traveled the same path – they followed the water. From its origins as a hay camp for Fort McDowell in the 1860s, the Phoenix area developed along rivers and canals. Farms and businesses concentrated on the valley floor, leaving the surrounding mountain ranges to a few hearty souls who chose to homestead upland.

Chaplain Winfield Scott bought land along the then-new Arizona Canal in 1888. He encouraged others to join him in establishing Scottsdale as a farming community. For its first six decades, Scottsdale's population was centered around the canal and the downtown area that supported the agricultural economy. Although the McDowell Mountains provided a beautiful backdrop, they were used mostly for hunting or picnicking.

Fast forward to 1969, when Jerry and Florence Nelson became the first developers of planned communities north of Bell Road. Nelson's bankers told him they thought only mobile home parks would attract buyers that far north. Undeterred,



Photograph by: D. Bierman

Mining

Early Europeans roamed the McDowell Mountains in the late 1800s conducting mining and minerals exploration. The Dixie Mine, dating from around 1890, was a "prospect" that found traces of copper, silver and gold, but economic concentrations were never found. The Paradise Gold Mine, with a so-called "discovery" in 1914, was actually a stock fraud masquerading as a working mine. Other claims and development attempts all ended in failure.

In keeping with the general attitudes of the time, miners and prospectors left their garbage wherever they went. Mining site bunk houses created a lot of food waste from canned goods. Miners would empty a can of beans, go to the door and toss it out. Those cans are still found sometimes in the Preserve.

the Nelson's love of the desert inspired them to create environmentally sensitive developments—Pinnacle Paradise, Troon Village and Troon North – long before they were mandated. These set the standards for other developers to emulate and improve upon.

It's clear that perceptions of suitable land use change over time. The McDowells supported Archaic, Hohokam and Yavapai peoples, ranchers, military, miners and land developers. Now as we find less and less open land to lose ourselves in, we view it less as a resource to be used but as a treasure to be protected by hikers, cyclists, recreational horseback riders, nature lovers and scientists who now roam this beautiful desert. We sense that nothing lasts but the land. 🌿

Access vs. Preservation: *Is there a balance to be found?*

Preface by Virginia Korte, MSC Board of Directors and Chair of the original McDowell Mountains Task Force.

Early on in the preservation effort in Scottsdale, the citizens formulating the strategy to protect the McDowell Mountains and surrounding desert were unanimous in the opinion that the principal objective was to protect this unique and sensitive ecosystem in perpetuity for the enjoyment of this and all future generations. Not coincidentally, subsequent public opinion polls conducted to gauge public support for creating a preserve and a means for paying for it strongly validated this opinion. Poll respondents stated, in order of importance, the mountains should be saved to protect scenic views, for their intrinsic value, to preserve habitat and archaeological sites, and to provide appropriate public access.

The McDowell Mountains Task Force was created and charged by the City Council to develop a plan for the preservation of the mountains and surrounding desert. Participants worked tirelessly to first identify the land that should be preserved and then to classify the land based on its sensitivity, intrinsic value, habitat quality and appropriateness for public access and use. These classifications served as the foundation for subsequent efforts to identify appropriate public access to and in the Preserve.

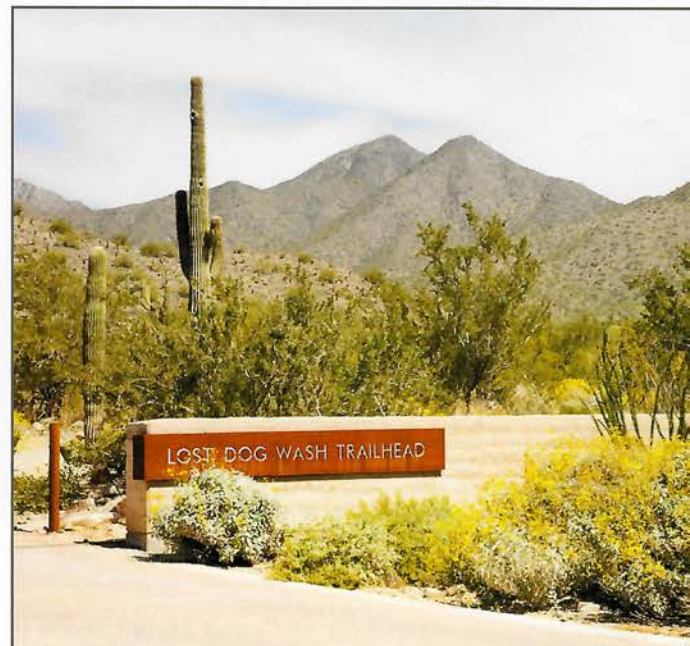
The City Council created a Commission to continue the work of the Task Force once that group completed its work and submitted a final report of recommendations. The Commission recognized early on the challenge of ensuring the ecosystem would remain healthy and sustainable while accommodating the anticipated demand for public access.

The Commission accomplished this task by working with officials from the Arizona Game and Fish Department and individuals with other expertise. These experts used the land classification work prepared by the Task Force to identify and map in great detail prime habitat, areas of lush desert vegetation, sensitive lands and archaeological sites where public access should not be encouraged. Areas suitable for public access and the provision of trails were likewise identified and mapped.

Based on this information, an access area plan and a conceptual trails plan were developed. A key element of the access area plan is to spread access to many locations around the edge of the Preserve so as not to concentrate use and thus cause a negative impact on the land in any one particular area. Regarding the trails plan, trails were laid out to traverse, to the maximum extent feasible, areas least used by wildlife. For example, the trails plan was designed to minimize paths in washes and other corridors used by wildlife, to avoid or keep a good distance from known archaeological or historical sites, and evade sensitive, dangerous or unique habitat areas.

As one looks at the access area plan and the conceptual trails plan, the work of these early advocates is apparent. Nine access areas are identified to serve the Preserve. These are spread around and are planned on the periphery of the Preserve. For the size of the Preserve there are few trails and not a significant total mileage of trails. Many portions of the Preserve do not contain trails. This was deliberate and respects the original objective of creating a preserve not a park.

An interesting fact is that the original geographic area desired for preservation developed by the McDowell Mountains Task Force did not include the Gateway area. Further analysis and discussions with Scottsdale residents suggested an area easily accessible to all was needed to ensure broad community support for the Preserve. The Gateway became this area. The Gateway stands as a perfect example bridging the need to access the McDowell Sonoran Preserve while protecting the natural ecosystem. It is located a good distance from the mountains and yet is readily accessible to the regional transportation system. The topography allows all individuals of different physical capacities, to experience the beauty of our desert. The Gateway was specifically included in the planned Preserve boundary to serve this purpose.



A Management Perspective *By Claire Miller, MSP Preservation Manager*

In January, 2009, geologist Brian Gootee with the Arizona Geological Survey—working with MSC stewards on a geologic survey of the Lost Dog Overlook area—discovered limestone.

Limestone is a sedimentary rock that consists mostly of calcium carbonate, calcite for short. A common source of calcite is the skeletons of dead marine organisms like coral polyps. When enough calcite accumulates, usually at the bottom of a shallow sea, pressure consolidates it into limestone rock. There are several limestone layers visible in the Grand Canyon, each corresponding to a period when that region was below sea level.

This is an important and interesting discovery because no limestone had been found previously anywhere in the metro Phoenix area. The nearest limestone deposit was thought to be many miles away. Most geologists assumed that there were layers of limestone formed when this area was underwater hundreds of millions of years ago, just like what's still visible in the Grand Canyon, but that they eroded away long ago.

Most of the rock in the metro area is either very old (between 1.4 and 1.7 billion years old) or very new (in geological terms, that is, 25 million years old or less). Camelback is a great example of this: the body is ancient granite about 1.4 billion years old and the head is sandstone about 25 million years old. The periods when the Phoenix area was submerged and calcite could accumulate into rock happened in between, and that rock now is gone. So where did the Scottsdale limestone come from?

It turns out that there's another way that limestone can form, not from the accumulation of marine skeletons but instead from the precipitation of calcite out of mineral-rich spring water. This can happen as mineral-laden water evaporates along the edges of stream beds or as mineral spring water heats up. Calcite has the unusual property that more of it can be dissolved in cold water than in hot water. This means that if calcite-rich water is heated by climatic or geological forces, the previously dissolved calcite may precipitate out of solution.

It appears that calcite from a mineral spring in northern Scottsdale accumulated through some combination of evaporation and heating/precipitation and solidified over time into travertine, the name given to limestone that forms in this way. Geothermal areas like Mammoth Hot Springs in Yellowstone National Park are rich in travertine deposits.

Mr. Gootee estimates that the travertine was deposited between 2 and 20 million years ago, during the formation of the McDowell Mountains. The mineral spring has long since disappeared. Because the travertine was formed recently, it hasn't had time to erode away—although the limestone actually was discovered because all the material deposited on top of it after it formed has disappeared, exposing it for the first time in perhaps millions of years.



This discovery raises a number of questions that we hope to investigate further. For example, we don't know the source of calcium in the mineral spring water since there are no known calcium-rich rocks anywhere in the vicinity. Tube-like structures resembling plant stalks were found in association with the travertine, and samples of the travertine contained brown material resembling algae. Additional work will be required to positively identify these unusual features. Also, next spring during wildflower season we'd like to determine whether different species or different numbers of wildflowers bloom in the vicinity of the limestone compared with elsewhere nearby.

Papers written by MSC volunteers describing both the limestone discovery and the larger geological research project of which this discovery was part are available through www.mcdowellsonoran.org. Both papers also were peer-reviewed by geologists and accepted as Contributed Reports (CR - 09 - B and CR - 10 - E, respectively) by the Arizona Geological Survey and are available through www.azgs.gov.

The City of Scottsdale's McDowell Sonoran Preserve is a wonderful example of a citizen-based effort to preserve a unique natural resource within a major urban city. Citizens have voted repeatedly to support the creation of the Preserve—and are now starting to “enjoy the fruits of their labor,” per se—with trails and access areas opening for public use.

Early years of the Scottsdale Preserve effort focused on the actual purchase of land for the McDowell Sonoran Preserve. As most of the private property within the Recommended Study Boundary (RSB) was purchased, the city was able to start implementing the Conceptual Trails Plan and the Access Areas Plan—to enable the public to get out and experience the beauty of the Preserve. This access is not without its challenges, however, and currently the city is in the process of transition—into the management of this public use.

Current issues and trends in natural resource management have not experienced significant changes from those of the past. A review of the literature will generally reveal the same issues and themes that occurred in the 1960's and 1970's still continue to be the same types of issues that are being dealt with at the present time. Given the proximity to a large urban population base and greater numbers of recreational users, preservationists and managers alike continue to worry that the Preserve will be "loved to death" if the appropriate management practices are not established and carried out. The concept of "carrying capacity" is at the core of this discussion.

Before continuing on the carrying capacity discussion, let's briefly talk about philosophical foundations. In the case of the McDowell Sonoran Preserve, this foundation is memorialized in Chapter 21 of the Scottsdale Revised Code. Chapter 21 outlines such things as the purpose of the Preserve, management objectives, roles, responsibilities, rules and regulations for the Preserve. It provides the framework – now we all must work to ensure that these objectives are met.

Clearly, a multi-disciplinary approach is necessary to address all of the resource management challenges and various aspects of carrying capacity. Proper care of the physical resource is only one piece of the overall picture. While physical impacts of any given resource are easier to measure and quantify, social and managerial factors also must be considered but may not be as easy to scientifically describe and quantify.

Examples of social factors are user perceptions and opinions about how much use and what types of use are acceptable in an area before it feels too crowded for them to have a meaningful or enjoyable experience. This "limit" will vary from person to person and will likely be different depending on the area being utilized and the expectation of the individual. Have you ever heard someone say, "I used to love to hike on that trail, but now it's just too crowded...?" Another person might thrive in that same scenario, and might say something like, "I really love that more people are hiking on that trail on the weekends – it gives me someone to chat with and the presence of others makes me feel safe." Given this, it is easy to see what might be a preferable situation for one might be totally unacceptable for another.

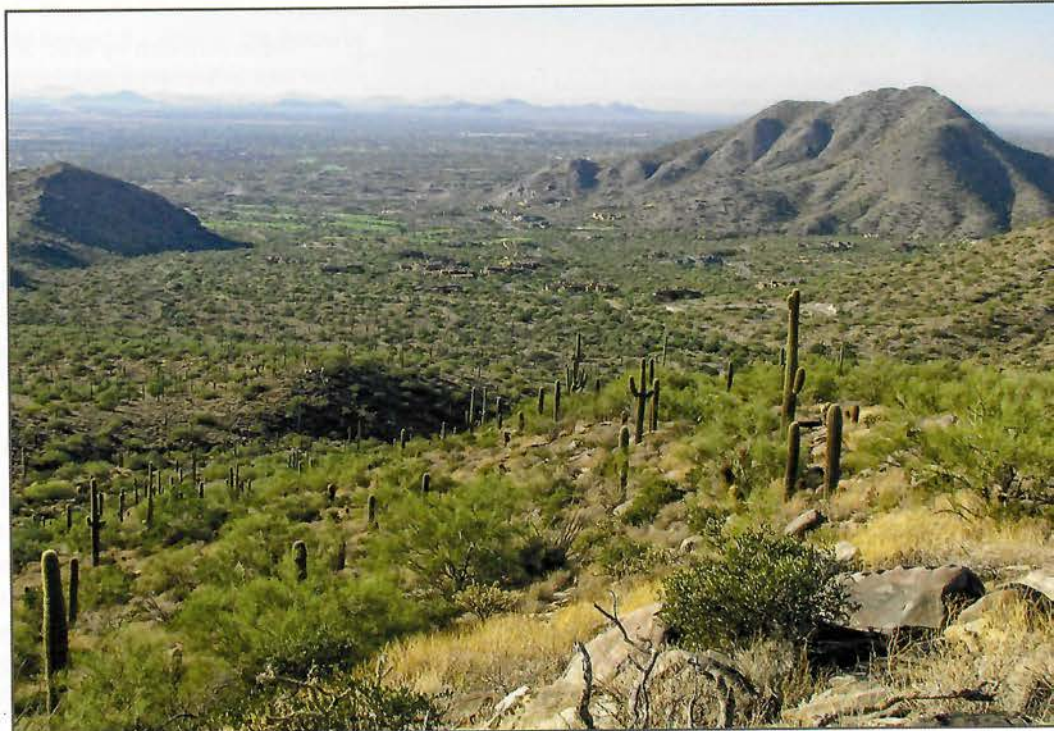
Examples of physical impacts of a natural resource are such things as trail tread characteristics – is the trail getting wider or more rutted with increased use? Is one type of use more resource intensive than another

(hikers versus horses, for example)? Has trail proliferation or the unauthorized addition of trails made by others become a problem? Is natural vegetation alongside a trail being trampled due to overuse? All of these impacts can be measured and documented relatively easily.

It is critical that baseline data of the natural resource be obtained, with regular monitoring over time to continue to evaluate the impact of recreational usage. Management plans will outline the "limits of acceptable change" of the resource, and the range of mitigation strategies that can be utilized to combat the degradation of the resource. These strategies might be as simple as adding additional signage or embarking upon an educational campaign or, on the severe end of the spectrum of options, a complete closure of an area or trail.

Our task is to find the balance between access and preservation and to identify and implement a management plan and strategies that will accommodate that delicate balance. The management plan must be adaptive and dynamic in nature, recognizing that the Preserve is not, and likely never will be a "one size fits all" type of resource. Chapter 21 has provided the overall framework, and it is our challenge to manage the use of the Preserve. More importantly, our obligation is to protect this incredible resource that the citizens of Scottsdale have invested in, for this and future generations to enjoy and behold.

The City of Scottsdale will work with the McDowell Sonoran Conservancy to meet this obligation and the challenges therein. We know and understand that the Preserve is not a primitive wilderness, but the goal is to keep it as pristine as possible – just as Chapter 21 states! 🌵



Photographs by: D. Bierman, B. White & M Jensen

Limestone Discovery In The McDowell Sonoran Preserve

By Dan Gruber, MSC Steward

In January, 2009, geologist Brian Gootee with the Arizona Geological Survey—working with MSC stewards on a geologic survey of the Lost Dog Overlook area—discovered limestone.

Limestone is a sedimentary rock that consists mostly of calcium carbonate, calcite for short. A common source of calcite is the skeletons of dead marine organisms like coral polyps. When enough calcite accumulates, usually at the bottom of a shallow sea, pressure consolidates it into limestone rock. There are several limestone layers visible in the Grand Canyon, each corresponding to a period when that region was below sea level.

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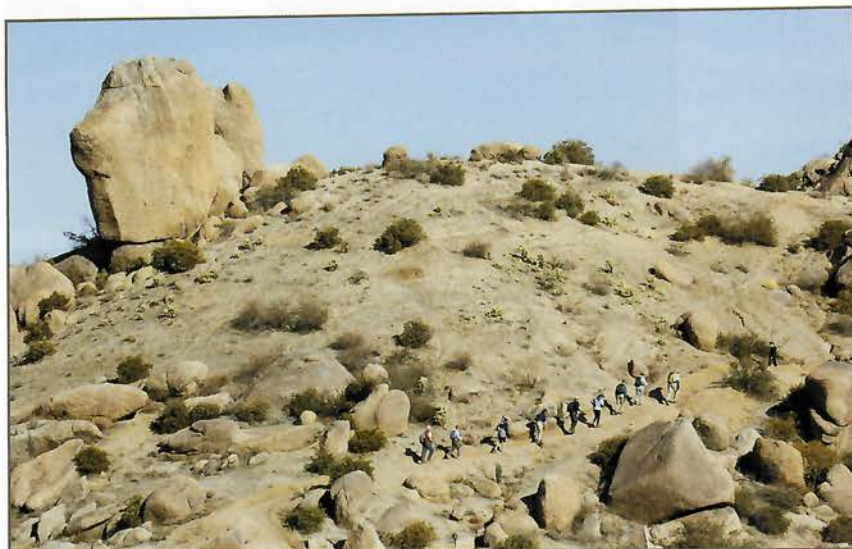
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Photographs by: Brian Gootee

Recreation that Complements Conservation

By Nancy Howe, MS

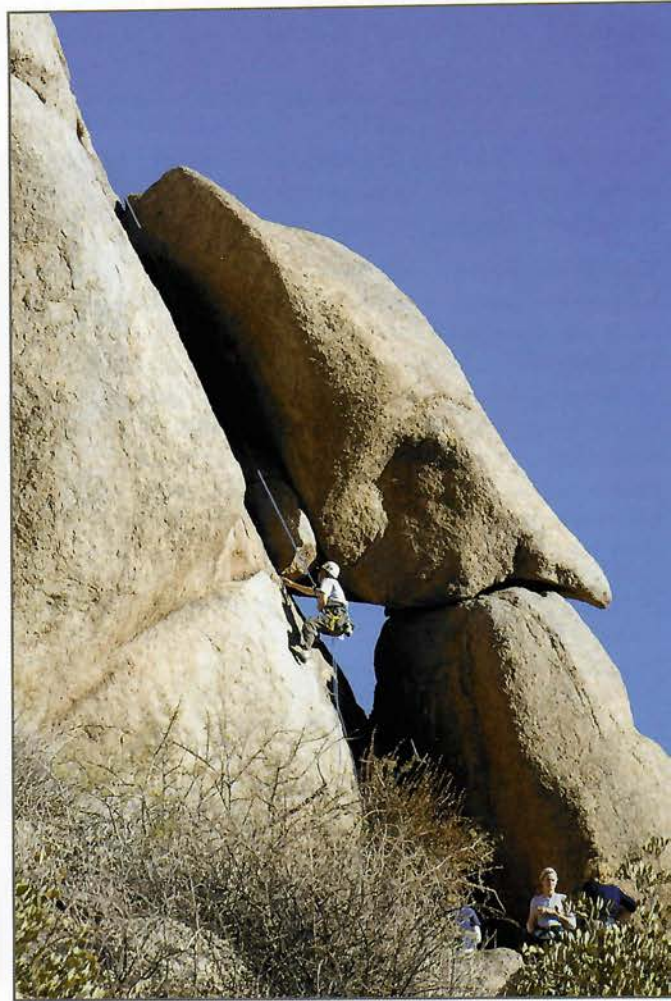


Wilderness advocates and outdoor recreational users can be at odds over how natural areas should be managed. Lovers of remote, wild nature bristle at the incursion of trails and amenities. Many lobby for preserves that restrict visitation. Those whose love of nature includes experiencing it by boot, horse, bike, or rope advocate for access along with careful management of land. What these groups share is an understanding that when people experience nature, and connect with it, greater social responsibility and increased willingness to protect wilderness areas is quick to follow.



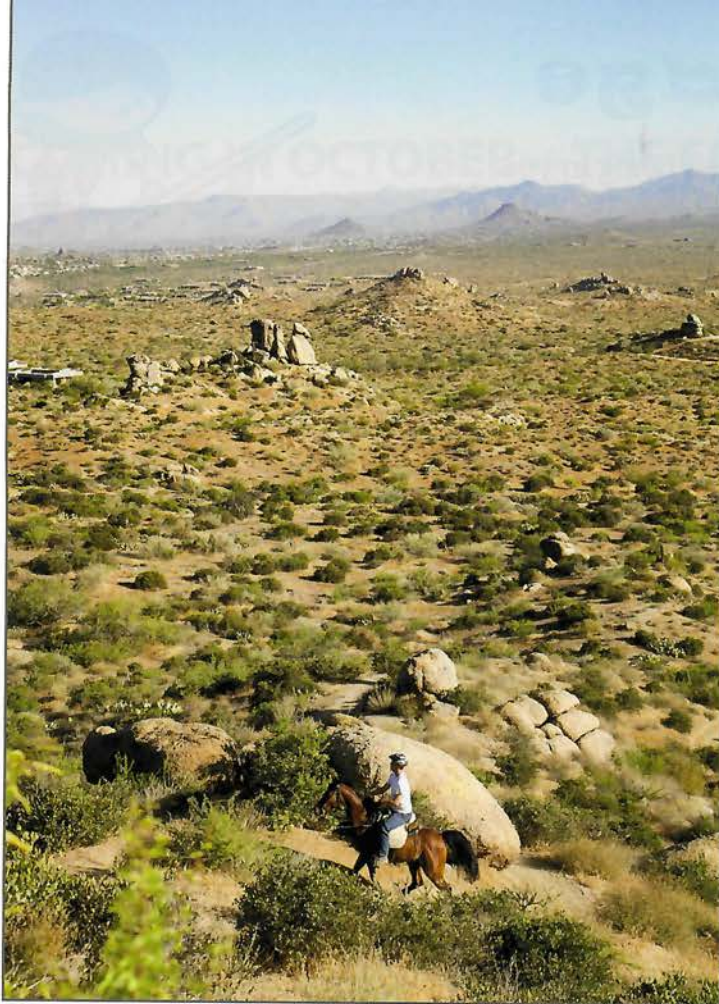
In the McDowell Sonoran Preserve, wilderness advocates and recreational users come together to foster a culture of environmental stewardship, which concentrates human activity within responsible guidelines and leaves large areas undisturbed. Because the Preserve has so much to offer, MSC stewards teach visitors how to minimize human encroachment and promote the health of this fragile and finite resource.

A primary vehicle for MSC's environmental stewardship of the Preserve is our Patrol program - a four-pronged team of hikers, mountain bikers, equestrians, and rock-climbers working together to monitor activity, both human and natural, throughout the Preserve. These four activities also represent the most common methods of approved recreation in the Preserve as they minimize impact and honor the wilderness pursuits of solitude, reflection, and discovery.



In this article, stewards who patrol on foot, on bike, on horseback, and on sheer rock faces give you a sense of what they do, and why they love to do it.

Allan Willey, who oversees MSC's hikers on patrol, promotes hiking as the perfect blend of total freedom and total control. Stewards can query the MSC website to find statistics describing which trail segments are most in need of patrol, or they can "adopt a trail," a program promoted by Patrol chair Samantha Teufel, that encourages stewards to develop a strong connection to a particular area of the Preserve. Stewards setting off on patrol are their own boss, according to Willey. "You get to decide what trails in the Preserve you want to patrol and when you want to hike them. You have the freedom to hike short or long trails, freedom to hike alone or with family or friends, and the freedom to spend as much time as you like chatting with whomever you meet on the trail."



In training, patrol hikers learn the fundamentals of trail maintenance as well as natural history, so “chatting with visitors” is really informal, on the spot, education. One key purpose of the hike patrol is for stewards to be available on the trails to serve as expert resources for visitors curious about specific trails, geographic features, and desert flora and fauna.

Allan likes to point out that patrol is perfectly suited to the individualist personality of most hikers. “When you encounter any kind of problem on the trail, one caused by rain or one caused by the ignorant actions of others, you can decide to repair the damage yourself or you can go straight to the preserve’s top management. You make your report directly to the Preserve managers, who you know on a first-name basis. If they have questions, they call you.”

Mike Millilo is the coordinating force behind MSC’s squad of bike patrollers. Mike knows the appeal of mountain biking firsthand. “It is a great way to enjoy some of the longer trails and access the wilder “backcountry” of the Preserve,” says Mike. “Although it is sometimes called an extreme sport, the prepared biker can enjoy the desert riches while experiencing an exhilarating trail ride.” Additionally, members of the bike patrol can quickly reach the most remote corners of the preserve, covering 8 – 10 miles of patrol in just a few hours.

Bike patrollers also serve as ambassadors of safe cycling and exhibit mountain-biking etiquette while they patrol. “We encourage all mountain bikers to ride with water in a hydration pack, food (nutrition bars or gel), bike multi-tools, an air pump or flat kit, gloves, helmet, and cellphone,” said Millilo. “It’s also wise to team up with a more experienced rider until you familiar-

ize yourself with the trails, potential hazards, and right-of-way courtesies.” Participating in a bike patrol is an easy way to meet riders who can show you around the Preserve.

Equestrian Sue Livingston knows the Preserve from the height of many hands, enjoying the elevated perspective available to her astride her horse. “A horse-and-rider team can cover lots of terrain and carry plenty of heavy supplies in our saddle bags. We all carry extra water and other resources that might come in handy if we discover a hiker in distress on the trail,” she said. “But mostly, riding a horse in the Preserve is pure pleasure. Because your horse is doing most of the watching for safe footing, you, as a patrolling steward, are free to enjoy the wide vistas of surrounding beauty.”

Of all the recreational pursuits that visitors can enjoy in the Preserve, rock-climbing is likely the most dramatic and the least understood. Climbers take justified pride in their long-time vocal support of the Preserve, and their community’s leadership role in the “Leave No Trace” movement, which was founded by climber Paul Petzolt. In the Preserve, climbers worked directly with the City of Scottsdale and through the Arizona Mountaineering Club to develop a rock-climbing plan that includes designated trails to historic climbing crags, associated parking lots, and clear and accurate signage.

Mark Brontsema, MSC steward and director of the Arizona Climbing and Adventure School, lists a number of misconceptions about rock climbing in the Preserve. Climbers don’t deface the rock faces. “The use of steel pitons, pegs that are hammered into the rock, are not used these days. Climbers at the McDowells use fixed bolts, which are safety devices drilled into the hard granite rock that provide a secure anchor for climbers’ ropes. Most of these bolts and climbing routes were placed long before the McDowell Mountains became a Preserve. The climbing community frowns on any new bolting in the McDowells.”

In addition, local climbers promote a small-group ethic, in which classes and social climbs of more than 8 people are discouraged. “When groups exceed a certain size, the dynamics shift from being fundamentally reflective to fundamentally social,” explains Brontsema. “Rock-climbing falls flat on its face in the context of large groups,” he said. “The larger the group, the harder the fall.” As a wilderness advocate and rock-climbing instructor, Brontsema promotes the adoption within the Preserve of the National Parks’ regulations for rock-climbing. The regulations include prohibitions against new installations of permanent climbing hardware, the intentional removal of lichen or plants from rocks, and physical alterations of rock faces, among other guidelines.

It is inevitable that without explicit protection, human activity will continue to threaten the wildness of desert lands that form the urban boundary. Improvements such as trails, signage, and habitat restoration increase both the attraction and accessibility of our wilderness. But greater use doesn’t have to mean greater degradation and loss of natural environment. By teaching and modeling recreational behaviors that embrace a “Leave No Trace” ethic, MSC stewards ensure that recreational users of the desert and wilderness lovers can work as a team toward the long-term benefit and survival of our wild Sonoran places. 🌿

Photographs by: B White

Family Fun Page

Have you ever wondered if there are animals living in your yard that only come out at night? Here is a fun way to find out!



Making a "Trap for Tracks"

One way to identify the animals that visit an area is to find their tracks. When hiking in the Preserve, the dusty edge of the trail is a great place to find tracks. It is easy to make a similar condition in your yard and then see what animals visit. Follow these instructions to make a "trap for tracks". You will make a tiny pond surrounded by sand and see who comes for a drink.

Materials

Fine sand (such as sandbox sand)
A ruler
A spray bottle with water
A shallow pie pan
Water

Instructions

1. Smooth an area about the size of a hula hoop.
2. Dig a shallow hole in the center and place the pie pan in it. Try to make the top of pie pan even with the ground. Fill it with water.
3. Spread the sand about 1 inch deep over the entire smoothed area, including right up to the edge of the pie pan. Use the edge of the ruler to make it as smooth as possible and spray it with the spray bottle to settle the surface.
4. Check the sand the following morning to see if anything visited. If not, try this for a few nights. Something is sure to come by for a drink!

10 Common Tracks in the Preserve and Nearby Areas

Can you match these animals with their tracks?

Javelina - Each foot leaves a track that looks like two fingers pressed into the ground. The pointy end points in the direction the javelina is going.

Beetle - Beetles have tiny, pointy feet. They take many many little steps so their tracks look like rows of dots.

Lizard - Lizards have longer toes on their back feet than their front. Their feet often point out to the sides. Many lizards drag their tails which may cause you to think the track is of a snake. If you see footprints though, it is definitely a lizard!

Jack Rabbit - The tracks of a jack rabbit can be confusing because their front and back prints look very different. The back prints are long and flat while the front prints look small and round.

Roadrunner - You can easily tell the tracks of a roadrunner when you find them. They are the only bird in the area that has two toes that point forward and two that point backward!

Coyote and Bobcat - The tracks of these two animals are very similar. They only difference is that coyotes, like all dogs, have tracks with a hole left by their toe nail while a cat's print never does.

Quail - Quail have long toes for a bird their size. Their foot prints are like a cross as each toe points in a different direction.

Mouse - A mouse has tiny feet whose prints look like hands.

Raccoon - The front feet of a raccoon leave prints that look very much like a human hand. Their back feet are long and narrow and have long toes.



COMING IN OCTOBER—THE FAMILY FRIDAY SUNSET SERIES

By Jill Feinstein, MSC Program Coordinator

It's been a long week. Friday comes around and collapsing on the couch in front of the television feels right to you and the kids. Not so fast! Imagine the sun setting on the Gateway to the McDowell Sonoran Preserve, the purple hue of the mountains, a quiet talk about some cute fuzzy desert resident or soaring majestic raptor. That will be your experience at our free Family Friday Sunset Series which takes place every Friday in April and October from 4:30 to 6:00 PM at the Gateway amphitheater.

that will talk about the geology of the McDowell Mountains with sample minerals for the kids to see and feel. There will be animal ambassadors to delight the kids and grown-ups, alike. These are only a few of the many wonderful events that will take place, so stay tuned to our website www.mcdowellsonoran.org for information on events and dates as they become available. 🌿

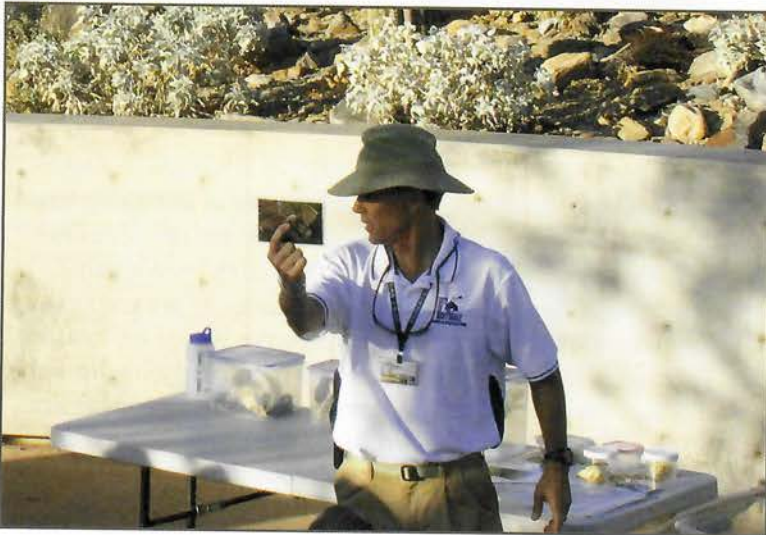


Photo by D. Bierman

As humans, connecting with nature is essential to our well-being. In the past, our lives were inextricably tied to nature. Almost everything we needed came from the earth. We may no longer need to hunt for our food or harvest the nuts of jojoba to make salve, but we need nature to keep us healthy. Being in nature reduces stress, sharpens our senses, and focuses our thinking. In children, time spent in nature encourages spontaneity, creativity and curiosity, and is critical to healthy development and maturation. Children today are more likely to be texting their friends, watching television, or playing a computer game than enjoying the wild world around them. The McDowell Sonoran Preserve is a gem in our own backyards and a wonderful place for kids to experience the outdoors.

The Family Friday Sunset Series provides an opportunity for families to share time together in a magnificent location at a spectacular time of day. There is no better way to end the week. Each Friday is a different event. In the past, we've had speakers on creatures of the Sonoran Desert, the many varieties of owls that live in our desert, saguaros and prickly pears, and the constellations that can be viewed from our desert, to name a few. All of these events are family friendly and engaging to audiences of all ages. In October, we'll have presenters from the Audubon Society, the Heard Museum and a rock hound

ASU Public Allies Arizona



Through a partnership with ASU's Lodestar Center for Philanthropy and Nonprofit Innovation, MSC worked with a Public Ally, June Cho, from September 2009 through June 2010. The Public Allies program has as its mission to "advance new leadership to strengthen communities, nonprofits, and civic participation." Public Allies Arizona places dedicated, service minded young people - Allies - in 10-month apprenticeships in nonprofit organizations throughout the Phoenix community.

June's work through this program has helped to expand MSC's reach into the community and to work with youth on local and national activities focused on supporting the community and the environment. We plan to continue to develop these efforts, with the hope that we are able to engage even more youth in our stewardship of the Preserve.

Teens who would like to get involved in their communities by supporting the local environment are invited to work with us by leading or participating in the following opportunities: National Public Lands Day (September 25, 2010), Make a Difference Day (October 23, 2010), Martin Luther King Day of Service (January 16, 2011), Global Youth Service Day (April 16, 2011), Earth day (April 22), National Trails Day (June 4, 2011).

For more information please call the MSC offices at (480) 998-7971.

Lesley Forst

MS Environmental Sustainability, USC 2010 and MSC Intern

What is sustainability and sustainable development? The term is used very frequently to describe everything from some of the food we eat everyday to an overarching way of life. But what does it really mean? Sustainability literally means: The capacity to endure, but in terms of protecting our environment and our way of life, we want more than pure endurance, we should aim for excellence. The most commonly used definition of environmental sustainability was set forth by the United Nations World Commission on the Environment and Development in 1983. Sustainable development was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Under the lens of environmental preservation sustainability means recognizing that we do not live in a world of unlimited resources, we must find a balance between preservation and growth to sustain a healthy, happy life today and for the future, not just for our human communities but also for the natural world around us. Sustainability can be achieved by simply living in balance.

PRINCIPLES OF SUSTAINABLE LIVING

Living in an environmentally sustainable way is not as daunting, nor abstract as even defining sustainability itself; in fact, many of us apply the principles of sustainability without even realizing it. Sustainable living recognizes that our economy and the environment are not two separate entities and in order to ensure a bright future on both accounts, the two must be integrated in our minds and practices. Also we must work together as a community to achieve this goal. Achieving a sustainable community on a local level requires integration of a few important principles with regard to development, the economy, and environmental protection. Sustainable communities recognize that:

- Growth must occur in accordance to natural limits in resources, including those of land.
- Resources should be used in the most efficient way possible and renewable alternatives should be utilized.
- Special care should be taken in protecting biodiversity and ecosystems, development should cause as little harm as possible.
- Community members should be active in protecting their environment and implementing strategies to live more sustainably.
- Education about environmental protection and sustainable living is essential.

- Economic decisions should incorporate environmental protection.
- Development should not compromise the sustainability of other communities today or in the future.

Living in an area with open space and a protected ecosystem, such as the communities that surround the preserve, fulfills several goals of living sustainably, including education, a sense of community, and protection of an irreplaceable resource, our desert home.

MCDOWELL SONORAN PRESERVE AND SUSTAINABILITY

The McDowell Sonoran Preserve is essential in making sustainable living possible in Scottsdale. It is the perfect example of community involvement to protect an irreplaceable resource. Preserved open space in urban areas is exceptionally rare and the existence of the preserve should be heralded. Desert and mountain ecosystems are particularly fragile and the Sonoran desert which is home to many unique organisms, and is unlike any other desert in the world, makes protection of this area even more crucial. By protecting this area we are not only ensuring a healthy ecosystem but we are also accomplishing several of the goals of sustainability, ensuring a healthy human community for generations to come. One of the main focuses of sustainable living is the preservation of open land. Open spaces such as the Preserve provide a variety of benefits to the human community such as improvement of air quality due to lack of vehicular traffic, mitigation of heat island effects, preservation of biodiversity, and opportunities for recreation and environmental education. In essence we take care of these lands and they, in many ways, return the favor.

Sustainability does not have to be an abstract far away concept. We can easily integrate its principles into our everyday lives, and it is in our best interest to do so. The single greatest hurdle in internalizing this concept is recognizing that we as humans are not separate from our natural environments; we are just as dependent on the Earth as every other living thing. In modern urban living this can be hard to recognize and remember; however we are extremely fortunate to have a place, the McDowell Sonoran Preserve, that can help us realize that environmental protection and sustainable living is a blessing not a burden, that it ensures a quality life for us now while ensuring that we leave a legacy of health and happiness for future generations. 🌱

North American Field Herpetology Association



H.E.R.P.

Herpetological Education & Research Project

Who is NAFHA?

The North American Field Herpetology Association (NAFHA) is a non-profit organization dedicated to uniting amateur, private and professional herpetologists from Canada, the United States and Mexico toward the common goal of better understanding, conserving and managing native North American reptiles and amphibians.

Founded in 2006 by a professional herpetologist with input from professional, private and amateur herpetologists from all regions of North America, NAFHA is rapidly becoming a primary source of herpetological data and field assistance for researchers, conservationists, legislators, and wildlife management organizations working with North American reptile and amphibian ("herp") species.

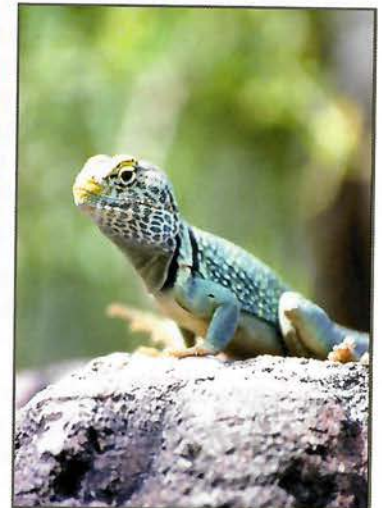
The Arizona chapter of NAFHA, founded in 2008, will be working in concert with the McDowell Sonoran Conservancy to conduct field studies of the various reptiles and amphibians which call the Preserve home.

Where can we find the data NAFHA collects?

Among the many projects undertaken by NAFHA regional chapters is the Herpetological Educational and Research Project (HERP) database (<http://www.naherp.com>). The information in the database is a continually expanding collection of current herpetological data, gathered daily from the field by NAFHA members working in Canada, Mexico and the U.S.A. Each member enters data collected from the field into the database and has the ability to control the dissemination of the information.



Photographs by George Andrejko



As an example of how this works the State of Texas recently asked for access to the information regarding Texas reptile species to assist them in determining land usage and development policies. The request was discussed by the International Board of NAFHA and is now put up for a vote by the members of the South Central NAFHA chapter (which includes Texas). If the vote is completed in a favorable fashion the data requested will be released to the authorities requesting the data. This method is used to protect the data from being used as a road map to sensitive or endangered herp locations by commercial and amateur herp collectors.

How will NAFHA benefit the MSC?

In conjunction with the McDowell Sonoran Field Institute, NAFHA and MSC are developing a partnership in preservation to discover exactly which herps reside within the Preserve. By using field work and other research methodologies, NAFHA members, along with volunteers from MSC, will be able to develop a baseline herp species survey. This survey can then be used to help track future populations of reptiles and amphibians over a period of time. By

continued long term field work, NAFHA and MSC will be able to determine herp population trends within the Preserve, to recommend methods to assist in the protection of legally protected species such as Desert Tortoises and Gila Monsters, as well as to create a better herp educational experience for those who enjoy the Preserves trails and amenities, among other things.

Copies of all data collected by NAFHA and MSC volunteers will be retained by the MSFI for its own use. NAFHA will also enter data collected into its own HERP database. Sensitive information regarding water sources, den locations, and other biologically sensitive information will remain under the strictest control of NAFHA and the MSFI.

What type of Educational Outreach can NAFHA provide MSC?

In order to properly conduct the field research, members of NAFHA will train MSC volunteers in proper methods to collect, record, and report information to NAFHA for the baseline survey. The MSC volunteers will be working alongside NAFHA members in the field learning field data collection techniques and methodologies. After completing this training the volunteers will then be able to continue in the collection of data even when NAFHA members are not present.

NAFHA members will also make presentations to MSC members and the general public, if requested by MSC, to promote a better understanding of the importance and benefits of reptiles and amphibians in the Preserves ecological system. As part of the field data collection process, a large number of photographs will be taken of the herps and habitat which will add to the education process and experience.

NAFHA members are looking forward to a mutually beneficial partnership with the MSC for many years to come. 🌿

The Rate of Change

By Ruthie Carll,
MSC, Executive Director

Do you recognize this place? It is your home, Scottsdale, 11,000 years ago. At that time, the Valley was a grassland peppered with juniper and pine trees and roamed by giant ground sloths and woolly mammoth. Evidence of these plants and animals can still be found secreted away in local packrat nests. Even living plants such as the Soaptree Yucca may be a connection to this long ago habitat. Some scientists believe that their edible fruit, produced on stalks too high to be reached by current native animals, may have evolved for seed distribution by mammoths! The recent limestone discovery in the McDowell Mountains, a mineral known to be deposited by water, also reveals a history of environmental change. This natural process of climate change has allowed the landscape in this illustration to become that which we see out our windows.

If climate change is normal, why is one of MSC's primary goals to protect the Preserve from impact, invasive plants, fire, and essentially - change?

We hear a great deal about climate change and its negative effect on the environment and species. This seems to contradict the fact that environmental change and species extinction is normal. Part of this story that isn't well-communicated in media sound bites is that it is the *rate of change* that is relevant, both locally in the Preserve, and globally.

“The difference between animals and humans is that animals change themselves for the environment, but humans change the environment for themselves.” ~ Ayn Rand

In order to put this concept in perspective, let's compare “life” time to “geologic” time by looking again at the illustration above. As the local climate slowly changed from snowy grassland to desert over 11,000 years, 5,500 generations of packrats, which live for about 2 years, passed. However, what seems like an infinitely long time to a packrat was just a moment in the history of the McDowell Mountain Range, which is over 200 million years old. Because there were so many generations of packrats during this time period, the species could adapt to the slowly changing environment and survive.



When changes occur to a habitat due to the influence of man, the change is often too rapid for the inhabitants to adapt. This is particularly true in deserts where many animals live long lives and produce few young. The ability for a species to adapt is directly related to its life span and the amount of offspring produced. For example, a Bailey's pocket mouse can have more than one litter of five young per year and each baby can grow to reproductive maturity the same season. Conversely, an ironwood tree may live for 800 years with only a handful of seeds growing into mature trees. Both of these species can evolve adequately in a stable habitat. Pressures from human activities, however, can weigh against them.



Illustration by Karen Carr (c) Bailey's pocket mouse photo by Randy Babb, Ironwood tree photo by Marianne Jensen, Desert Spiny lizard photo by Gene Almendinger, Preserve photo by Ruthie Carll

Now let's look at the present day. In a recent issue of Science, a paper was published revealing that common lizards living adjacent to desert urban areas are dying off while their more remote counterparts are not. The scientist found that, due to the rise in temperature caused by urban development known as the heat island effect, the lizards cannot spend enough time out of their burrows without overheating and are therefore unable to hunt. They are starving to death. Temperatures in the Valley have increased an average seven degrees in the last forty years. A typical lizard, such as the desert spiny lizard, lives for about five years and therefore, the change occurred over only eight generations – not nearly enough time for the species to evolve.



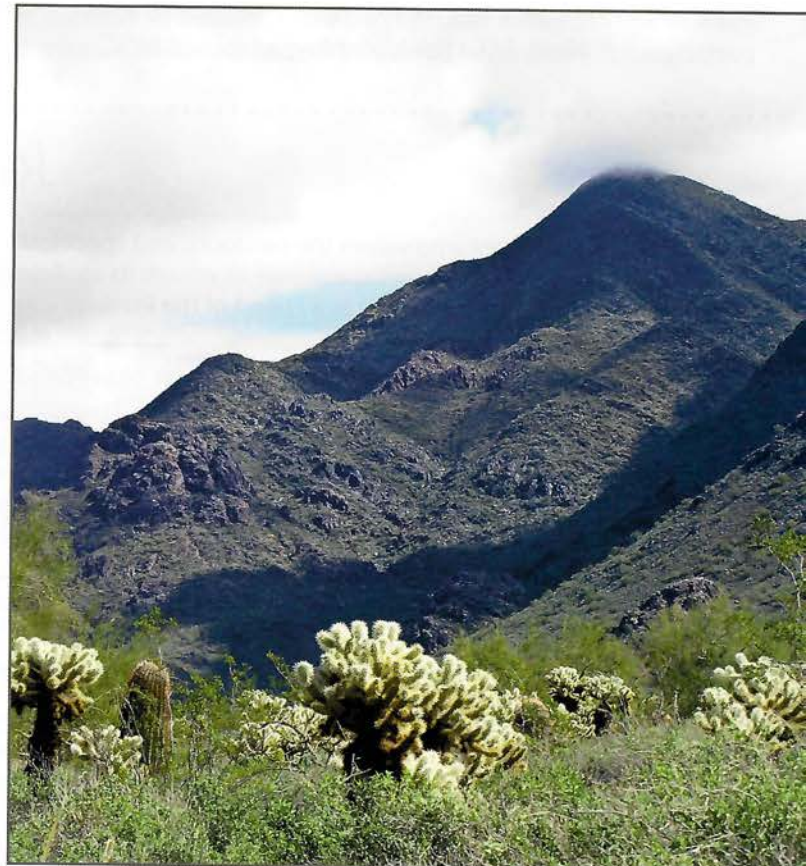
C's goal in stewarding the Preserve is to allow healthy, natural change while attempting to ameliorate human-caused, rapid change. Our strategies include:

- Removing invasive species that are proven to be negatively impacting the habitat
- Monitoring species that appear to be 'moving in' or declining
- Patrolling for habitat damage
- Sharing ways to reduce impact with recreationists
- Educating those living adjacent to the Preserve about their impact – even if they never go inside its boundary.
- Encouraging decision-makers to prioritize land acquisition
- Getting teens involved in the stewardship of their local environment.
- Engaging the community to support the Preserve through volunteerism.

We know that the Preserve will change. In fact, we hope it does! We hope that it continues to adapt to the pressures caused by climate change and urbanization. We also hope to remove as many threats to this process as possible. We are counting on you to be part of the solution. To learn more about appropriate recreation, conservation, and sustainability, please visit our website at www.mcdowellsonoran.org.

Another example of change occurring too quickly is the rapid influx of people to a previously remote area. When the Tom's Thumb Trail was completed last year, it allowed thousands of visitors to explore this amazing area filled with boulders and views that are spectacular. Those who stay on the trail pose little danger to tortoises, typical residents of boulder areas and rocky slopes. Going off-trail, however, allows for increased tortoise/human interactions which is often not healthy for the tortoise. These shy animals urinate when startled, losing water they store in their bladders until fresh water is available. This can be fatal if a new water source isn't found. Other threats brought by increased access include the theft of tortoises for pets as well as the release of captive tortoises that bring domestic diseases to the wild. Tortoises live for about seventy years and therefore a single generation must adapt to these changes. This is simply impossible.

The most extreme example of change occurring too rapidly is when habitat is lost entirely. Residential development on bajadas, the slopes at the base of mountains, eliminates the habitat of bajada-dependent plant species such as cholla cacti and saguaro. These plants can't migrate and even if salvaged, they rarely survive. They have become so well-adapted to their habitat that they don't thrive in other areas.



M&I Bank



M&I Bank has been serving Arizona residents since 1965 through the acquisition of Thunderbird Bank in 1986. Over the past 20 years M&I Bank has experienced tremendous growth while remaining dedicated to providing customers with unparalleled service and reaching out to the communities they serve. They currently have more than 50 locations across the state.

Each year, M&I Bank, Arizona, and its employees strive to enhance the lives of individuals in the communities it serves by supporting local organizations through financial donations, board involvement, and volunteer efforts. Employees dedicate countless hours to the causes in which they believe.

M&I Bank encourages service during the work week, enabling Gina Scimeca, Scottsdale Branch Manager, to become an MSC Steward and volunteer each month on Wednesday afternoons. Gina's commitment to MSC is contagious as she has been able to arrange a number of employee volunteer days in support of our work!

First, bank employees volunteered for the McDowell Sonoran Challenge, arriving at 5:45 a.m. the last Saturday in February to give exemplary service to event participants. Next, M&I Bank employees joined MSC



Stewards and Scottsdale city staff for a habitat remediation project in the McDowell Sonoran Preserve.

Our partnership includes financial support as well as resources that only M&I is able to provide. For instance, in celebration of McDowell Sonoran Month in October, Scottsdale branches will promote the Preserve through a poster campaign and giveaways. "As a volunteer with MSC and a manager at M&I Bank, I understand the importance of the Preserve to our community and understand our unique ability to support MSC's important work," says Gina Scimeca, Branch Manager.

MSC appreciates the support we receive from our Preservation Partners! For more information or to become a Preservation Partner, please contact Linda Raish at (480) 998-7971.

Join Our Circle of Friends

As a community member who values the outdoors, and specifically the Sonoran Desert, you understand the importance of preserving and maintaining open space now to ensure its availability in the future. This shared appreciation of the desert is why we are inviting you to join us today as a Friend of the Preserve... by returning the membership form below.

Yes!

I want to help preserve my desert and mountains by joining MSC's Circle of Friends.

- McDowell Sonoran Society (\$1,500+)
- Steward Circle (\$1,000)
- Pathfinder Circle (\$100)
- Trailbuilder Circle (\$500)
- Hiker Circle (\$50)
- Caretaker Circle (\$250)
- Other _____

- Please charge my credit card
- A check is enclosed

Credit Card # _____ Expiration Date: _____

Name as it appears on the card _____

Name(s) by which you would like to be acknowledged _____

Address _____ Email _____

_____ Phone _____

- I would prefer that my gift remain anonymous

Mail to: McDowell Sonoran Conservancy • 16435 N. Scottsdale Rd. • Suite 110 • Scottsdale, AZ 85254

Donor Profile

Betty Lou Summers: A Legacy of Giving

Betty Lou Summers is a long-time proponent of open space and the natural world. As an avid artist, she finds inspiration in a diversity of subjects which frequently include impressions from nature. Thankfully for us, Betty Lou is also a long-time supporter of the McDowell Sonoran Conservancy.

What makes Betty Lou different from most other MSC supporters, though, is that she provides annual support through transfers of stock. She encourages this method of gifting as a win/win for all involved, the donor and the organization.

Most people think of cash when they consider a charitable contribution, but a gift of securities may be a wiser choice. Gifts of appreciated securities, both publicly traded and closely held, can often provide more advantages to a donor than a gift of cash. Income and capital gain tax savings generated by a gift of stock can dramatically reduce your after-tax cost of giving and result in the maximum charitable deduction allowed.

Betty Lou says she has been happy to have the opportunity to give appreciated stock to the MSC and to see the excellent work MSC has done at the new Gateway to the McDowell Sonoran Preserve. She believes that "the Preserve is a won-



photograph by John Nystedt

derful gift to the entire community for all time."

Betty Lou is a wonderful advocate for the McDowell Sonoran Preserve; moreover, she has taken an additional step in protecting the McDowell Mountains and surrounding Sonoran Desert by helping to ensure that MSC can continue our important work. We are very appreciative of her support.

For more information about gifts of appreciated securities, please contact Linda Raish at (480) 998-7971 extension 101. 🌿

NEWS AND NOTES:

Piper Grant to fund Stewardship Efforts

The Virginia G. Piper Charitable Trust recently provided significant support to MSC with an investment to help MSC's efforts to develop and maintain an active cadre of Stewards sufficient in number and with the skills and commitment to ensure care and protection of the Preserve's land and wildlife, specifically funding our efforts to engage over-55 adults. Piper Trust makes grants that continue Virginia Galvin Piper's commitment to improving the quality of life for the residents of Maricopa County. Their core grant making reflects Mrs. Piper's support of programs in healthcare and medical research, children, older adults, arts and culture, education and religious organizations.

Through land acquisition potential over the next months and years, MSC faces a critical need to recruit and educate new volunteers. The Piper Trust's support will help us reach our goal of doubling our number of volunteers over the next three years.



Look for the MSC Calendar

In an effort to provide complete, current information to MSC supporters and those interested in activities available in and about the McDowell Sonoran Preserve, MSC has developed a calendar of events and activities. Published twice per year, the booklet will feature regular MSC programs like Pathfinders and Guided Hikes, as well as special monthly features and themed activities. For instance, the Fall calendar, scheduled to be available in September, 2010, will feature special activities planned for McDowell Sonoran Month in October, and activities for visitors to be introduced to the Preserve in November and December. Upcoming activities include *Fit City* in January, *Art in the Preserve* in February, *Wild about Wildflowers* celebration in March and family-focused activities in April.

McDowell Sonoran Month Kickoff

McDowell Sonoran Conservation Festival

Market Street at DC Ranch, Thursday, September 30, 2010— 5-8 p.m.

Experience all that makes the McDowell Sonoran Preserve important to our community at the launch of the 16th annual *McDowell Sonoran Month*, a celebration of the McDowell Mountains and surrounding Sonoran Desert.

Explore the Preserve through a virtual hike, learn about the plants and animals you see in the desert, and experience the awe of a rehabilitated hawk release, learning how our efforts are protecting our natural heritage.

This family-friendly event features the following activities:

- Taste, touch and learn about the amazing saguaro with MSC Nature Guides.
- Meet two live tortoise and learn about how these interesting creatures survive in the desert.
- Practice basic hiking etiquette with an MSC Hiking 101 expert.

- Challenge yourself and your friends to be "Smarter than a 5th grader" in a desert trivia game.
- Make a wish before the release of a rehabilitated hawk and speak to representatives of a local wildlife group.
- Vote for your favorite Focus on Conservation photograph at an exhibit comprised of winning entries from the 2010 contest and meet the artists and other expert photographers.
- Sample locally grown organic produce and products which will be offered for sale.
- Taste the best dishes of featured restaurants at the Market Street at DC Ranch.

Riders participating in the Scottsdale Cycling Festival can pick up their race packets at the event and volunteers participating during the Cycling Festival will be recognized for their service.



SEPTEMBER 30 - OCTOBER 3, 2010
SCOTTSDALE CYCLING FESTIVAL
CRITERIUM AT DC RANCH - TOUR DE SCOTTSDALE

For more information on this event and McDowell Sonoran Month activities, please contact Linda Raish at (480) 998-7971 extension 101 or via email at linda@mcdowellsonoran.org