



MCDOWELL SONORAN CONSERVANCY

Speakers Bureau Topics

Our educational talks cover a broad range of topics and are available to groups and communities. Experience the Sonoran Desert through our *Enjoying Nature and Wellness talks*. Learn about the natural world – geology, wildlife and plants in our *Nature and Ecology* talks. Take a step back in time to discover life in the Sonoran Desert in our *Human History* talks.

Our presenters are subject matter experts with a passion for sharing what they know. If you are interested in booking a talk, send an email to speakers@mcdowellsonoran.org. We request a donation when providing speakers for your event.

We offer this shorter overview of the Conservancy and Preserve for group meetings, gratis, when time is limited to 20 – 30 minutes:

INTRODUCTION TO THE MCDOWELL SONORAN CONSERVANCY AND PRESERVE

The majesty of the Preserve is for everyone to enjoy. This 20 minute introduction to Preserve activities (walking, hiking, biking, nature programs, educational walks, and the Conservancy's role) provides an overview to help you understand the many activities offered in the Preserve for adults, families, and children. This lecture provides a short introductory overview.

Talks Listed By Category

Please review the list below which covers over 20 topics presented by category. Categories include *Enjoying Nature and Wellness*, *Nature and Ecology*, and *Human History of the McDowell Sonoran Preserve*. Most talks are 60 minutes with some taking 90 minutes.

Enjoying Nature and Wellness

A DOZEN WAYS TO DIE IN THE DESERT

This lecture will enlighten and educate you about the unusual ways in which people end up ten toes in the air in the middle of the Sonoran Desert. Learn how to deal with

rattlesnakes, Gila Monsters, scorpions, mountain lions, bees, heat stroke, hypothermia, and the occasional hostile cactus, just to name a few. More importantly, understand appropriate ways to respond, so that you can come away with nothing more than a great story.

ADVENTURES IN THE PRESERVE

The McDowell Sonoran Preserve is in your backyard. Learn the tips that Conservancy stewards use to stay safe while exploring the Preserve. Topics include an overview of the Preserve, best trails based on location, interests, and ability, backpack must haves, desert safety, and Conservancy resources.

DESERT HACKS AND FACTS

Desert Hacks & Facts is a potpourri of skills, techniques, tricks, and facts that make a walk in the desert enjoyable, interesting, and survivable. Learn how to find your direction, identify animal tracks, how a saguaro survives, and thrives and much more. This talk will prepare to impress your out-of-town guests with your knowledge of the Sonoran Desert.

NATURE AS THERAPY – WHY NATURE MAKES US HAPPIER, HEALTHIER, AND MORE CREATIVE

People, for centuries, have noticed an improvement in their physical and mental well-being after spending time in nature. Scientists have been asking the question, “Does being out in nature offer additional benefits beyond the documented value of walking or high-intensity exercise?”. Learn why spending time in nature makes us happier, healthier, and more creative. Peer-reviewed scientific research is discussed showing how this occurs. Specific techniques and prescriptions are then provided to enable anyone, at no cost other than time, to access the health benefits of spending time in nature.

Nature and Ecology

ANIMAL MIND GAMES

Have you ever been startled by an animal on the trail or around your house and wondered why you didn't see it at all until perhaps it moved? We'll explore animal camouflage – what it is, how it's used, and why it's effective – using actual examples including some from the Sonoran Desert. Come and test your ability to spot hidden animals.

ARTHROPODS OF THE SONORAN DESERT

Spiders, scorpions, bees, and wasps are just the beginning – there are more species of arthropods than any other group of animals. The arthropod world is fascinating and diverse, and arthropods have important roles in the desert ecosystem. Learn about some of the arthropods that you can see in the Sonoran Desert which includes the McDowell Sonoran Preserve and your home if you live in this area. What adaptations do these animals have that allow them to survive and even thrive in the desert and how do they affect the people who live in the Sonoran Desert?

BIRDS: ENJOYING AND UNDERSTANDING LOCAL BIRDS

There are 300 bird species in Arizona with 190 documented in the McDowell Sonoran Preserve. Learn about these birds, their habitats, and diets from one of our bird experts. Get tips on using binoculars and learn how you can help birds continue to thrive in the Sonoran Desert.

ECOLOGY: THE INTERCONNECTEDNESS OF ALL THAT EXISTS

Everything in the desert is connected and always changing. We'll explore how the environment--the mountains, the rocks, the climate, the washes, and more--affects the plants and animals that live here, how living things in turn change the environment, and how climate change and increasing development may impact what we see here.

ECOLOGY OF DESERT DIRT

Most of the desert is covered by rock, dirt, and soil – which are the basis for everything that lives here. But how does rock turn into dirt, what's the difference between dirt and soil, and how does dirt become soil? We'll explore millions of years of transitions that turn mountains into meadows, explain why dust is crucial to life here, and understand why you can't tell a rock from its cover!

ETHNOBOTANY: THRIVING AND SURVIVING IN THE SONORAN DESERT

The people of the Sonoran Desert not only survived but thrived in the harsh environment that surrounded them. Learn about the accumulated generational knowledge of these desert people and how they used plants to sustain themselves. We will explore the amazing properties of many essential desert plants, about gathering and processing procedures and ways in which the plants were utilized.

HIDDEN WONDERS – ARIZONA GEOLOGY

Arizona is a land of geologic marvels, where the forces of nature have shaped the rugged terrain, we live in today. Over the course of more than 1.7 billion years, natural phenomena have played a key role in the creation of Arizona's striking landscapes, including those found in Phoenix and the McDowell Sonoran Preserve. You'll be

introduced to the fundamental concepts of geology and explore how these natural processes continue to shape our world. Discover the geological history that underpins the natural beauty we see in Arizona today.

IF ROCKS COULD TALK: THE GEOLOGIC STORY OF THE MCDOWELL SONORAN PRESERVE

Discover what makes the Sonoran Desert unique and the way in which geology is a fundamental influence on all that exists in this region. Explore the amazing story about the world in which the rocks that make up the landscape of the Sonoran Desert were formed. Learn about the massive forces that formed the McDowells and the central Arizona region and how the land we see today changed over geologic time.

MIGHTY SAGUARO

The Saguaro is the icon of the Sonoran Desert that inspires us to appreciate the majesty and beauty of the land that surrounds us. The story of the Saguaro starts with thousands of tiny seeds, often spread by birds, with only a few seeds landing safely, germinating and making it to maturity. From there the Saguaro becomes home and food to many creatures and slowly grows to tower over all other Sonoran Desert plants. Learn the secrets of the Saguaro that make it possible for this giant to live in a land of little water and harsh sun.

NATURE'S MEDICINE CABINET: PLANTS OF THE SONORAN DESERT

Take a global look at the importance of plants and their physical properties, and how they were used throughout the centuries to aid in wellbeing. We begin with a global view but then move closer to home to look at some of the medicinal plants found in the McDowell Sonoran Preserve.

RUST, DUST, CRUST: DISCOVERING DESERT SURFACES (90 MINS.)

The Hills are Alive! If you think the desert floor is all dust, gravel, and rocks, then you haven't taken a good look beneath your feet. The desert's surface is full of life in the form of soil crust, lichen, and desert varnish – the living things that probably cover more of the desert than any single kind of plant. These organisms have much in common — they're all alive (yes, even varnish), they have some components that are neither plant nor animal and living filaments that are crucial to their existence. We'll explore these life forms and how they enrich and protect the desert surface.

FROM RAIN TO BLOOM: UNDERSTANDING DESERT WILDFLOWERS

Wildflowers arrive as the harbingers of spring—but only after their seeds have been nourished by fall and winter rains. Yellow blossoms burst from Brittlebush, washing the landscape in gold, while poppies paint the lower edges of the scene with warm orange hues. Much of the magic of wildflower season happens close to the ground, where

small, sometimes tiny, blooms add delicate splashes of color across the desert floor. This talk highlights the wildflowers found in the McDowell Sonoran Preserve and explores how and when these fleeting displays come to life.

VENOM IN THE SONORAN DESERT

Some reptiles and arthropods in the Sonoran Desert use venom to defend themselves or subdue their prey. Other animals secrete poisons to defend themselves. In this presentation, you will learn how to recognize these venomous animals that bite and sting and how their venom affects their prey and humans. Some of these venomous animals are not as dangerous as you might think.

WILDFIRE AND INVASIVE PLANTS – WHAT COMMUNITIES CAN DO

Fires are happening with more frequency and are burning faster and hotter than ever before. See how the Sonoran Desert evolved without fire and how invasive plants have impacted the desert's ecosystem. Discover how these invasives journeyed to the desert – some of them as cattle food and others as stowaway passengers. Learn what you can do to stop the spread of invasives and to contain fire.

WILDLIFE CONNECTIONS

This lecture explores the connections among the wildlife in the McDowell Sonoran Preserve, changes imposed by environmental stressors, the importance of valuing the biota in our surroundings and actions we can all take to promote sustainable populations of the creatures with which we share the Sonoran Desert.

Human History in the McDowell Sonoran Preserve

BIZARRE HUMAN HISTORY OF THE MCDOWELLS

The McDowell Mountains feature a peculiar past of plane crashes, ghosts, murders, and wildfires. You will learn of the impact of southwestern military, mining, ranching, urbanization, and preservation activities on the natural resources of the area. Learn about the unique contributions of women from local cultures.

BROWN'S RANCH: LAND WARS

All hell broke loose when, in February 1947, Ellsworth Brown – known as “Big Brownie” – purchased 27,000 acres of land in northwestern Arizona with the intention of exchanging it for 16,000 acres of public land adjoining Brown's Ranch in north Scottsdale. Before the dust settled two years later, the conflict over Big Brownie's planned exchange sucked in a myriad of politicians, businesses and lawyers. The wild

and wooly political warfare and backstabbing embarrassed the newly formed Bureau of Land Management and ultimately helped save land that was eventually acquired by the City of Scottsdale for the McDowell Sonoran Preserve. The story provides insight into how land politics is conducted outside the public eye. (90 minutes)

DESIRE AND ROMANCE AT FORT MCDOWELL

What were relationships like between men and women living at the most remote military outpost in the Arizona Territory? Was there passion? Romance? Hanky-panky? It's complicated. Enjoy 60 minutes of history stuff that would encourage Cupid to get a different day job

GEORGE STONEMAN AND THE STONEMAN ROAD

This is the story of General George Stoneman and the creation of the military road that bears his name. The military road ran through the Brown's Ranch area of the McDowell Sonoran Preserve, Cave Creek, Carefree, and the Black Canyon. Learn what life was like for the soldiers as they marched from Fort McDowell to Fort Whipple in nearly unbearable conditions.

PEOPLE OF THE MCDOWELLS: A 10,000 -YEAR STORY

The McDowell Mountains have never been without people. For over 10,000 years, humans have called this land home — first as hunter-gatherers, then as Hohokam farmers, and more recently as 20th-century ranchers. The land changed hands and ways of life evolved, but the questions stayed the same: Where do you find water? What do you eat? Where do you sleep? How do you spend your day? Living in the Sonoran Desert has always challenged people, but each culture learned to adapt. Through images and hands-on artifacts, we'll bring human history to life.