



PARKS & RECREATION
SAN ANTONIO

WELCOME TO FRIEDRICH WILDERNESS PARK!

A FIELD GUIDE FOR YOUNG EXPLORERS



Visiting Friedrich Wilderness Park can be a learning adventure! This guide shares a few tips to keep in mind, activities for kids, history of the park, as well as suggested trails to explore.

WAIT! NO DOGS ALLOWED?



Dogs are prohibited at designated Natural Areas, including Friedrich Wilderness Park and Crownridge Canyon Natural Area. As a wilderness refuge, Friedrich Wilderness Park is a special place where you can experience nature like nowhere else! The presence of dogs in natural ecosystems can disrupt or threaten wildlife. Dogs make sounds and leave scents that can disturb all kinds of animals including foxes, rabbits, and bobcats. Let's work together to protect wildlife and help others understand the importance of having a dedicated wildlife refuge like Friedrich Wilderness Park.

REMEMBER THE PRINCIPLES OF LEAVE NO TRACE!

The following are a selection from the Leave No Trace Seven Principles.
© 1999 by the Leave No Trace Center for Outdoor Ethics: www.LNT.org.



Plan Ahead & Prepare.

Travel on Durable Surfaces.

Dispose of Waste Properly.

Leave What You Find.

Respect Wildlife.

Be Considerate of Other Visitors.



KEY FOR YOUNG EXPLORERS



Look for this while at
Friedrich Wilderness Park



ProTips—professional tips
from the experts!



Don't miss these
fun facts!



ProTip: Did you know spending time in nature improves children's academic performance?

There are SO many benefits to spending time in nature—it builds confidence, promotes creativity, teaches responsibility, provides stimulation, and reduces stress levels.

Visit childrenandnature.org for more information and data on the benefits of nature.

READY TO START YOUR HIKE?

EXPLORING HISTORY

For thousands of years, hundreds of small groups of native peoples occupied the land that would much later become Texas. These groups depended on native plants like the prickly pear cactus, and hunted animals such as deer, antelope, rabbits, and bison. Each group of Native Americans moved from place to place gathering wild plant foods that were in season. They also used fibers of plants such as the sotol to weave mats, nets, and baskets, and made clothing from tanned animal hides. Many groups also lived near streams, springs, and rivers where they could catch fish. Each group had their own distinct culture and language, and they often traded goods with other nomadic groups. Comanche, Lipan Apache, and Tonkawa were said to have lived and traveled through what is now Friedrich Wilderness Park.

ROOTS OF HISTORY



About 2,500 years ago, Native Americans learned to make clay pots as well as plant corn, beans, and squash. They also used new tools like the bow and arrow whereas early hunters used an **atlatl**, a type of spear or throwing stick.

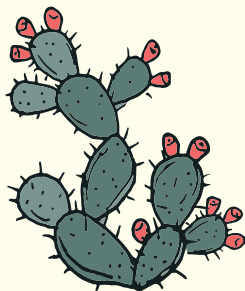
Imagine a life without grocery stores. How would you survive using only the available natural resources around you? Some of the plants such as pecans and walnuts gathered by Native Americans still provide food today.



As you explore the park, look for these plants and imagine how they were used for food, medicine, or other purposes.



SOUTHERN DEWBERRY



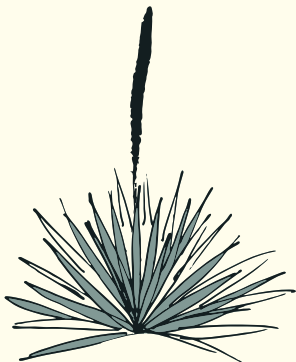
PRICKLY PEAR
CACTUS



LIVE OAK



HONEY MESQUITE



SOTOL



ASHE JUNIPER



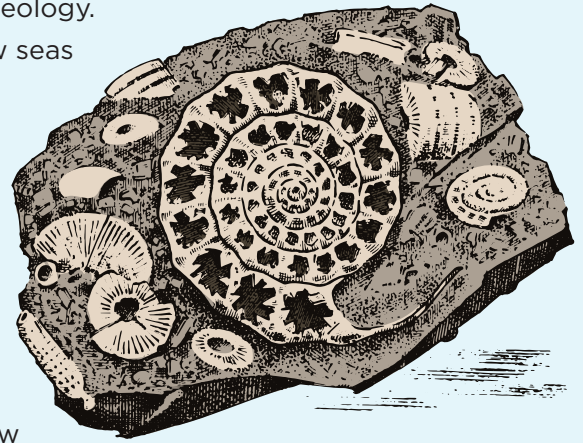
TEXAS PERSIMMON



HACKBERRY

GEOLOGY ROCKS!

We live in a very special place when it comes to rocks and geology. The rocks you are walking on today formed in warm, shallow seas from the time of the dinosaurs! Deep below your feet are hundreds of feet of limestone—a rock that was formed from the countless skeletons of microscopic creatures that died and fell to the ancient sea floor. After millions of years of being buried under pressure and **lithified** (transformed into stone), limestone formed what we call the Edwards Aquifer today. In fact, these rocks are the very reason San Antonio exists! Natural, mildly acidic rain dissolved the limestone forming vast networks of holes, fractures, and caves that now hold and transport our precious drinking water. This type of landscape with limestone and caves is referred to as **karst topography**. The water that flows through these underground rocks today is the water you will be drinking and washing with next month.



As you walk through the park look for holes, or **vugs**, in the limestone. Notice the stronger and more pure limestone ledges that stand out in the creek beds. After a heavy rain, look for the small cave along Water Trail and notice the spring where water rushes out of the hillside. Perhaps you might see an ancient snail fossil lying on the ground? Geology and rocks tell us stories about the ancient Earth, and give us important resources for the modern world, including clean water!



Photo: Fred Loxsom; Karst Topography at Friedrich Wilderness Park

NATURE'S RECYCLERS



BEETLES, LICHENS, FUNGI, OH MY!

Do you recycle at home? Invertebrates (such as beetles and earthworms), fungi, bacteria, and even lichens act as decomposers and do the important job of recycling for nature. The invertebrates, fungi, and bacteria turn dead plants and animals back into reusable resources for other plants and animals. This is the process called **decomposition**. Lichens recycle in a special way—by breaking down rocks and thus contributing to the creation of soil. As you recycle plastics, glass, aluminum cans and paper, think about ALL the creatures in the natural world recycling too!



Walking along Entry Trail, notice the fallen trees. The death of a tree is a complex process, and standing dead trees, or **snags**, and rotting logs can be found throughout forest communities. They make an excellent habitat for organisms like decomposers. By observing various stages of decay, you can see the trees gradually returning to the soil. Can you find evidence of insects or other decomposers?

FANTASTIC FUNGI



Did you know fungi were once classified as plants? Today this is no longer the case, particularly since fungi don't contain chlorophyll. Chlorophyll is what allows most plants to make their own food from sunlight through a process called **photosynthesis**. Fungi are actually more closely related to animals than plants. Don't miss the shelf fungi attached to the Black Walnut tree on the Entry Trail.

GOING ON A MUSHROOM HUNT....



Look for mushrooms a few days after a rain shower, but hunt quickly because many species disappear after only a few days! Be sure to document what you find in a nature journal.



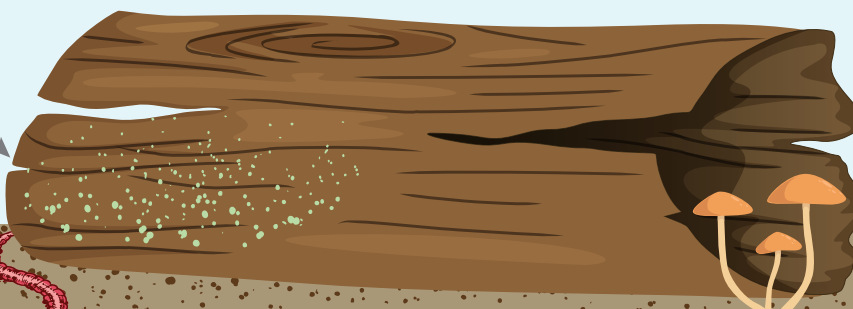
MUSHROOMS



lichens



ProTip: Since mushrooms don't need sunlight, you may find them growing in darker places. Look around the base of trees, tree trunks, rotting logs, or popping up from under dead leaves.

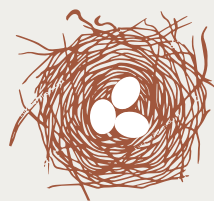


WHERE ARE THE ANIMALS?

FRIEDRICH WILDERNESS PARK provides 600 acres of natural refuge to countless plants and animals. As you walk through the park, the most obvious animals are **diurnal**, meaning they are active during the day—this includes many insects, birds, and reptiles as well as some mammals. Although a large number of animals in the park are **nocturnal**, meaning active at night, some such as white-tailed deer are **crepuscular** (active at dawn and dusk). Twilight hours may be the ideal time for deer to feed since the light is too bright for nocturnal predators and too dim for daylight predators.



Search for signs of animals by using your eyes to find **scat** (wild animal droppings), rooting, tracks, rubs, feathers, nests, and bones.



BIRD'S NEST



SPIDER



COYOTE TRACKS



SPIDER WEB



DEER TRACKS



HONEY BEE



RACCOON TRACKS



LIZARD



ProTip: The day after rain is typically the best time to search for tracks. Be sure to look near a water source. A track's size and shape can help you guess the species of the animal.



TRIED AND TRUE TEXAN!

There are over 400 bird species recorded in Bexar County, making Friedrich Wilderness Park an important destination for birders from around the world. It is also an important habitat for the federally listed endangered Golden-cheeked Warbler. These warblers rely on the bark of mature Ashe Juniper trees (also known as mountain cedar) to build their nests. Aside from this important songbird, there are many other bird species you may encounter.



Did you know every Golden-cheeked Warbler alive was born in Texas? These amazing songbirds live in central Texas during the breeding season between March and July. Typically at the end of March the males can be heard singing the characteristic *Bzz Bzz Lay-Zee-Day-Zee* song while establishing their territory.

Here's a checklist to get you started.



TURKEY VULTURE



**LADDER-BACKED
WOODPECKER**



**NORTHERN
CARDINAL**



**BLACK-CRESTED
TITMOUSE**



WHITE-WINGED DOVE

All Photos: Ken Butler



**WOODHOUSE'S
SCRUB JAY**



**NORTHERN
MOCKINGBIRD**



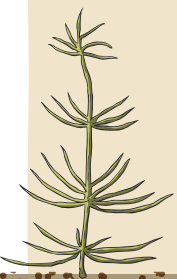
**RED-SHOULDERED
HAWK**



ProTip: As a beginning birder, you can start identifying birds by their shape and color. Check out the E-Bird phone app to see recent bird species seen in the park. Merlin Bird ID is also useful; download a booklet for your area that includes a range map, and learn to identify birds by their songs and calls.

THAT'S DYNO-MITE!

Fossils suggest that some dinosaurs were covered in feathers called "dino fuzz." These dinosaurs were members of the group called **theropods** that later evolved to become birds!



BUTTERFLIES AT FRIEDRICH...

During seasons other than winter, and if weather conditions are favorable, chances are you might spot some butterflies on your walk. With so much plant diversity, Friedrich Park is an excellent place to learn about butterfly species.



ProTip: You are more likely to find butterflies in sunny areas, especially those with blooming flowers.



Can you find these butterflies?



MONARCH (SEASONAL)



JUNIPER HAIRSTREAK



QUEEN



GULF FRITILLARY



PIPEVINE SWALLOWTAIL



AMERICAN LADY



COMMON BUCKEYE



RED ADMIRAL

All Photos: Ken Butler

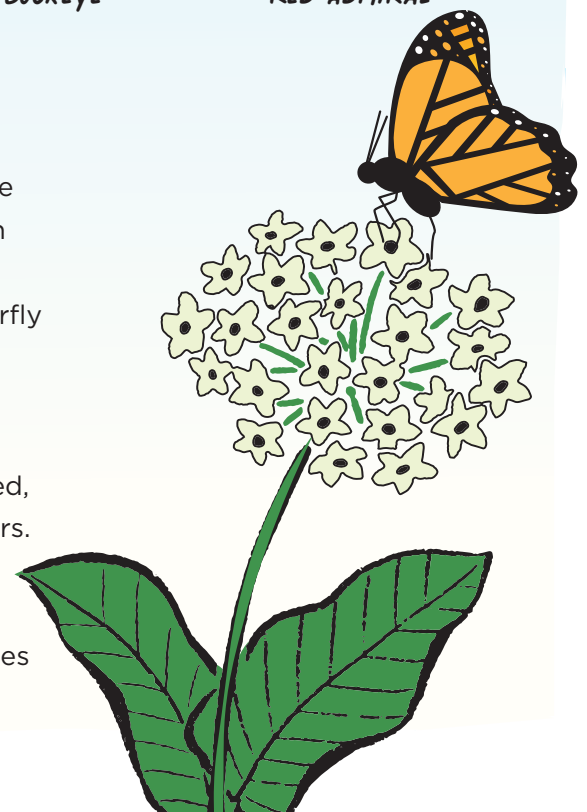
ODE TO THE MONARCH



Did you know San Antonio is a Monarch Champion City? Because of San Antonio's unique geographical location, the city agreed to take 24 specific actions to help the monarch butterfly—this includes installing pollinator gardens, encouraging homeowners to plant natives, hosting a butterfly festival, and doing more programs that support these important insects!



ProTip: While monarchs breed only where there is milkweed, the adults feed on the nectar of many non-milkweed flowers. You can help both monarchs and other butterfly species by growing a diversity of native flowering plants such as Texas lantana, frostweed, purple coneflower, and many types of salvias.



EXPLORING THE TRAILS FOR KIDS

FOREST RANGE TRAIL Easy, 0.20 miles, 20 minutes roundtrip

Look for the Ancient Ashe juniper and Lindheimer's hackberry trees on your walk. Compare the shaggy bark on the Ashe juniper trees to other trees, like the hackberry. Notice how the bark patterns are similar or different.



BARK



ProTip: Forest Range is ADA accessible, and there are several benches to sit and enjoy the sights and sounds of nature. Listen for bird calls. How many different birds can you hear?

WATER TRAIL Moderate, 1 mile, 30-40 minutes roundtrip

Explore Water Trail and experience a natural surface trail. Stop by the windmill and take time to watch the birds. Also notice the mosquito fish (*Gambusia*) in the windmill water tank—these fish were placed there to eat mosquito larvae.

BLAST FROM THE PAST....



So how does this windmill work exactly? In short, the wind turns a wheel and a gear box moves the sucker rod inside a vertical pipe. Valves open and close in concert with the movement of the sucker rod which draws the water out of the ground. This windmill's pipe and rod extend about 200 feet beneath the ground!

MAIN LOOP Challenging, 1.85 miles, 1-1.5 hour roundtrip

Want to see the highest elevation in the park? To see some of the best views, check out the natural surface trail Main Loop with its canyons and hills. Be sure to bring plenty of water, and don't forget to look for signs of wildlife!

Once you're on the very top of Main Loop—look out toward the hills. How far can you see? As it turns out, you can probably see between 2 and 3 miles on a clear day. Of course, this depends on certain factors such as the amount of pollution, the weather, and lighting. **But wow, what a view!**

