



The Saguaro Sentinel

The official newspaper of Saguaro National Park



Standing Tall at 75 Years

“If you understand that the desert is you and you are the desert, you can only ask yourself how would you want to be treated.”

DANIEL PRESTON



Homer L. Shantz, University of Arizona president and plant scientist, envisioned a vast outdoor laboratory.

IN THE LAST DAYS OF HIS PRESIDENCY, Herbert Hoover signed a Proclamation establishing Saguaro National Monument in the nearly empty desert, 15 miles east of the sleepy town of Tucson. Wrenched by the Great Depression and awaiting a new administration, few in Washington paid any attention to Hoover’s action. But it was a victory for both botanists and boosters in Arizona who’d worked for years to protect this grandest stand of saguaros. And it was a far-sighted accomplishment that would have incredible benefits for future generations of both Tucsonans and tourists.

It was in 1920 that members of the Natural History Society of the University of Arizona first expressed interest in preserving a stand of the West’s most iconic plant species.

Already famous from countless silent movie westerns, the saguaro was high on everyone’s list as a symbol of the frontier. Still, desert land cost money, and the Society’s fund-raising efforts fell short. But in 1928 University president Homer L. Shantz, in his role as a plant scientist, took up the cause. He envisioned a vast outdoor laboratory, ranging from the cactus-studded desert to the pine-wreathed mountains, free from human disturbance and studied by generations of student scientists.

Unfortunately, academics’ dreams and political realities seldom mesh. Although Shantz succeeded in purchasing some cactus acreage with University funds, it was clear that other means were necessary. First of all, the agency managing the mountains would have to agree to the grand design. After heated

Land of the Saguaro

As a unit of the National Park System, Saguaro National Park preserves and protects thousands of acres of wilderness, offering recreation, learning, and spiritual renewal amid the impacts of the exploding urban center of Tucson, one of the Southwest’s fastest-growing communities. All who enjoy this park play a role in the stewardship of this unique resource.

Our mission remains unchanged in this, our 75th anniversary year: to preserve and protect the Sonoran Desert’s many biotic communities, cultural features, scientific, scenic and wilderness areas found within the park. From arid desert to lush coniferous forest, the incredible diversity of plant and animal life of the Sonoran Desert is exemplified within Saguaro National Park. One of the greatest challenges we face today is leaving the park unimpaired for future generations to enjoy.

I encourage you to explore the land of the grand and mysterious saguaro cactus, which engages our imagination with its immense size and fascinating biology, as well as cultural significance and human-like qualities. It is easy to get to know the Sonoran Desert here. Have a great visit!

Sarah Craighead
Superintendent



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National Park Service
U.S. Department of the Interior

Saguaro National Park

Saguaro National Park preserves and protects thousands of acres of Sonoran Desert wilderness, offering recreation, learning, and spiritual renewal amid the impacts of an exploding urban center.

Superintendent
Sarah Craighead

Address
Saguaro National Park
3693 South Old Spanish Trail
Tucson, AZ 85730

Park Information
(520) 733-5100

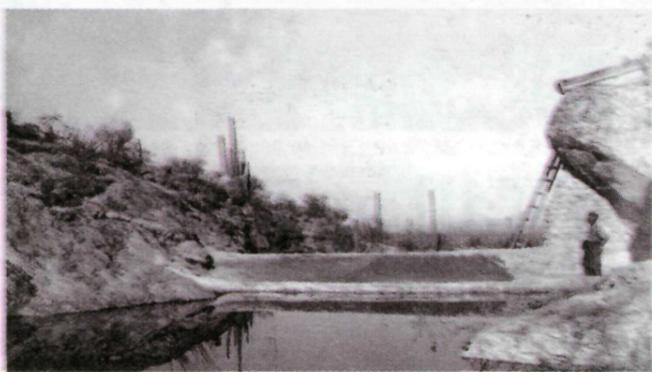
Fax
(520) 733-5183

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SAGU_Information@nps.gov

Website
www.nps.gov/sagu

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

Saguaros Start Where Sidewalk Ends



top left: Viola Freeman and Louis Gastelum share a laugh at the Rincon Mountain Visitor Center in 1975. Freeman homesteaded with her husband in the future Saguaro National Park in the 1930s; Gastelum's family in the Santa Cruz River Valley near Tumacacori NHP [NPS]. **top right:** irregular burlled saguaro formations, now gone, were on view to visitors through the 1950s [NPS]. **above:** a visitor reflects on Garwood Dam in Wildhorse Canyon, circa 1950 [NPS].

THIS NORTHERN EDGE OF THE SONORAN DESERT IS HOME TO the most recognizable cactus in the world, the majestic saguaro cactus, *Carnegie gigantea*. Saguaro cacti provide their sweet fruits to hungry desert animals. They also provide homes to a variety of birds, such as the Harris' hawk, Gila woodpecker and the tiny elf owl. The saguaro in turn requires the shelter of desert trees such as the palo verde for its survival. Saguaro National Park protects not only the saguaro cactus but these interrelationships, the ecological webs of the Arizona Upland subdivision of the Sonoran Desert.

THE WILDERNESS WITH A CITY AT ITS CENTER

In the park, trails begin where city boulevards end. There are over 150 miles of hiking trails, from flat strolls in Tucson Mountain deserts scrub to rugged hikes in the green "sky islands" of the Rincon Mountains. Two park districts bookend the city of Tucson, one of the southwest's fastest-growing cities. In spite of the automobiles, supermarkets and 1 million people at its edges, much of the park—78 percent—is protected wilderness. These are wild lands in their natural state, meant as places where even humans are visitors who do not remain. In these forests of cactus, scrub oak and pine, we can find refuge, as we witness in all directions the changing landscape of the arid West. □

Plan Your Visit

In an Emergency

In case of an emergency, call 911 or contact a ranger. Cell phone coverage within the park is not reliable. A pay phone is located at the Red Hills Visitor Center. To talk to a ranger, call the east district visitor center at (520) 733-5153 or the west district visitor center at (520) 733-5158.

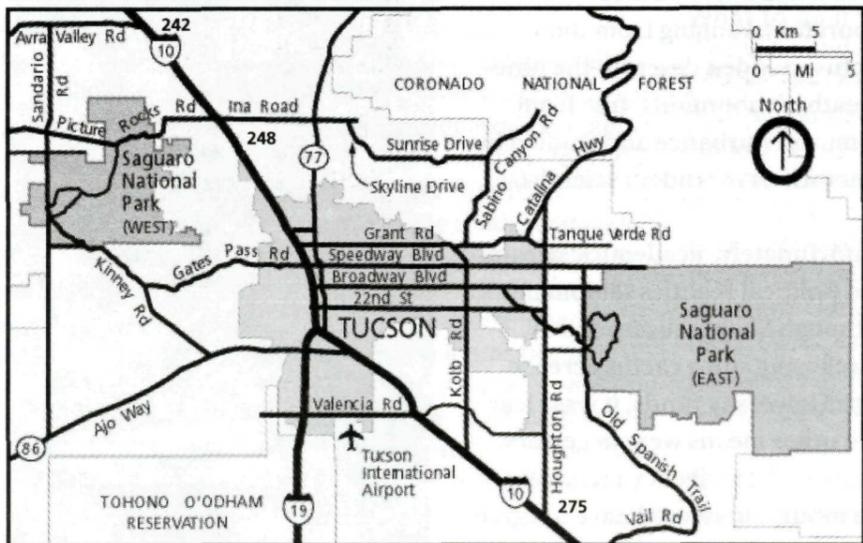
Dates and Hours of Operation

Both districts of the park are open daily from 7:00 a.m. to sunset. Visitor centers are open from 9:00 a.m. to 5:00 p.m. daily, and are open year-round, excluding December 25.

Entrance Fees

Private vehicles and motorcycles.....	\$10.00	Valid for 7 days
Bicyclists and pedestrians.....	\$5.00	Valid for 7 days
Saguaro Annual Pass	\$25.00	Valid for one year
Interagency Pass.....	\$80.00	Valid for one year
Interagency Senior Pass (U.S. citizen, 62 or older)....	\$10.00	Valid for lifetime
Interagency Access Pass (U.S. citizen, disabled).....	Free	Valid for lifetime

Travel Between Park Districts



Saguaro's west and east districts are 30 miles apart, separated by the city of Tucson. Both districts are about 15 miles from downtown Tucson. Travel time between districts is approximately one hour.

Getting There

From Downtown Tucson

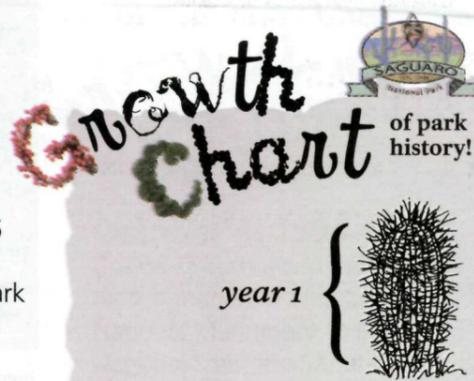
To reach the **east district**, follow Speedway Boulevard east 14 miles (22.5 km) to Freeman Road. Turn right and follow Freeman Road 3.6 miles (5.8 km) to Old Spanish Trail. Turn left and follow signs to the park entrance.

To reach the **west district**, follow Speedway Boulevard west. At the junction of Camino de Oeste, Speedway Boulevard becomes Gates Pass Road. Continue 4.6 miles (7.6 km) west on Gates Pass Road over the Tucson Mountains to Kinney Road. Turn right and follow Kinney Road 3.7 miles (6 km) to the park entrance. Vehicles exceeding 12,000 lbs. GVWR are prohibited on Gates Pass Road. Trailers and RVs should use the Ina Road exit (248) on I-10. Follow Ina Road west 9.8 miles (15.8 km) to Sandario Road, then turn left onto Sandario, following signs to the park.

From I-10

Reach the **east district** by taking I-10 Houghton Road exit (275) north 8 miles (12.9 km) to Escalante Road, then turning right, heading east 2 miles (3.2 km) to Old Spanish Trail. Turn left, following signs to the park.

Reach the **west district** by taking I-10 Avra Valley Road exit (242). Travel west 5 miles (8 km) on Avra Valley Road to Sandario Road. Turn left and follow Sandario 6 miles (9.7 km) to the park boundary. From there, follow signs to the visitor center.



1921

Last documented observation of a grizzly bear in the Rincon Mountains.

March 1, 1933

Saguaro National Monument was established by President Hoover in what is known today as the Rincon Mountain District.

1939

A significant die-off of saguaros, first noted in 1939, was the delayed response to the subfreezing temperatures of January 1937, the coldest period in 24 years.

What You Need to Know

Information, regulations and tips—everything you need to make your visit safe and enjoyable.

Accessibility

Visitor centers are wheelchair-accessible, and offer accessible cactus gardens and nature trails. All picnic areas, excluding Mam-A-Gah, have accessible picnic tables and pit toilets.

Both visitor centers offer a captioned 15-minute slide program. For the visually impaired, the west side offers a descriptive audio version of the slide program.

In the west district, guides to the Desert Discovery Nature Trail are available in Braille and on cassette.

TDD

Hearing-impaired please use state relay service, 1-800-352-8161.

Service Animals

Service animals are welcome anywhere their owners may legally go.

All-Terrain Vehicles

ATVs and off-road vehicle travel are not permitted in the park.

Amenities

No fuel, lodging, or food services, other than water and soda vending machines, are available in the park. Fuel and food is available 5 miles from either visitor center. Lodging is available within a 30-minute drive of either district. A list of local campgrounds is available from either visitor center.

Backpacking

Overnight backpacking is permitted only in the Rincon Mountain District at one of 6 designated campsites. A permit is required and must be obtained at the east district visitor center before noon the day of departure. The fee for this permit is \$6.00 per campsite, per night. The maximum number of people allowed per campsite is 6 (see "Headed into the Backcountry?," page 4).

Bicycling

Bicycling is permitted on all public roads and on the designated portion of the Cactus Forest Trail in the east district (see page 5). Bicycles are prohibited on all other trails. Bicycling is not recommended on Picture Rocks Road due to narrow road shoulders.

Helmets are required for all riders and passengers under 18 years of age.

Helmets, gloves and glasses are recommended for all riders. Always maintain a safe speed for road conditions and your own riding experience. Cyclists must obey all traffic regulations, including speed limits.

Bookstores

A Western National Parks Association (WNPA) bookstore featuring books, maps, hiking guides and more is located at each visitor center. WNPA is a non-profit organization dedicated to preserving the heritage of our National Park System. See the WNPA article on page 11 of this newspaper.

Campfires

Campfires are permitted only in picnic areas where fire grates or fireplaces are provided. Fires must never be left unattended and must be completely extinguished upon departure. You must provide your own wood or charcoal. Collecting living or dead vegetation for firewood is prohibited.

Car Camping

There are no campgrounds or RV facilities in the park. A list of local campgrounds is available from either visitor center. Overnight backpacking in the east district requires a permit—apply in person at the east district visitor center, by fax or by mail. See *Backpacking*.

Collecting

Removal or disturbance of any natural or cultural feature in the park is prohibited.

Differences Between East and West?

You can have a great time visiting just one district of the park. Each offers similar services. The east district, the Rincon Mountain District (RMD), is the larger district with 8,000 ft (2400 m) high mountains and a greater diversity of lifezones. RMD has 128 miles (206 km) of hiking trails, as well as backcountry campsites. The west district, the Tucson Mountain District (TMD), has 4,600 ft (1400 m) high mountains and dense stands of saguaro cactus, with 43 miles (69 km) of trails. TMD has no campsites. Both districts offer visitor centers, scenic drives, picnic areas and nature trails. Park headquarters is located in the Rincon Mountain District.

Filming & Photography

When filming or photography involves advertising a product or service, or the use of models, sets or props, a film permit is required. See *Special Use Permits*.

Firearms & Weapons

Firearms, including fireworks, traps, bows, BB guns, paint-ball guns, and slingshots are not allowed in the park.

Geocaching

Virtual geocaching is allowed in the park, subject to park regulations. No treasure items are permitted. Caches containing logbooks, treasure items, or any other materials are prohibited.

Horses

See *Livestock & Pack Animals*.

Lost and Found

Report lost or found items at either visitor center.

Mines

Numerous historic mine sites can be found within the park. Old mine workings are extremely dangerous. Stay out and stay alive.

Do not enter old mine workings!

Parking

The Red Hills Visitor Center parking lot can accommodate buses and trailers up to 40 feet long. Buses may park in the Rincon Mountain Visitor Center lot while passengers are loading or unloading. Buses may not idle in either visitor center parking lot. Overnight parking is not permitted.

Park roads are winding with narrow shoulders. There are many pullouts and parking areas throughout the park, so wait until you get to one before stopping.

Pets

Pets are allowed only on roadways and at designated parking and picnic areas (except the Tucson Mountain District's Mam-A-Gah picnic area.)

Pets are not permitted on trails or inside either visitor center.

Pets must be leashed at all times. Leash length may not exceed 6 feet. Pets may not be left unattended anywhere in the park, including inside vehicles. Remember temperatures in a car can quickly exceed 120 degrees and kill a pet in a very short time! Report all unattended pets to a ranger.

Phones

A payphone, located at the Red Hills Visitor Center, is available 24 hours a day. In an emergency, dial 911.

Rincon Mountain Visitor Center (east)
(520) 733-5153

Red Hills Visitor Center (west)
(520) 733-5158

Saguaro Information Line
(520) 733-5100

Picnics

Both districts offer picnic grounds with picnic tables and grills, shaded ramadas, and pit toilets. Picnicking is not allowed at the visitor centers. Picnic groups larger than 20 must obtain a permit. No reservations can be made and no area held for any group's exclusive use. To locate picnic areas, see the district maps starting on page 5.

Special Use Permits

Permits are required for special events such as weddings, commercial filming, or any events which involve over 20 people, including picnics. Permits may be obtained by contacting the Division of Ranger Services. For west district permits call (520) 733-5116. For east district permits call (520) 733-5111.

Livestock &

Pack Animals

Livestock, which includes horses, burros and mules, may be ridden on designated trails within the park. See hiking maps starting page 5 for restricted trails. Check at visitor centers for other special requirements. Stock groups are limited to a maximum of 15 animals. Stock groups may not travel off-trail in the park. All other animals, including pets, are prohibited on park trails.

Translations

Translations of the park brochure in Spanish, French, Dutch, German, Italian, Chinese and Japanese are available at visitor centers and online at <http://www.nps.gov/saguoplanyourvisit/brochures.htm>.

Audio in German, French and Japanese is available for the west district slideshow.

Trash

Pack out all trash when hiking. Dispose of your trash in a responsible manner. Aluminum can recycling is available at visitor centers and many picnic areas.

Vehicles

Speed Limits
Motorists and bicyclists must obey all posted speed limits. Reduce speed in heavy rains and stay alert for pedestrians and wildlife crossing roadways. Use special care driving at dawn and at dusk, when wildlife is most active. Do not attempt to cross running washes (streambeds) in your car during rainstorms! State and federal vehicle laws apply within the park.

Vehicle Restrictions

Vehicles, including bicycles, are prohibited from leaving established roads.

Vehicles wider than eight feet and trailers longer than 35 feet are prohibited from traveling on Kinney Road and the scenic loop drive of either district.

High clearance or four-wheel drive is not needed on park roads in either district.

Driving the Rincon Mountain District

The *Cactus Forest Drive Scenic Loop* is a winding, eight-mile, paved, combination one- and two-way road.

Driving the Tucson Mountain District

The west district has both paved and graded gravel roads. The district's scenic drive, the *Scenic Bajada Loop Drive*, is a 5 mile, graded, combination one- and two-way gravel road. This road contains many large dips and may be rough.

Visitor Centers

There are two visitor centers in the park: the Rincon Mountain Visitor Center in the Rincon Mountain District and the Red Hills Visitor Center in the Tucson Mountain District. Both visitor centers are open from 9 a.m. to 5 p.m. daily, except December 25. Both facilities offer visitor information services, slide programs, cultural and natural history exhibits and nature trails, as well as books, videos, maps and other items for sale. First aid, restrooms, payphones and drinking water are available at both visitor centers.

Water

Potable water is available at both visitor centers. Water is available 24 hours a day to all in the west district, and to walk-ins and cyclists in the east district. Natural water sources in the park are not safe to drink.

Wildflowers

Spring wildflower blooms vary with elevation, temperature, soil quality and accumulated seasonal rainfall. You can get current information by calling the park or checking the park's website.

All plants, and all plant parts, are protected—leave them for the next visitor to enjoy, too.

Wildlife

Treat wildlife with respect. Do not use artificial lights for viewing animals or taped recordings to lure them near. View wildlife from an unthreatening distance. Leave enough space, at least 10 feet (3 m), for wildlife to make an escape.

Don't feed wildlife. Protect wildlife, your food and yourself by storing food in sealed containers.

Headed into the Rincon backcountry?

Backpacking in the east district's higher elevations requires special preparation. These tips will get you started.

Backpacking and Camping

Overnight camping is permitted, with a backcountry permit, in designated campgrounds in the Rincon Mountain District. Campgrounds are accessible by foot and horseback. There are six campgrounds located six to twelve miles from public access trailheads.

Backcountry Camping Permits

Backcountry camping permits are available on a first come-first served basis at the Rincon Mountain Visitor Center. A permit costs \$6.00 per campsite, per night. The maximum number of people allowed per campsite is six. The maximum size of any one group is 18 persons. Permits must accompany the permittees into the backcountry and be openly displayed. Campground stays are limited to five consecutive days per camp and no more than 10 days in the park, with 10 days between

successive permits. Permittees must be at least 16 years of age.

Water

Only Manning Campground has water year-round. **All** water from natural sources must be treated before use. Inquire at the visitor center for current water availability before beginning your trip.

Bears

The Rincon Mountains have a small population of black bears. Proper food storage, in bear boxes located in all six backcountry campgrounds, is **required** for your safety and protection of the bears.

Backcountry Livestock Use

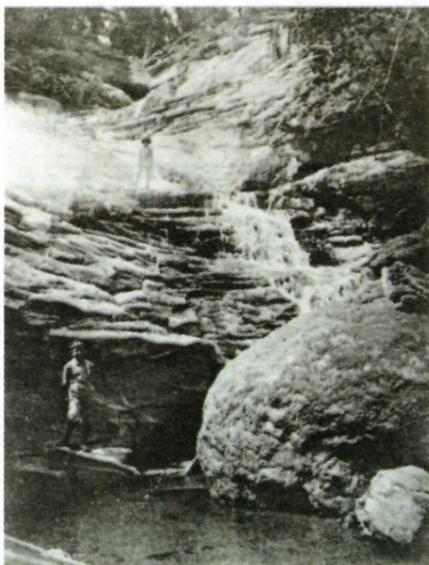
Stock animals are defined as horses, burros, and mules. All stock are required to stay on designated trails. In the Rincon Mountain District over-

night stock use is permitted at all campgrounds except Juniper Basin. Riders must carry in all horse feed; grazing is not permitted. "Weed-free" feed is recommended to prevent the introduction of exotic species. Stock animals are not allowed on the Tanque Verde Ridge Trail, Miller Creek Trail and the last half-mile of the Rincon Peak Trail.

Backcountry Safety Tips

- Treat all water before consuming.
- Carry plenty of water. On hot days, 1 gallon or more per person is a necessity.
- Use sunscreen and wear a hat with a full brim.
- Tell someone your travel plans.
- Practice proper food storage techniques to avoid attracting bears.

For a permit application, download the *Saguaro Wilderness Area* brochure from www.nps.gov/saguoplanyourvisit/brochures.htm



left: historic hikers enjoy the falls below the pond at Manning Camp [NPS]. right: winter snow keeps the cabin at Manning Camp snug, circa 1960 [NPS].

"Standing Tall at 75"

continued from page 1

discussions the U.S. Forest Service reluctantly signed on, as long as they kept control and cattle grazing continued. The National Park Service, charged with preserving vistas of grand landscapes and objects of scientific interest, sent the Superintendent of Yellowstone, Roger Toll, on a winter trip to the desert. He liked the cactus forest but found the mountains uninteresting and the cost too high. The vision seemed to be fading.

But there were others in Tucson who saw the value and prestige of having a National Monument nearby. Frank Hitchcock, publisher of the local *Citizen* newspaper, active in the business community, and influential in Republican politics,

knew the time was ripe for action in Washington. With help from both agencies he literally rushed to Washington to take advantage of a tradition started by Teddy Roosevelt—the proclamation of National Monuments at the end of a President's term. With support from the Secretary of Agriculture and the promise of Forest Service management, Saguaro National Monument was born on March 1, 1933.

But times change—sometimes quickly. Only three months later, President Franklin Roosevelt ordered that sixteen national monuments be transferred to the National Park Service and Saguaro began a long slow march to the

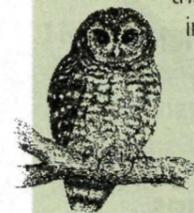
treasured sanctuary it is today. Often the progress was painful: early rangers had to haul water from the center of town; "cactus rustling" was rampant; cattle continued to trample young cactus for decades. Aging of the cactus forest and lack of regeneration led to a widespread belief that the saguaro was a dying breed, like the frontier life it symbolized. Efforts to close the Monument were suggested, but Washington took no action.

And there were successes. Homer Shantz continued his efforts on behalf of the Cactus Forest, leading to Civilian Conservation Corps construction of the famous

"Standing Tall at 75" continued page 11

Get to know Saguaro's Threatened and Endangered

America's Endangered Species Act (ESA) mandates the identification, protection, and recovery of species threatened with extinction in the United States, and provides "a means whereby the ecosystems upon which endangered species depend may be conserved." This groundbreaking legislation passed in 1973, when our country was just beginning to acknowledge the far-reaching effects of human influences on the environment. Since that time, the extinction of several species, including bald eagles, California condors, brown pelicans, and American alligators, has been prevented through measures implemented through the ESA.



Mexican spotted owl

Among other things, the ESA requires *all* federal agencies to determine the status of threatened and endangered (T&E) species on their lands, and to manage their habitat in ways consistent with maintaining, if not benefiting, their populations. Furthermore, they must ensure that their actions are not likely to jeopardize any T&E species, or result in the destruction of their habitat.

Saguaro National Park is home to two T&E species. The endangered lesser long-nosed bat, *Leptonycteris curasoae yerbabuena*, feeds on the fruit, pollen and nectar of saguaros and agaves. The threatened Mexican spotted owl, *Strix occidentalis lucida*, is a large forest-dwelling owl. The lesser long-nosed bat and the Mexican spotted owl have small, but stable numbers at Saguaro. Biologists regularly survey for these species to assess their status in the park. A third species which is thought to inhabit park lands, the cactus ferruginous pygmy-owl, was removed from federal protection in April 2006.



Lesser long-nosed bat

T&E?

An "endangered" species is any species (other than an insect pest) which is in danger of extinction throughout all, or a significant portion, of its range. A "threatened" species is any species which is likely to become an endangered species within the foreseeable future.

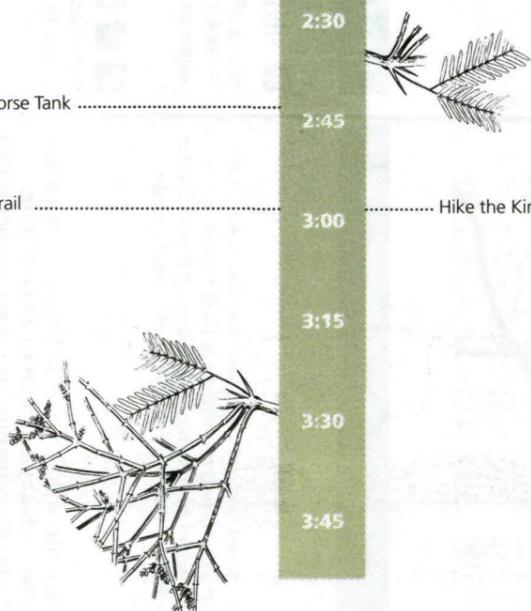
What can I do in the time I have?

Rincon Mountain District

Walk the Cactus Garden Trail	0:10
View the <i>A Home in the Desert</i> slideshow	0:15
Explore the visitor center exhibits	
Walk the Desert Ecology Nature Trail	
Drive the Cactus Forest Loop Drive (no stops)	half an hour
Hike the Freeman Homestead Trail	0:45
Attend a ranger-led program	
Stroll at sunset to Javelina Picnic Area	1:00
	1:15
Hike to the Garwood Dam	1:30
Enjoy a sunrise, sunset or moonrise	
Picnic at Mica View or Javelina Picnic Areas	1:45
Participate in the Junior Ranger Program (ages 5-12)	two hours
	2:15
	2:30
Hike to the Little Wildhorse Tank	2:45
Walk the Hope Camp Trail	3:00
	3:15
	3:30
	3:45
	half a day
Hike to Bridal Wreath Falls.....	4:15
	4:30
	4:45
Hike to Douglas Spring Campground and back.....	5:00
	5:15
	5:30
Hike to Juniper Basin Campground.....	5:45

Tucson Mountain District

Walk the Javelina Wash Trail	
Walk the Cactus Garden Trail	
View the <i>Voices of a Desert</i> slideshow	
Explore the visitor center exhibits	
Walk the Desert Discovery Nature Trail	
Drive the Bajada Loop Drive (no stops)	
Hike the Signal Hill Petroglyph Trail	
Attend a ranger-led program	
Hike Valley View Overlook Trail	
Picnic at a historic CCC picnic area	
Enjoy a sunrise, sunset or moonrise	
Hike to the ridge on the Hugh Norris Trail	
Hike up King Canyon wash & down the trail	
Participate in the Junior Ranger Program (ages 5-12)	
Hike the King Canyon Trail to the Sweetwater Trail	
Hike the Hugh Norris Trail to Sendero-Esperanza Trail	
Hike the Hugh Norris Trail to Wasson Peak	
Hike the Sweetwater Trail to Wasson Peak	



Tucson Mountain District Hiking Trails

Trail Description

Times and distances are roundtrip.

Desert Discovery Trail

1

You will find the trailhead to this self-guided nature walk on Kinney Road, one mile southwest of the Red Hills Visitor Center. Here you can familiarize yourself with the native plants, animals and ecology of the Sonoran Desert. This trail is also available as an audio tour for the visually impaired.

easy
.5 mile/.8 km
no elevation gain
20 minutes

Valley View Overlook

2

This trail was built by the Civilian Conservation Corps (CCC) in the 1930s. The trailhead is located at 1.34 miles along the Bajada Loop Drive. While hiking this trail, you will pass through two washes and then gradually ascend stone steps to a ridge. The view from the ridge includes Avra Valley sprawled below and Picacho Peak to the north.

easy to moderate
.8 mile/1.3 km
100 ft./30 m. elevation gain
30 minutes

Signal Hill Trail

3

This easy climb takes you to dozens of ancient petroglyphs more than 800 years old. The trail starts from the Signal Hill Picnic Area located off Golden Gate Road, at 3.3 miles along the Loop Drive. The trail climbs numerous stone steps through a wash and up a hill.

easy
.5 mile/.8 km
negligible elevation gain
20 minutes

King Canyon Trail

4

The trailhead and parking area for this hike is directly across the road from the Arizona-Sonora Desert Museum. From the visitor center, travel two miles east on Kinney Road. The first section of the trail follows an old roadway constructed by the CCC in the 1930s. At .9 mile hikers pass the Sendero Esperanza trail junction at the Mam-A-Gah picnic area. The next 1.9 miles climbs to the Sweetwater Trail junction. The final .9 mile ascends a series of steep switchbacks to the Hugh Norris Trail. From here, continue .3 mile to reach the top of Wasson Peak, elevation 4,687 feet.

moderate
7 miles/11.3 km
1839 ft./560.5 m. elevation gain
4 hours

Sendero Esperanza Trail

5

This trail begins 1.2 miles from the intersection of Golden Gate and Hohokam Roads, across from the Ez-Kim-In-Zin picnic area. The trail's first mile follows the sandy path of an old mine road. The next .7 mile climbs a series of steep switchbacks to the top of a scenic ridge, where it intersects the Hugh Norris Trail. The trail then descends .4 mile to the south, past the Gould Mine Trail junction, where it meets the King Canyon trail.

moderate
6.2 miles/10 km
700 ft./213 m. elevation gain
3-4 hours

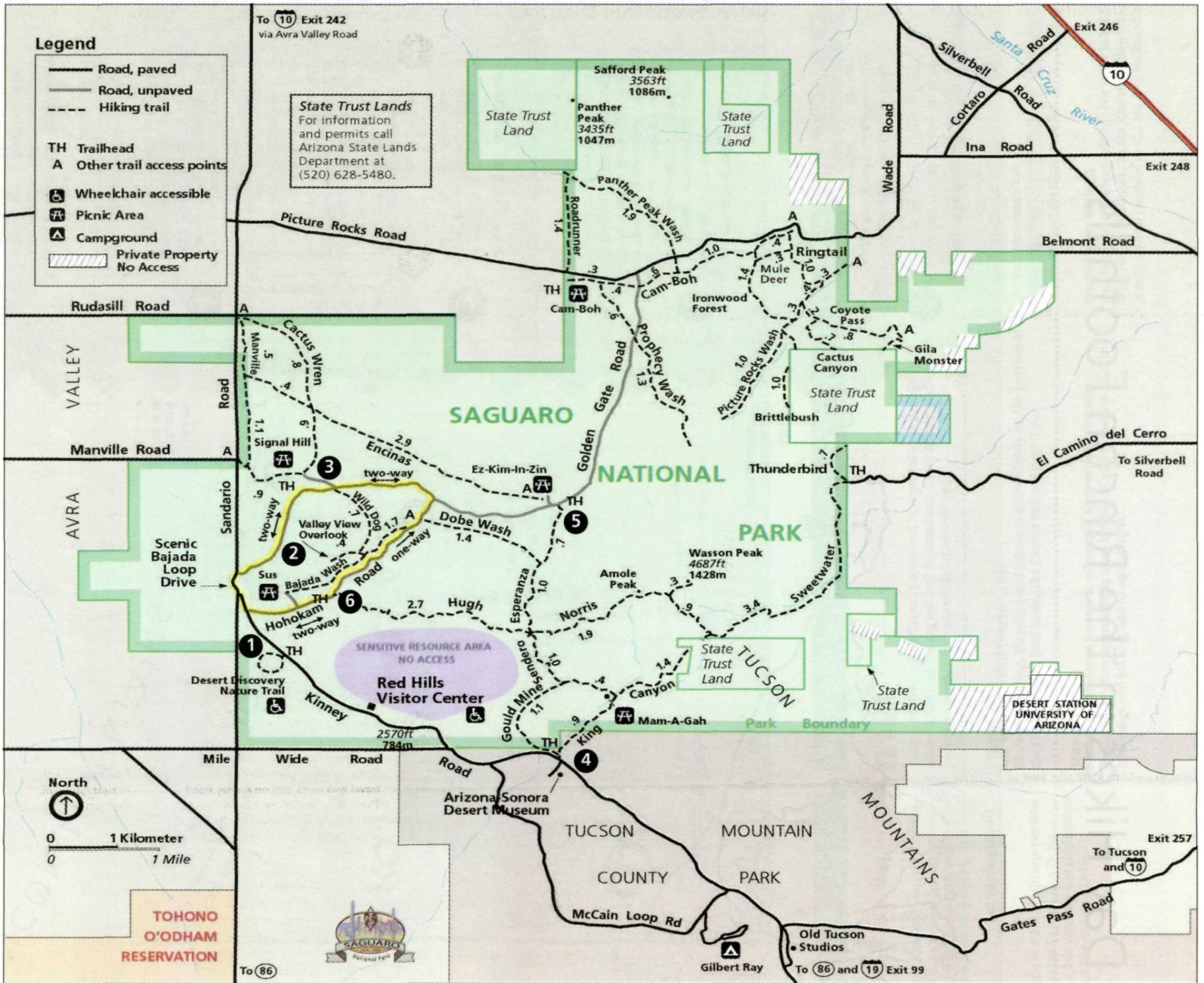
Hugh Norris Trail

6

This is the longest trail in the Tucson Mountain District. The trailhead is .8 mile from the start of the Bajada Loop Drive. The trail begins with a series of switchbacks that climb to a ridge overlooking the cactus forest. From there, the trail follows the ridge-top through areas with unique welded tuff rock formations until it reaches Amole Peak, approximately 4.1 miles from the trailhead. From here, continue .8 mile up a series of switchbacks to the top of Wasson Peak, the highest point in the Tucson Mountains.

strenuous
10 miles/16 km
2087 ft./636 m. elevation gain
5-6 hours

Tucson Mountain District Hiking Map



Driving the Loop

The west district's Scenic Bajada Loop Drive (shown on map in yellow) is a popular way of exploring the Tucson Mountain District's foothills. This unpaved, combination one- and two-way graded dirt road offers scenic pullouts, picnic areas and hiking trailheads in a 5 mile (7.8 km) loop. High clearance or four-wheel drive is not needed to drive the loop.

A guide to the natural and cultural history of the Bajada Loop Drive is available for one dollar at the Red Hills Visitor Center.

Directions to the Loop

The Bajada Loop Drive begins at Hohokam Road, one and a half miles west of the Red Hills Visitor Center. Leaving the Red Hills Visitor Center, turn right onto Kinney Road. Follow Kinney Road 1.6 miles (2.6 km) to the loop's entrance on the right.

The Loop Drive ends where Golden Gate Road meets Sandario Road. To return to the visitor center, turn left onto Sandario Road. Continue 0.2 mile (300 m) to the junction with Kinney Road. Turn left. The visitor center is 2 miles (3.2 km) ahead.

Hiking

The Tucson Mountain District offers more than 40 miles (64 km) of hiking trails. Check at the Red Hills Visitor Center for trail conditions and special notices before you leave.

Hiking Checklist

- Review park safety, regulations, fees and permit information.
- Pack a park map showing accurate trail information.
- Leave itinerary with a friend or relative.
- Pack breathable, long-sleeved clothes in light colors, a wide-brim hat, hiking boots with ankle support, raingear.
- Bring day packs with water (1 gallon per person in summer), salty snacks, watch, sunblock, comb or knife (to remove cactus spines), cell phone, pencil and notebook.
- Call for up-to-date road and weather information: (520) 733-5153 or (520) 733-5158.
- Check online for more trip planning advice: www.nps.gov/sagu/planyourvisit.htm

Restrictions

Driving Restrictions

Trailers longer than 35 feet or any vehicle wider than 8 feet are not allowed on the Loop Drive.



Horses & Pack Animals

Stock groups are limited to 15 animals. Stock animals are prohibited from traveling off-trail in the park. Stock are restricted entirely from these trails:

- Desert Discovery Trail
 - Hugh Norris Trail
 - King Canyon Trail
 - Cactus Wren Trail
 - Manville Trail
 - Bajada Wash Trail
 - Red Hills Visitor Center Area
 - Sus Picnic Area
 - Signal Hill Picnic Area
- from the Sweetwater Trail junction to the Hugh Norris Trail junction south of the Encinas Trail
- from Signal Hill Picnic Area to Manville Road
- from Valley View Overlook Trail to Sus Picnic Area
- including the Cactus Garden and Javelina Wash trails

Stock trailers should use Cam-Boh, El Camino del Cerro and Sendero Esperanza trailheads.

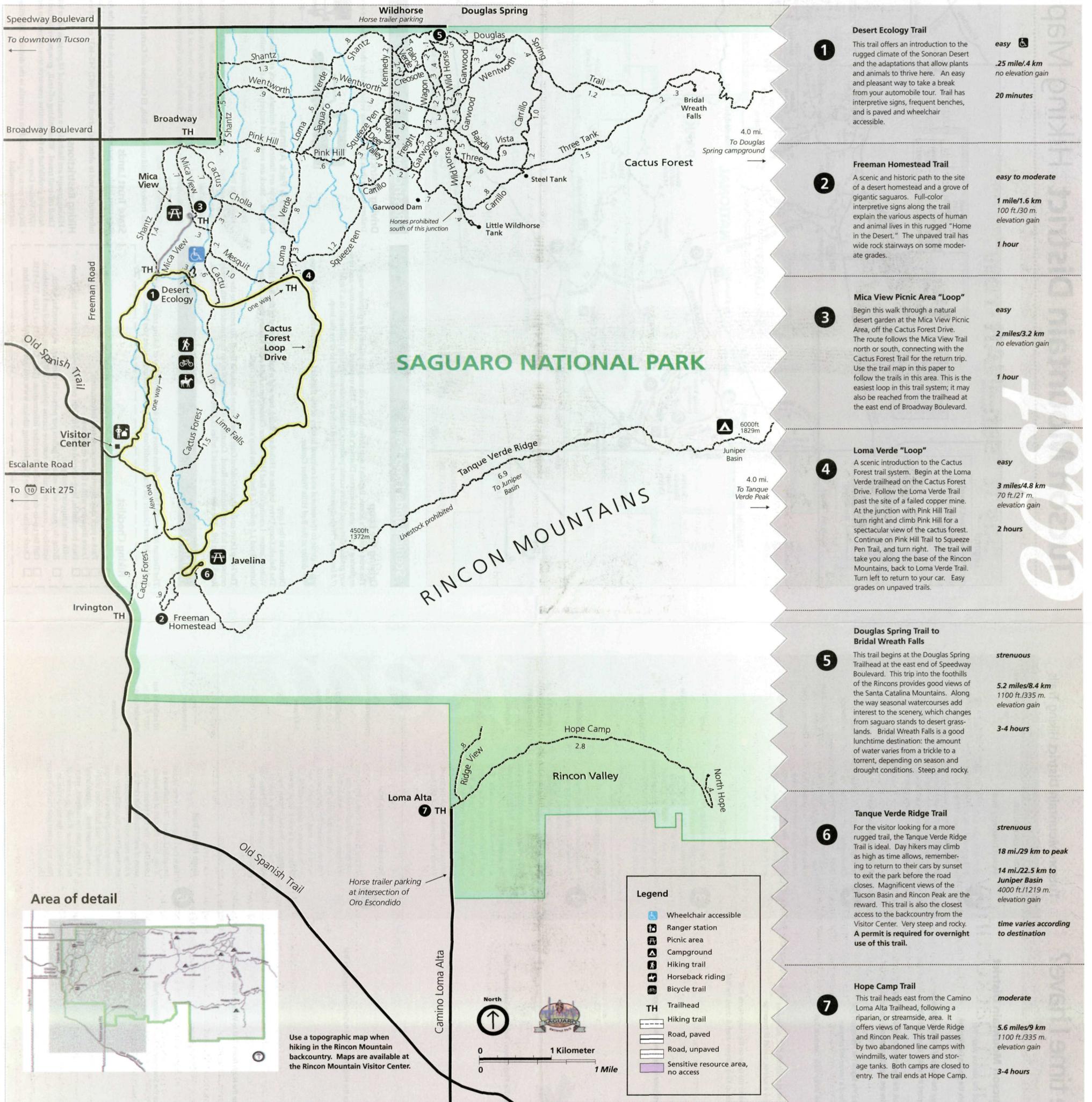
State Trust Lands

State trust lands are parcels of land within the park held by the Arizona State Land Department. A State Land Recreational Permit is required to hike in these parcels. For more information and to obtain a permit, call (602) 542-4631 or visit www.land.state.az.us.

Hiking Restrictions

- Hiking groups are limited to a maximum of 18 persons when hiking on designated trails. Limit off-trail travel. When hiking off-trail, groups are limited to 10 people.
- Access is prohibited in the sensitive resource area (shown on map in purple) near the Red Hills Visitor Center.
- Bicycles are not permitted on any trails in the district. Bicycling along Picture Rocks Road is not recommended.

Rincon Mountain District Day Hikes in the Rincon Foothills



- 1 Desert Ecology Trail**
 This trail offers an introduction to the rugged climate of the Sonoran Desert and the adaptations that allow plants and animals to thrive here. An easy and pleasant way to take a break from your automobile tour. Trail has interpretive signs, frequent benches, and is paved and wheelchair accessible.

easy
 .25 mile/.4 km
 no elevation gain
 20 minutes
- 2 Freeman Homestead Trail**
 A scenic and historic path to the site of a desert homestead and a grove of gigantic saguaros. Full-color interpretive signs along the trail explain the various aspects of human and animal lives in this rugged "Home in the Desert." The unpaved trail has wide rock stairways on some moderate grades.

easy to moderate
 1 mile/1.6 km
 100 ft./30 m. elevation gain
 1 hour
- 3 Mica View Picnic Area "Loop"**
 Begin this walk through a natural desert garden at the Mica View Picnic Area, off the Cactus Forest Drive. The route follows the Mica View Trail north or south, connecting with the Cactus Forest Trail for the return trip. Use the trail map in this paper to follow the trails in this area. This is the easiest loop in this trail system; it may also be reached from the trailhead at the east end of Broadway Boulevard.

easy
 2 miles/3.2 km
 no elevation gain
 1 hour
- 4 Loma Verde "Loop"**
 A scenic introduction to the Cactus Forest trail system. Begin at the Loma Verde trailhead on the Cactus Forest Drive. Follow the Loma Verde Trail past the site of a failed copper mine. At the junction with Pink Hill Trail turn right and climb Pink Hill for a spectacular view of the cactus forest. Continue on Pink Hill Trail to Squeeze Pen Trail, and turn right. The trail will take you along the base of the Rincon Mountains, back to Loma Verde Trail. Turn left to return to your car. Easy grades on unpaved trails.

easy
 3 miles/4.8 km
 70 ft./21 m. elevation gain
 2 hours
- 5 Douglas Spring Trail to Bridal Wreath Falls**
 This trail begins at the Douglas Spring Trailhead at the east end of Speedway Boulevard. This trip into the foothills of the Rincons provides good views of the Santa Catalina Mountains. Along the way seasonal watercourses add interest to the scenery, which changes from saguaro stands to desert grasslands. Bridal Wreath Falls is a good lunchtime destination: the amount of water varies from a trickle to a torrent, depending on season and drought conditions. Steep and rocky.

strenuous
 5.2 miles/8.4 km
 1100 ft./335 m. elevation gain
 3-4 hours
- 6 Tanque Verde Ridge Trail**
 For the visitor looking for a more rugged trail, the Tanque Verde Ridge Trail is ideal. Day hikers may climb as high as time allows, remembering to return to their cars by sunset to exit the park before the road closes. Magnificent views of the Tucson Basin and Rincon Peak are the reward. This trail is also the closest access to the backcountry from the Visitor Center. Very steep and rocky. **A permit is required for overnight use of this trail.**

strenuous
 18 mi./29 km to peak
 14 mi./22.5 km to Juniper Basin
 4000 ft./1219 m. elevation gain
 time varies according to destination
- 7 Hope Camp Trail**
 This trail heads east from the Camino Loma Alta Trailhead, following a riparian, or streamside, area. It offers views of Tanque Verde Ridge and Rincon Peak. This trail passes by two abandoned line camps with windmills, water towers and storage tanks. Both camps are closed to entry. The trail ends at Hope Camp.

moderate
 5.6 miles/9 km
 1100 ft./335 m. elevation gain
 3-4 hours

Cactus Forest Loop Drive

Driving
 The Cactus Forest Scenic Loop Drive (shown on inset map highlighted in yellow) in the east district is a paved, combination one- and two-way road. The Loop Drive features several trailheads, scenic vistas and pullouts in a total 8 miles (12.9 km). Trailers longer than 35 feet or any vehicle wider than 8 feet are not permitted on the Cactus Forest Drive.

Restrictions

Biking
 Always maintain a safe speed for road conditions and your own riding experience. The Loop Drive is narrow with many tight turns and steep hills. Use *extra caution* when approaching the first steep downhill after passing the entrance station! Bicyclists must obey all posted speed limits.

Mountain Biking
 Trail riding is permitted only on the 2.5 mile (4.0 km) multi-use portion of the Cactus Forest Trail circled by the Cactus Forest Loop Drive. The trail may be ridden in either direction, but you may not ride against traffic on the one-way section of the Cactus Forest Loop Drive.

Hiking
 Hiking off-trail in the Cactus Forest and Rincon Valley is prohibited. Above 4,500 feet, hiking off-trail is permitted. Limit hiking parties to 18 people on trails, 10 people while hiking off-trail.

Multi-use trail
 Horseback riding, bicycling and hiking is allowed only on the portion of the Cactus Forest Trail inside the Cactus Forest Loop Drive.

Stay alert!
 Make your presence known to other trail users well in advance, particularly when approaching from behind. Cyclists yield to all other trail users and hikers yield to equestrians.

Stock and Pack Animals

Horseback riding off-trail is prohibited. Livestock are restricted from these trails:

- south of the intersection of Carillo and Wild Horse Trails
- Tanque Verde Ridge Trail
- Desert Ecology Trail
- Freeman Homestead Trail
- Miller Creek Trail
- Last half mile of the Rincon Peak Trail

Horse Trailer Parking
 Use designated trailer parking. For trails in the Cactus Forest, use the Wild Horse Trailhead. In the Rincon Valley, trailer parking is available .4 mile (.6 km) south of the Loma Alta trailhead at Oro Escondido.



Say it "sah · WAH · row"

Saguaro flowers are waxy and white, about three inches across. They open at night and are pollinated by Mexican long-tongued and lesser long-nosed bats.



Flowers stay open until the following afternoon, allowing birds and insects an opportunity to pollinate them.

Gila woodpeckers and gilded flickers make nest holes in the stems of saguaros. The cactus quickly produces a thick material to heal and dry the wound.



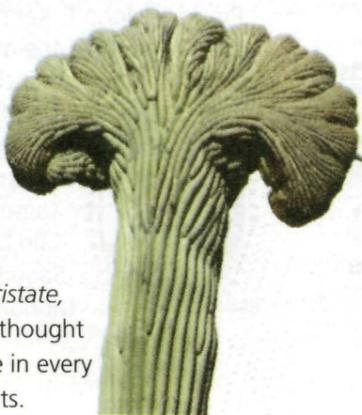
This nest-lining structure sometimes survives after the saguaro dies and rots, and is called a saguaro "boot" because of its shape. Woodpeckers build new nests each year, and older nests become homes for cactus wrens, elf owls, mice, snakes,

spiders and other animals that appreciate the water-cooled cavities in the cactus.



Elf Owl

While the cause is not known, sometimes damage occurs to the growing tip of a saguaro, causing a fanlike growth. Crested, or *cristate*, saguaros are thought to occur once in every 200,000 plants.



Saguaros are fully protected by law, not only in Saguaro National Park, but throughout Arizona.

When ripe, saguaro fruits split open attracting birds, insects, and other desert dwellers. Each fruit may contain 2,000 seeds!

The saguaro blossom is Arizona's state flower.



The spines of a cactus not only protect it from animals that might eat it, they also shade the plant's skin.



In a 150 - 200 year lifetime, a saguaro might produce 40 million seeds. Dispersal, rainfall, and other factors result in about *one* of these seeds living to maturity to replace the parent plant!



The fruiting of the saguaro signals the beginning of the Tohono O'odham new year. Families camp in the desert and collect the fruit for jams, jelly, candy, and a ceremonial wine used to bring on the summer rains.

Why grow "arms?" More arms equals more surface area for photosynthesis, and more places to grow flowers, thus increasing the number of seeds produced.

Saguaros must start life under a tree or shrub to protect them from drying out and be hidden from herbivores. Saguaros often outlive their "nurse" plants.

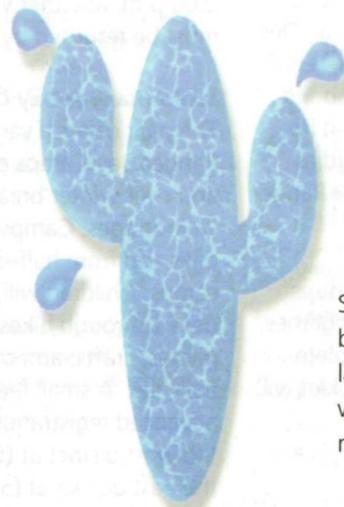
When a saguaro dies, the woody ribs that supported it in life soon become visible as the softer plant tissue dries up and crumbles away.

Saguaros grow slowly. In the most favorable conditions it may take 35 years for a plant to reach 6 feet; more commonly it takes 47 to 67 years.

Saguaros can grow to 50 feet tall and are the largest member of the cactus family in the United States (though not in the world).

Saguaro branches always grow upward. Occasionally frost or snow will freeze the tissue at the base of a limb and damage it, and the weight of the branch pulls it down.

If the branch survives, the growing tip will turn upward again.



Saguaro tissue may be 85% water; a large plant may weigh 8 tons or more!

From Trail Work to Tracking, Cactus Rangers Do it All

SAGUARO NATIONAL PARK IS A special place, where you can view the beauty of nature and the Cactus Ranger program gets you involved with that nature. This program is a wonderful opportunity to share the many unique qualities of the park with visitors while having life-long experiences with those who manage the park for future generations. The past year has been an active one thanks to the direction provided by our leader, Ranger Chip Littlefield.

The greatest reward for me is found during the Junior Ranger camps held each month during the winter. Even though I sacrificed part of my holiday and spring school breaks it was no problem for what I got in return. I have been given the support and trust to pass on my understanding and appreciation of Saguaro National Park to kids 8 to 12 years old, who in some cases, are enjoying the wilderness for the very first time.

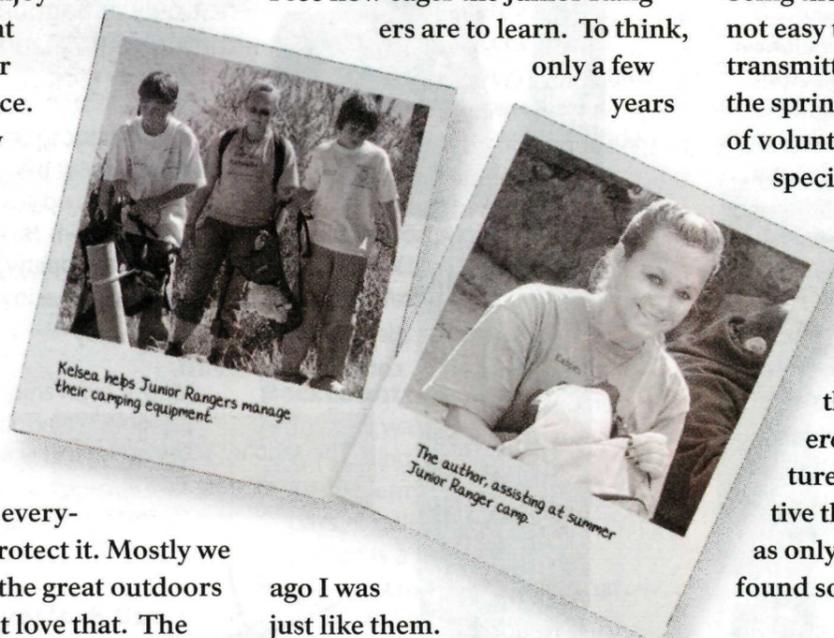
by Kelsea Jondall, Cactus Ranger, age 15

The theme at these camps has been to get out and enjoy the environment in a safe manner but leave no trace. There are many activities built into the three days. Camp begins by talking about the fragile nature of the Sonoran desert, the choices we make and what everyone can do to protect it. Mostly we head right into the great outdoors and the kids just love that. The group will learn about campsite selection, setting up tents, using cook stoves, navigating with a compass and map, using visual landmarks for hiking, good safety equipment to have, and how to prepare food that is compact but easy to make and tastes good. The kids have a great time learning while taking in all the beauty the

park offers. I can only smile when I see how eager the Junior Rangers are to learn. To think, only a few years

survivors—with human activity being their only threat! They are not easy to find even with a radio transmitter on their backs. During the springtime, I joined with teams of volunteers along with a big cat specialist to identify mountain lion activity in the park. We knew from motion sensor cameras that there was a mother lion and a young cub living in the park. I soon discovered that these special creatures were even more secretive than the desert tortoise, as only one group of surveyors found some tracks left in the sand.

I look forward to making the most of the up coming year, as I know in time, younger kids will grow to replace me as a Cactus Ranger. What I now realize is one person can make a difference by volunteering in the park, at any age, because you're preserving something wonderful for generations to come. □



ago I was just like them. I have learned a lot of leadership skills helping out at the Junior Ranger camps, but that's only part of what I've been doing as a Cactus Ranger. During the summer monsoon season I helped a park biologist track a group of Sonoran desert tortoises using radio telemetry. I discovered those old timers are real



Ranger Jeff Kartheiser and volunteers help Junior Rangers explore the Rincon Cactus Garden [NPS].

Saguaro's Junior Rangers

Junior Ranger Discovery Pack
The Junior Ranger Discovery Pack program is designed for children of all ages who want to explore the plants, animals and people of the Sonoran Desert. The Discovery Pack contains pencils, colored pencils, field guides, magnifying glass, and binoculars that can be checked out by a parent or guardian. There is no charge for the Junior Ranger programs.

Activity booklets for two age groups (5-8 and 9-12) offer a variety of games, puzzles and art projects to complete. Every child that finishes the booklet will be awarded an official Saguaro National Park Junior Ranger certificate and badge.

Please allow approximately 2-3 hours to complete the program. Discovery Packs can be checked out from 9:00 a.m. to 2:00 p.m. at either visitor center and must be returned by 4:30 p.m.

Junior Ranger Day Camps
The park offers a variety of Junior Ranger Day Camps during June, July, and over winter breaks for kids of various ages. Camps range from 1-3 days and from half-day to full-day camps. Children will experience the desert through hikes, exploration, games, crafts, and other engaging activities. A small fee applies and advanced registration is required. Call the west district at (520) 733-5158, or the east district at (520) 733-5153 for more information.

Ranger-led Talks and Hikes
are offered daily from November through April. Call for schedules.

Environmental Education

Saguaro National Park offers a variety of curriculum-based programs throughout the year. Programs are presented by rangers or Volunteers in Parks (VIPs) and are offered at no charge.

The park is pleased to feature **Desert Discoveries** and **Desert Communities** programs for students. Both programs are hands-on, curriculum-based environmental education field trips exploring the plants, animals and Hohokam people of the Sonoran Desert. If unable to visit the park, let park staff bring the exciting **Traveling Trunks** program, and the desert, into the classroom to enhance topics already being studied by the students.

Celebrating **Love of Reading Week**, park staff come to the classroom and read park-related stories to students of all ages. An activity or hands-on presentation is always included.

Programs are offered at both districts of the park and require reservations. Programs are always free of charge. Please call one of our environmental education program coordinators, (520) 733-5157 (west district) or (520) 733-5152 (east district), if you would like more information.

Growth Chart of park history!

1942
Last documented observation of a desert bighorn sheep in the Rincon Mountains.



(javelinas were here)

1948
Last documented observation of a Mexican Gray Wolf in the Rincon Mountains.



1950
Last documented observation of a jaguar in the Rincon Mountains.

November 15, 1961
President John F. Kennedy signed a bill expanding the monument lands to include a new patch of dense saguaros. This became the Tucson Mountain District of Saguaro National Monument.



WESTERN NATIONAL PARKS ASSOCIATION

Western National Parks Association (WNPA), founded in 1938, is a non-profit organization authorized by Congress. WNPA strives to create a greater public understanding of the heritage preserved in our National Park System by publishing and distributing educational materials, funding scientific research, and providing financial grants. We believe that providing these services will lead to greater public enjoyment of the parks and help preserve them for future generations. All net proceeds support the interpretive and research programs of the National Park Service and Saguaro National Park.

WNPA offers four membership categories: individual annual (\$25), family annual (\$45), corporate annual (\$500), and Life (\$1000). Membership entitles you to a 15% discount on all purchases over \$1 in our bookshops in all 63 sites served by WNPA. (Hubbell Trading Post purchases excluded.) An additional 5% discount is offered to WNPA members over the age of 62. Most other National Park Service

cooperating associations, including those at Grand Canyon and Mesa Verde, will also honor your membership card.

By obtaining membership in WNPA, you are making a direct contribution to the parks we serve. Each year we provide almost \$2 million in aid to those parks in funding for personnel, in support of educational programs and scientific research, and in publishing books and other materials that assist the park in conveying the park story to visitors.

Western National Parks Association gratefully accepts tax-deductible contributions to further the goals of the National Park Service. These contributions can be designated to support a particular project or park served by WNPA.

You can reach the WNPA bookstore at Saguaro National Park at (520) 733-5159. Mail orders are accepted with check, money order, Visa, MasterCard, or Discover for the price of the item plus shipping and handling. Call for more details or to learn what is available specific to the park, or visit WNPA on the internet at www.wnpa.org.



You can help assure that the incredible experience you enjoyed at Saguaro National Park will be available for your family, friends, and thousands of others for years to come. The **Friends of Saguaro National Park** has donated tens of thousands of dollars to our park for trail construction, new picnic tables and benches, educational materials, safety equipment, and funds for research on saguaros and the wildlife that lives in the cactus forests.

Public funding no longer meets some of the most pressing needs of our parks. A non-profit organization, the **Friends of Saguaro** has a single purpose: to provide dollars for desperately needed projects at Saguaro National Park. Join us, and give something back to these stunning "sentinels of the desert" today. Call (520) 622-1080, or visit us online at www.friendsofsaguaro.org to learn more.

YES! I want to support special projects at Saguaro National Park by:

Becoming a member of the *Friends of Saguaro National Park* at the following level:

___\$30 ___\$50 ___\$100 ___\$250 ___\$500

Adopting a Saguaro (you'll receive a certificate and frameable photo):

___\$20 *Indiv.* ___\$30 *Family* ___\$100 *Guardian* ___\$10 *Student or Class*

Name _____
Address _____
City, State, Zip _____

Clip this form and mail with a check or money order payable to Friends of Saguaro National Park. Mail to: Friends of Saguaro National Park, P.O. Box 18998 Tucson, Arizona 85731-8998.

Your Fees Improve Your Park

HAVE YOU ENJOYED A PICNIC IN THE shade of a historic shelter at Signal Hill? Have you learned about the natural and human history of the saguaro from signs along the Freeman Homestead trail? Are you better informed by the new trailhead exhibits and maps found throughout Saguaro National Park? If so, you are enjoying facilities provided by park entrance fees, paid by you and other visitors to Saguaro National Park.

Like hundreds of recreation areas across the country, Saguaro National Park operates under the Federal Lands Recreation Enhancement Act of 2004. Many visitors are familiar with the "Fee Demo" signs of an earlier law: the Fee Demonstration Program. Under both programs, 100% of all entrance fees are put to use in the park system, and at least 80% of the funds stay in the park where they are collected. Your fees are not returned to the government's general fund.

The effects of time, use, and a rugged desert climate have been

tough on the recreational facilities of the park. The picnic areas of the Tucson Mountain District were built in the 1930s by the Civilian Conservation Corps. The structures are wonderful, but historic saguaro rib ramadas require special care. Facilities in the Rincon Mountain District were installed by the National Park Service in the 1950s, when visitation was a small fraction of what it is today.

Projects paid for by fee dollars at Saguaro cover a wide range of visitor needs. New restroom facilities at Javelina Picnic Area are basic necessities, as are trail renovations in both districts of the park. Fees have also been used to create a new public information program, "The Saguaro Saga," which highlights the latest research on our fascinating namesake cactus. Other projects have included safety glass in the Rincon Mountain Visitor Center and a protective barrier at a popular petroglyph site.

Whether you purchase a seven-day permit to the park, a Saguaro Annual Pass good for one year's

worth of visits, or the Interagency Pass to be used anywhere in the USA, you can be happy knowing that your fee dollars are used for projects directly related to the facilities and resources of your Saguaro National Park. □

"Standing Tall at 75"

continued from page 4

Loop Drive (fully restored in the summer of 2006!). A visitor center opened in the 1950s and important scientific research brought a fuller understanding of the saguaro life cycle by 1970. Most important, in 1961, at the urging of the people of Tucson and Secretary of Interior Stewart Udall, President Kennedy added 25 square miles of splendid cactus lands in the Tucson Mountains to the Monument. Finally, after setting aside vast areas as wilderness, Congress elevated Saguaro to National Park status in 1994.

The simplest efforts long ago may have the most profound effects upon us today. □

Growth Chart of park history!

Late 1960s

Small saguaros begin surviving in larger numbers in the Rincon Mountain District for the first time since the establishment of the park in 1933.

October 20, 1976

Over 71,000 acres of Saguaro National Park are designated as wilderness where the land is to be protected, preserved and left unimpaired, in its natural condition, for the American people of present and future generations

May 8, 1994

The Mother's Day Fire on the west slope of Tanque Verde Ridge marks the first time a major fire spreads through the lower desert. The fire is due to red brome grass (*inset*), an



species of grass. 1,200 acres are charred, including many saguaros.



National Park Service
U.S. Department of the Interior

Saguaro National Park
3693 South Old Spanish Trail
Tucson, AZ 85730



Average Maximum / Minimum Temperature

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Max	64° F	68° F	72° F	81° F	89° F	99° F	98° F	97° F	94° F	84° F	73° F	65° F
Min	38° F	40° F	44° F	50° F	57° F	67° F	74° F	72° F	67° F	57° F	45° F	39° F

Sunrise/Sunset Times for Tucson, Arizona (Mountain Standard Time, GMT -7)

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1st	7:25/5:30	7:17/5:57	6:51/6:21	6:12/6:43	5:38/7:04	5:18/7:25	5:21/7:34	5:39/7:21	5:59/6:49	6:18/6:10	6:41/5:35	7:07/5:19
5th	7:25/5:33	7:14/6:00	6:46/6:24	6:07/6:46	5:35/7:07	5:17/7:27	5:23/7:34	5:42/7:18	6:01/6:44	6:20/6:05	6:44/5:31	7:10/5:19
10th	7:25/5:37	7:10/6:05	6:40/6:28	6:02/6:48	5:30/7:10	5:17/7:29	5:25/7:33	5:45/7:13	6:05/6:37	6:24/5:58	6:48/5:28	7:14/5:19
15th	7:25/5:41	7:06/6:09	6:34/6:31	5:55/6:53	5:26/7:14	5:17/7:31	5:28/7:31	5:48/7:08	6:08/6:31	6:27/5:52	6:53/5:24	7:17/5:21
20th	7:23/5:46	7:01/6:13	6:27/6:35	5:49/6:56	5:23/7:17	5:18/7:33	5:31/7:29	5:51/7:03	6:11/6:24	6:31/5:47	6:57/5:22	7:20/5:23
25th	7:21/5:50	6:55/6:18	6:21/6:38	5:40/7:00	5:21/7:21	5:19/7:34	5:34/7:26	5:55/6:57	6:14/6:17	6:35/5:41	7:02/5:20	7:22/5:25
30th	7:10/5:55		6:14/6:42	5:39/7:03	5:19/7:24	5:21/7:34	5:38/7:23	5:58/6:51	6:17/6:11	6:39/5:36	7:06/5:19	7:24/5:28

Arizona, except for the Navajo Nation, does not observe Daylight Savings Time. Please note that sunrise and sunset times will vary slightly from year to year. Call for exact times.

EXPERIENCE YOUR AMERICA

The Saguaro Sentinel is published by Saguaro National Park with assistance from Western National Parks Association (WNPA). Printed by Western Web and Graphics, Tucson, Arizona. Publication Coordinator: Chip Littlefield. Layout: Daina Dajevskis. Page 9 layout: Philip Brown.

Please recycle this paper, or give it to a friend. 5th edition 10/2007.

Safety in the Park

Snakes Six species of rattlesnakes are found at Saguaro National Park. They seek shelter in the shade of bushes or rock crevices in the heat of the day. Avoid placing your hands or feet in hidden areas. **Treatment:** If you are bitten by a snake, remain calm. Immobilize the limb and get to a doctor as soon as possible. Report any bites to a ranger.

Bees Africanized honey bees ("killer" bees) are found throughout the park. These bees will attack only when they feel their hive is threatened. Stay alert for sounds of bee activity and watch for them entering or exiting a colony. Near a colony, individual bees may "bump" you, without stinging, as warning. If you are attacked, run away as fast as you can. If possible, cover your head and face with clothing. Africanized bees will usually cease attacking once you are ¼ to ½ mile away from their hive. **Treatment:** If you are stung, scrape away embedded stingers with your fingernail or a credit card. Call 911 and get to a doctor as soon as you can. Report the attack to a ranger.

Heat Hike within your ability and rest often when hiking in the heat. Know the symptoms and treatment for heat exhaustion, and life-threatening heat stroke.

Heat exhaustion: This is the result of dehydration due to intense sweating. Symptoms: pale face, nausea, cool and moist skin, headache, and cramps. **Treatment:** drink water, eat high-energy foods, rest in the shade, and cool the body, especially around the neck, head and groin.

Heat stroke: If left untreated, heat exhaustion can turn into heat stroke. This is a life-threatening emergency where the body's heat-regulating mechanisms become overwhelmed. Symptoms: flushed face, dry skin, weak and rapid pulse, high body temperature, poor judgment or confusion, unconsciousness. **Treatment:** find shade, cool the victim with water, call 911 and seek help immediately.

Water During the summer, drink at least one gallon of water per person, per day, even if you don't feel thirsty. In the winter, carry at least two quarts per day. Don't ration

your water when hiking—turn back when half your supply is gone. **Hyponatremia:** Drinking too much water over a short time can lead to hyponatremia, where sodium electrolyte levels in the body become dangerously low. Symptoms of hyponatremia are similar to those of heat exhaustion. **Treatment:** Drink both water and sports drinks and eat salty snacks to keep electrolytes balanced.

Flooding During the summer rainy season, the desert is prone to flash flooding. Avoid hiking in washes (dry riverbeds) during thunderstorms. Do not try to cross a flooded road in your vehicle under any circumstances!

Lightning Be prepared for rain even on sunny days. If you see lightning, move quickly to the nearest safe place. Avoid hill tops, ridges, and flat open areas. If you can't find shelter, do the "lightning crouch": put your feet together, squat low, tuck your head, and cover your ears.

Mountain Lions Mountain lions—also known as pumas, or cougars—are found in both districts of the park. Human-lion encounters are rare, but possible. **What to do if you encounter a mountain lion:** Most lions will avoid confrontation—give the lion a way to escape. Stay calm and speak loudly and firmly. Do not run from a mountain lion—rather, stand and face it. Make eye contact. Appear as large as you can: raise your arms and open your jacket if you are wearing one. Throw stones or whatever you can reach without crouching or turning your back. Wave your arms slowly. Protect small children so they won't panic and run. Finally, fight back if you are attacked. Use whatever you have to defend yourself: rocks, sticks, caps, or your bare hands. Since a mountain lion usually tries to bite the head or neck, try to remain standing and face the animal.

Cacti Many desert plants are spiny or thorny. Some species of cactus, such as cholla, have barbed spines which detach easily and embed in skin. Carry a comb and tweezers to flick off cactus segments and remove spines.



October 4, 1994
Congress authorized the re-designation of Saguaro National Monument to Saguaro National Park, the 52nd National Park.



The bill was signed by President Bill Clinton on October 14, 1994.

November 12, 2006
Tucson's population hits 1 million. It was less than 100,000 during World War II, and Saguaro National Park was far from any urban center.

