

Organ Pipe Cactus

National Park Service
U.S. Department of the Interior



Organ Pipe Cactus National Monument



Tillotson Peak

Welcome to Organ Pipe Cactus National Monument

The Making of a Monument

Until slightly more than 100 years ago only a few people inhabited this part of the Sonoran Desert. Except for Native Americans, most were transient.

Early in the 20th century, a few intrepid scientific explorers visited this region. They compiled copious data along with photographs and drawings of the plants, wildlife and geology. When their scientific reports were published, news of their discoveries of previously undocumented plants and animals spread worldwide.

By 1920, miners were commercially mining the copper deposits in Ajo. The incursions of ranchers, miners, hunters, and others left roads, trails, buildings and mine tailings throughout the area.

As commerce expanded across the desert, there were those who sought to protect its natural wonders. In the 1920s, the Tucson Natural History Association, later known as the Tucson Audubon Society, conducted tourist excursions here. People from around the world came to see cactus country.

In the early 1930s the National Park Service (NPS) began changing its emphasis from “mountaintop” scenery to preservation of representative ecosystems. The Valley of the Ajo presented a unique opportunity. The desert landscape was subtle, (See **Making ...** page 7) yet it contained a wide diversity of native wildlife and plants. The Park Service evaluated the area and recommended that it be made a national monument.

Early in 1937, the director of the NPS drafted a proclamation and sent it to the Secretary of the Interior. He signed it and passed it on to President Franklin D. Roosevelt who signed the proclamation on April 13, 1937, using the authority granted in the Antiquities Act of 1906. His action set aside a representative sample of the Sonoran Desert and named it after a unique and spectacular cactus found only here: Organ Pipe Cactus National Monument.

As they watched the monument boundary being fenced, some local residents began a heated battle of words with the U.S. government: Western independence vs. government regulations, and local economic interests vs. the National Park Service. For many years, angry letters flew between all parties. Ranching and mining finally came to an end in the mid-1970s when most of Organ Pipe Cactus was declared a wilderness area.

Today, Organ Pipe Cactus National Monument preserves its historic sites amid unique flora and fauna as a truly representative sample of the Sonoran Desert ecosystem.

Superintendent's Welcome



Superintendent Lee Baiza

Welcome to Organ Pipe Cactus National Monument. We work hard to make your visit a pleasant, memorable and safe experience. Our knowledgeable and capable staff is ready to answer your questions so you can enjoy the unique Sonoran Desert landscape and the cultural and historical sites in the monument.

Kris Eggle Visitor Center, with its newly remodeled exhibit and museum area, is both interesting and beautiful. Our educational book and gift store has many items to help you remember your visit. We continue to improve our park infrastructure which includes replacement of the visitor center roof, and paving in Twin Peaks Campground and other developed areas of the monument.

Organ Pipe Cactus National Monument has a cultural partnership with El Pinacate Y Gran Desierto de Altar, our sister national park just across the border in Mexico. You will find information and educational items about both parks in the bookstore at the visitor center maintained by our partner the Western National Parks Association.

Hiking trails, self guided auto tours and ranger led walks and talks are here to help you explore the landscape. Information about these activities can be found at the Kris Eggle Visitor Center.

Organ Pipe Cactus National Monument is near the border, so there are cross-border incursions. If you see something or someone suspicious, simply continue on your way and notify a ranger or other park employee.

I hope you enjoy your time here and will return often.

Lee Baiza, Superintendent
Organ Pipe Cactus National Monument

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Organ Pipe Cactus National Monument

Protecting 516 square miles of Sonoran Desert, Organ Pipe Cactus National Monument is a sanctuary for diverse and endangered species. The park was established by President Franklin D. Roosevelt in 1937 and has since been recognized as a Biosphere Reserve by the United Nations. Over 95 percent of Organ Pipe Cactus is designated wilderness. Come explore the wonders and the wild of the Sonoran Desert!

Superintendent

Lee Baiza

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<http://www.nps.gov/orpi>

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

Organ Pipe Cactus: Fun Facts

Organ Pipe Cactus National Monument is one of the few places in the United States where you can see large stands of organ pipe cacti.



An organ pipe cactus produces its first flowers at age 35. The flowers blossom at night and are wilted by mid-morning the next day.

Organ pipe cactus may live 150 years.



Early settlers who encountered dead cacti were reminded of church pipe organs and called these cacti organ pipes. If you cut them open do you think they would be hollow?



Just before and during the summer rains, the organ pipe fruit ripens and splits open to reveal its red pulpy flesh.



Creatures of the Sonoran Desert feast on the juicy fruit and disperse the seeds across the desert.

Average height at maturity is 15 feet.



Columnar cacti such as the organ pipe and saguaro can form these unusual growths called "crustates."

Information and Services

Emergencies

For 24-hour emergency response, call 911 or 623-580-5515. The closest medical clinic is the Desert Senita Community Health Center in Ajo, 520-387-5651. The closest hospitals are in Phoenix and Tucson.

Visitor Center

The Kris Eggle Visitor Center is open daily 8:30 a.m. - 4:30 p.m. except Thanksgiving and Christmas. It includes an orientation program, short accessible nature trail, exhibits and bookstore are available. Ranger led talks, tours and hikes are offered January through March.

Camping

See page 4 for details and map on page 12.

Entrance Fees

\$8 per vehicle, \$4 per pedestrian or bicyclist. Pass is good for seven days. Entrance is free with Interagency and Organ Pipe Cactus Annual, Golden Age, Access, and Senior passes.

Accessibility

The Kris Eggle Visitor Center, restrooms and 1/10 mile nature trail are fully accessible.

Pets

Pets must be on a leash at all times. Pets are allowed in campgrounds, picnic areas, the Palo Verde and Campground Perimeter trails, and monument roads.

Fires

At Twin Peaks Campground, fires are permitted only in campground fire grills, using pressed logs, charcoal, or firewood. Gathering dead or down wood is prohibited. Wood fires are prohibited at Alamo Campground.

Lost and Found

Contact the Kris Eggle Visitor Center at 520-387-6849 ext. 7302.

Western National Parks Association

The Association is our partner and operator of the park bookstore, located in the visitor center lobby. It sells educational books, post cards, local arts and cultural items.

Firearms

As of Feb. 22, 2010, federal law allows people who can legally possess firearms under federal, Arizona and local laws to possess firearms in Organ Pipe Cactus National Monument.

It is the visitor's responsibility to understand and comply with all state, local, and federal firearms laws. Federal law prohibits firearms in certain facilities in the monument. These are identified by signs at public entrances. If you have questions, please contact the Arizona Department of Public Safety at (800) 256-6280 or visit their website http://www.azdps.gov/Services/Concealed_Weapons/.

Your Fees at Work



New museum displays inside the Kris Eggle Visitor Center

Here at Organ Pipe Cactus National Monument, visitors can see tangible evidence of improvements paid for with entrance and campground fees.

The most recent is remodeling of the Kris Eggle Visitor Center museum display. From a few beautiful photographs to eight interactive displays depicting the monument's natural history and the importance of the Tohono O'odham local Native American culture, this change was entirely funded with fees collected at Organ Pipe Cactus. A state-of-the-art sound system in the visitor center auditorium now enhances visitor enjoyment of the park video and other presentations.

Outside the visitor center, the picnic area ramadas also were funded with fee money. Except for the addition of metal wire to tie the shelters together for safety, they were built in the traditional manner by workers from the Tohono O'odham Nation. The visitor center nature trail received a facelift by replacement of the asphalt walkway with red brick pavers and new interpretive signs.

Fees also paid for signs and landscaping that welcome visitors to the monument at the north and south entrances. In addition, the Twin Peaks Campground amphitheater was rehabilitated, including new projection and sound equipment.

Fee money supports the Youth Conservation Corps teams that periodically work in the monument to rehabilitate trails, such as they recently did on the Estes Canyon / Bull Pasture loop.

Looking forward, new wayside exhibits are planned for the Victoria Mine, Tillotson Peak and Ajo Mountains Waysides.



Interpretive signs and trail at visitor center built with fee dollars.

WNPA: The Bookstore People



Janet Castro, WNPA Store Manager with visitor.

“Western National Parks Association (WNPA) promotes preservation of the national park system and its resources by creating greater public appreciation through education, interpretation and research.” This statement is the guiding principle under which WNPA operates.

In partnership with the NPS, Western National Parks Association operates the bookstore in the Kris Eggle Visitor Center. It offers a wide selection of books and educational materials about birds, wildflowers, plants, ecology, geology, history and archaeology. There are also postcards, bookmarkers, Native American artwork, tee and sweatshirts, and hats for sun protection.

Proceeds from this and other bookstores at national parks across the West are used in direct support of education, interpretation and research in the parks as well as outreach programs to schools and communities.

VIPs: Our Volunteers are Something

Dictionary definition - Vol*un*teer: somebody who works for nothing.



Volunteer Sherri Rivenburgh assisting a visitor.

Volunteers in the National Park Service work in unique settings, preserve this country's natural and cultural legacy, and help visitors discover the resources, meanings and values in each park. Many tasks would go undone without the help from the unique group of Volunteers-In-Parks (VIP). Ask volunteers at Organ Pipe Cactus National Monument why they are willing to work for nothing. Many will answer that it isn't for nothing. Besides receiving a free campsite and living in the park, They have many more reasons.

Mary and Kenn Hoover walk miles over rough terrain in all types of weather. They spend many hours stooped over to yank, dig and tear out buffleggrass, an invasive plant species that is trying to gain a root hold in the park.

Asked why they would do such labor intensive work for no pay, Kenn replied, “To give back something, be productive and be a part of something, to feel needed.” Mary added: “You can't travel 365 days a year and now I look forward to Fridays. There is a sense of community among the volunteers. It just feels good to come back.”

VIPs have an ever-increasing role in national parks, performing a variety of jobs. There are work groups called divisions in national parks. At Organ Pipe Cactus, every division benefits from the work of VIPs. Each division sets its own schedule for VIPs based on the work load and difficulty of the work. To find out what positions are available at Organ Pipe Cactus, visit www.volunteer.gov or inquire at the Kris Eggle Visitor Center.

Whether working behind the scenes or with visitors, VIPs make a difference by helping to connect you with your parks.

Want to Volunteer?

Go online to www.volunteer.gov. Or, just call or visit your closest national park and ask at the visitor center about how to find opportunities to volunteer.

4 Planning Your Visit

What can I do in this Sonoran Desert Wonderland?



Barrel Cactus

In one hour....

Explore the Sonoran Desert by driving the 10 mile round-trip North Puerto Blanco Scenic Drive. This graded dirt road is accessible to passenger vehicles but not recommended for motor homes or trailers over 25 feet.

Visit the Kris Eggle Visitor Center for an informative presentation, 1/10-mile nature trail, and exhibit room.

During the winter, join a park ranger or volunteer for an interpretive talk or hike. Ask about the schedule in the visitor center.



Ranger guided walk.

In two or three hours....

Walk the easy 1.2-mile Desert View Nature Trail from the campground to experience the Sonoran Desert landscape and learn about its many desert plants and animals

Tour the beautiful 21-mile Ajo Mountain Scenic Loop. This graded dirt road winds through the Ajo Mountains and provides stunning views of organ pipes, saguaros and other cacti. Not recommended for motor homes or trailers over 25 feet.



Ajo Mountain Drive scenic loop.

In half a day....

Hike one of the monument's trails, such as the Arch Canyon trail, the Victoria Mine trail, or Alamo Canyon.

For a more strenuous outing, hike the rugged Estes Canyon-Bull Pasture trail into a unique ecosystem high in the Ajo Mountains.

In a full day....

Immerse yourself in the Sonoran Desert ecosystem. Combine the Ajo Mountain Scenic Loop with some of the hiking trails and a stop at the visitor center. Ask visitor center staff for further suggestions.

Nearby Attractions

Cabeza Prieta National Wildlife Refuge

Register at visitor center for free permit.
North Second St.
Ajo, AZ 85321
(520)387-6483

Tohono O'odham National Museum and Cultural Center

Federal Route 19
Fresnal Canyon Road
Topawa, AZ 85639
(520)383-0201

El Pinacate y Gran Desierto de Altar, Sonora, Mexico

The sister park to Organ Pipe Cactus National Monument, Mexico's El Pinacate has huge volcanic craters and cinder cones. Located 31 miles west of Sonoyta on Highway 2.

Estación Biologica
Carretera Mexico 8 km 52
Puerto Peñasco, Sonora
01 (638) 384-9007

International Sonoran Desert Alliance

Art Gallery
401 W. Esperanza
Ajo, AZ 85321

Ranger Talks and Walks

At Organ Pipe Cactus National Monument, park rangers continue the time-honored tradition of leading tours hikes and talks every winter from early January through March. Schedules and descriptions for guided walks, van tours, evening programs, and patio talks are posted in Kris Eggle Visitor Center and on the bulletin board at Twin Peaks Campground.

Rangers and volunteers are happy to provide information and answer your questions. Subjects and presentation styles are varied. One evening you may visit with an early Arizona rancher or miner portrayed in costume by a ranger or volunteer. The next night it might be a conversation with a bat or a vulture. Other topics may include the night sky, Organ Pipe Wilderness, or the biology of the desert tortoise, history and more. These presentations will help you to understand and appreciate your priceless heritage at Organ pipe Cactus National Monument.



Volunteer Randa Weber with visitors at Birdseye Point along the Ajo Mountain guided van tour.

Camping

Organ Pipe Cactus National Monument has two distinctly different campgrounds. **Twin Peaks** is the main, developed campground near the park visitor center. **Alamo** is a more remote, primitive campground at the entrance to Alamo Canyon, about ten miles northeast of the visitor center.

Twin Peaks Campground: Open all year. Fee: \$12 per night or \$6 for holders of Golden Age/Access/Senior Passes. 40-foot maximum vehicle length. Generator use permitted 8 am-10 pm and 4 pm-6 pm. Sites are first-come, first-served. No reservations. 34 tent sites/174 RV sites.

Facilities: Restrooms, drinking water, picnic tables, fire pits, showers, dump station. No RV hookups.



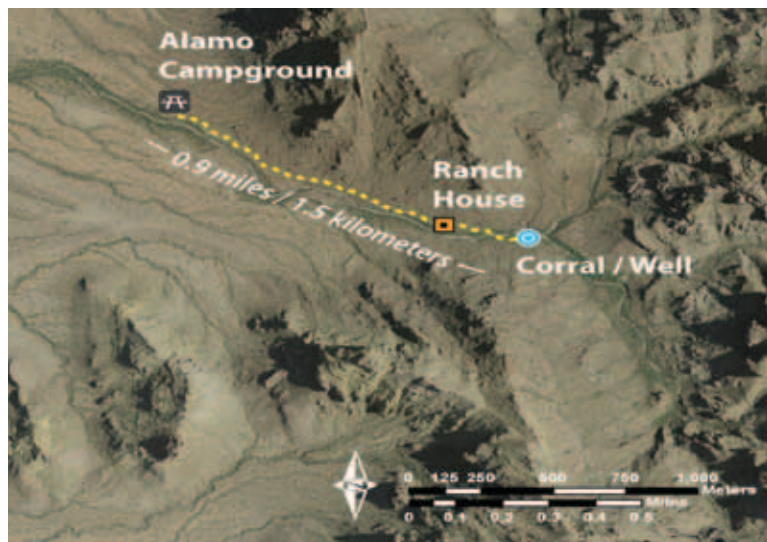
Alamo Primitive Campground: Open all year. Fee \$8 per night or \$4 with a Golden Age/Access/Senior Pass. Obtain required permit at visitor center. Open to tents, pickup campers, and vans only. No generators. Limited to four tent sites which may fill early, especially in winter. No advance reservations.

Facilities: Pit toilet, picnic table, grill.
No Water available.

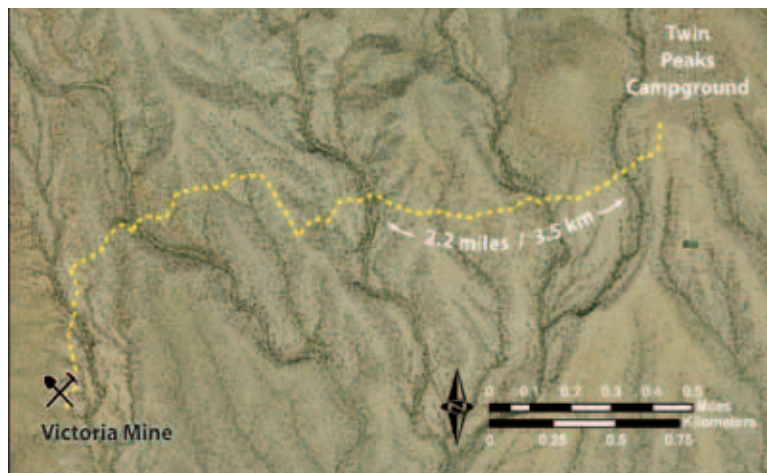
Your Trail Guide to Organ Pipe Cactus



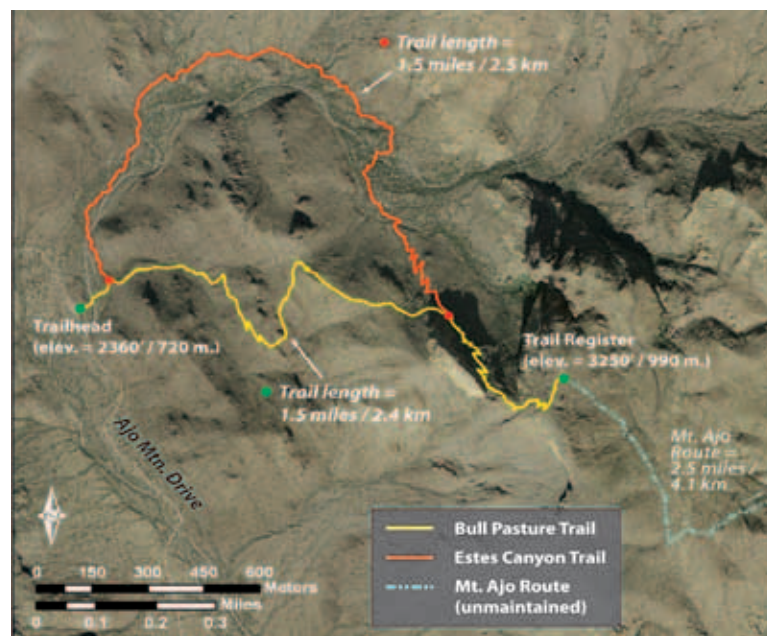
Fishhook Pincushion Cactus



Alamo Canyon trail



Victoria Mine trail



Bull Pasture - Estes Canyon trails



Along the Campground Perimeter Trail

Trail	Distance/ Time (round-trip)	Description
Visitor Center Nature Trail	0.10 miles 5-10 minutes 	Easy brick path from Visitor Center with exhibits. Accessible to scooters and wheelchairs.
Campground Perimeter	1 mile 20-30 minutes 	Easy loop around Twin Peaks Campground. Pets allowed.
Palo Verde	2.6 miles 1.5-2 hours 	Easy trail between Twin Peaks Campground and Visitor Center with views of the Ajo Range. Pets allowed.
Alamo Canyon	2 miles 1.5 hours	Easy trail to historic ranching site. Recommended for birding. Footing can be rough.
Desert View	1.2 miles 45-60 minutes	Easy loop trail to beautiful vistas. Ideal for sunrise and sunset. Benches provided.
Victoria Mine	4.5 miles 2 hours	Easy trail meandering across the Sonoran Desert to historic mining structures. Crosses several arroyos (washes). Benches provided. Mines are closed. For your safety, do not enter mines.
Arch Canyon	2 miles 1 hour	Easy-moderate trail that steadily climbs into canyon. Good views of arch and oak-juniper environment.
Estes Canyon-Bull Pasture	4.1 miles 2-3 hours	Difficult loop trail with steep grade and exposed cliffs. Spectacular views of monument and Mexico. Estes Canyon is great for birding.



Dogs on leash OK



Accessible

Staying Safe in the Desert



The desert is a wondrous, magical place- To enjoy it safely keep the following in mind:

- Carry and drink plenty of water - at least one gallon per person a day.
- Sun protection is important. Remember to wear sunscreen and protective clothing.
- Desert vegetation is spikey, so avoid contact. Spines can be removed with tweezers.
- Flash floods occur instantly and are dangerous. Avoid washes when rain is threatening.
- Never enter a flooded roadway. Wait for the water to subside and it is safe to cross.
- Do not put your hands or feet anywhere you cannot see. That is where snakes, scorpions, and spiders often hide.
- Hike with a partner. Let someone else know where you are going and when you plan to return.
- Cross-border incursions do occur. If you should encounter someone or a group traveling cross country with backpacks, bundles or black water bottles, do not make contact. Report suspicious activity or people to a ranger, or call 911 if your phone has a signal.

Alamo Canyon: Birdie Del Miller's Dream



Alamo Ranch Houses: Miller (L-now gone) Gray (R)

Tucked away in remote Alamo Canyon is a four-site primitive campground, a favorite spot for campers who want to experience "roughing it" in the Sonoran Desert. Intrepid adventurers gladly sleep on the ground with only a thin tent for shelter from the elements, bring their drinking water in jugs, cook over a camp stove and use a pit toilet just for the privilege of living under the cloudless blue desert sky by day and the brilliant stars by night while being lulled to sleep by the soft peaceful sighing of the canyon wind through the palo verde and mesquite. So beautiful! So idyllic! Who couldn't spend the rest of their life in this paradise?

Pioneer rancher Birdie Del Miller, that's who!

Actually, Birdie would have gladly spent her whole life in this paradise, but the difficulties of making a living here presented too great a challenge. Historically, inhabitants have been few and far between in this section of the Sonoran Desert. Life was brutal here...even though there was more water in Alamo Canyon than out on the desert floor, it wasn't abundant. And access to water makes all the difference to life in the desert. Birdie was not the only person to make this discovery in her effort to establish a home here. Miners made a brief attempt. In 1913 two men established mining claims and prospected the Alamo in hopes of

discovering valuable mineral deposits to make their fortunes. No tangible history remains of their efforts, but presumably they were not successful in these endeavors as the following year they sold their holdings to William G. and Birdie Del Miller. Birdie paid \$750 to miners Hubstader and Powell for the mining claim and "a well that wouldn't water our saddle horses," which made digging a second well imperative if she and Bill were going to have any success raising cattle in these rigorous surroundings.

A moonshiner gave the remote canyon a try—at some point during the Hubstader-Powell era, an enterprising producer of boot-leg liquor established a still in the back reaches of the Alamo. Adventurous Birdie always wanted to go in search of it, but her mother, who ranched a few miles north at Gunsight, feared for her safety, so Birdie never found it. There is no record of the revenue out of Ajo ever finding it either; the repeal of Prohibition ended profitability of white mule sales in the area, if the run-runner ever made a profit, since a distillery operation requires a water supply too, causing the whisky peddler to move on.

Bill and Birdie built a two-room adobe house, dug two wells, installed a windmill and cement tank, and started ranching in the canyon. Birdie had her own brand—the KW; she was a good wrangler and worked as hard as anyone. Just like the other cowhands, she slept on the ground using her saddle as a pillow when working cattle overnight. She had a sense of humor, often directed toward Bill, and she loved to attend the dances at the local Papago (a name early Spanish explorers called the Tohono O'odham) village, where she would dance all night.

Birdie liked this life "out in the country," even though living in this remote site meant occasionally she had to improvise and use "burro grease" (lard made from fat rendered from the local wild burros) for cooking. Birdie would have stayed in the Alamo the rest of her life, but she couldn't make a profit ranching there. Living

conditions were too severe...and it seemed her livestock too frequently was adopted and spirited off to Mexico. So, in 1928 Birdie sold her grazing rights to the Gray family, a local ranching dynasty, and moved to Gunsight five miles north. Even though she and Bill moved away, Birdie maintained a love for and an interest in the Alamo. She kept the mining claim, although she never worked it; and she held the title to the ranch improvements for another 20 years, but never lived there again.

Birdie and Bill were the pioneers of Alamo; they made do as best they could with what little they had...but it wasn't enough to overcome the challenges of living in this unforgiving desert environment. The Gray Partnership, the next (and last) ranchers in Alamo Canyon, had more resources...they built their house of fired adobe brick rather than mud, and their corrals of stone instead of sticks... and stayed 40 years.

Today, campers who pitch their state-of-the-art tents in Alamo Campground and confront the same challenges the early inhabitants met—stifling heat, no water, and few amenities—can readily identify with Birdie. Even 100 years later modern camping gear does little to alleviate the brutal conditions of the Sonoran Desert.



Alamo Corral

Bates Well: Rube Daniels' Home on the Range

How would you like to live 30 miles from nowhere in an arid canyon between two ranges of creosote covered hills offering no view, with about 1000 mooing cows for company? Sound attractive? probably not.

Rube Daniels thought Bates Well was a delightful place. Well, maybe that's a stretch, although he did think it was nice enough that he bought it twice. Living in the desert requires a special type of individual. An individual with the determination and perseverance to succeed in an inhospitable and unforgiving land. One who doesn't need a life of ease or convenience. One who can adapt to harsh conditions and overcome hardship. The area that would become Organ Pipe Cactus National Monument provides none of the former and plenty of the latter, and Rube Daniels didn't want to live anywhere else.

Rube Daniels may have been more familiar with the Organ Pipe Cactus region than anybody else of his era. He lived, ranched and prospected all over the area. When the Carnegie Expedition explored the Sonoran Desert/Pinacate in 1908, Rube was one of their guides. He was a deputy sheriff in Ajo and good friends with border lawman Jeff Milton, accompanying Milton on many of his exploits. He, with Ajo rancher Tom Childs, prospected throughout the region.

Rube lived for a while at Quitobaquito and married Juan Jose Orosco's daughter Viviana with whom he had six children. He ran cattle at Bates Well before Bates Well

was a real ranch, and he bought and sold the ranch twice.

Rube also mined. He was one of the persistent original backers of the Ajo copper mines along with Tom Childs, Sam Clark and M.G. Levy. In 1911, Colonel Greenway's Chief Geologist, Ira B. Joralemon, wrote, "Tom Childs and Rube Daniels ran a few bony cattle among the mesquites that lined the desert washes, while they did their assessment work on the copper claims they hoped might someday be worth something.

In spite of their tattered clothes and unrelenting poverty,



Rube Daniels

Tom and Rube were real men. Their eyes were clear and steady from looking a hundred miles off across the desert and there wasn't an ounce of crookedness in their make-up. There weren't any truer friends or more dangerous, straight shooting enemies on the border, men who would look you in the eye and tell you what was right.

The first well to bear the name Bates was dug by George C. Bates around 1886. The first time the Bates ranch site came into Rube's possession was in 1913, possibly having been given to him by W. B. Bates, the original occupant. As soon as Rube took possession of the well, it collapsed.

A dependable water supply is of major importance in raising cattle. Rube intended to raise cattle. He dug a new well right next to the old one, but the new one collapsed also. Undaunted, Rube built corrals and ranch structures, and in 1915 dug yet another well. This well was a few hundred yards south of the first two, at the mouth of Growler Wash, and it held up for quite a few years—maybe because it was called Daniels Well instead of Bates Well.

Rube, like many early settlers, dug his wells in washes, by hand, on the premise that rain water flowing through the wash would sink in the sand, and if he dug deep enough he would find it. Most of his wells were 20-25 feet deep,
See Bates Well - page 7 top

Bates Well... continued from Page 6

and might yield a couple of feet of water in the bottom. These hand-dug wells generally were not year-round sources of water. Water could be found in them after the rainy seasons, but it dried up in the summer heat or during a prolonged period of drought. Places where reliable water sources could be tapped in the Valley of the Ajo were few and far between.

Feed was scarce in the mountains, limiting the number of cattle that could be pastured there. Rube ran between 1000 and 2000 cattle, and worked hard to do so.

In 1917 Rube sold the rights to Bates Well and the ranch to brothers John and Samuel McDaniel for \$17,000, but he and his family continued to live on the site and run cattle there. By 1920, Rube was ranging over 2,000 head of cattle on Bates Well Ranch.

In 1919, Colonel John Greenway, the manager of Ajo's New Cornelia Copper Mine, sought to purchase rights of way for a railroad line that would have connected Ajo with Puerto Peñasco (Rocky Point), Mexico. The railroad would have gone through Growler Pass, very close to Bates Well, and would have provided a site close to the ranch for loading cattle, eliminating the need to drive them 40 miles across the dry desert to a shipping point.

However, one thing after another delayed the railroad construction. The McDaniel Brothers couldn't wait it out and sold all their cattle. So in 1922, for \$1500, Rube resumed ownership. The railroad was never built.

In 1924 Rube suffered a serious stroke, causing loss of speech, so he sold the Bates Well Ranch Back to the McDaniel Brothers. In 1926 at the age of 48, Rube died, having outlived his wife and four of his six children. Ownership of the Bates

Well Ranch was eventually taken over solely by John McDaniel, who, in 1935, sold out to Henry D. Gray



After Henry D. Gray bought the ranch, it continued as a working ranch until 1976. This is how it looked in its later days.

Henry D. Gray: The Last Rancher at Bates Well



Henry D. Gray

"I might as well," grumbled Henry Gray to the scenery, as he was riding from the Alamo to Bates Well across the hot, dry, cactus-populated Valley of the Ajo for the umpteenth time, "buy this ranch and not have to ride over here every other day to chase these miserable cows back home again!"

He was complaining about having to ride 15 miles from the Gray Ranch site in Alamo Canyon to the Bates Well Ranch three or four times a week to herd his cattle back onto his own ranch. So, Henry D. Gray bought it and all water rights from John T. McDaniel in 1935 for \$2500.

But amenities were scarce when Henry moved in. There was a little house, a couple of brush structures (jacals), two hand dug wells, a windmill, tank and watering troughs. Henry went up to the abandoned village at the Growler mine and dragged down a two-room house. He also took lumber and tin to build a hay barn, bunkhouse and tack shed. Outbuildings and corral fences were constructed of natural materials. The corrals were built of mesquite, using "sandwich" (retaque) construction method: a double line of posts were set in the ground about a foot apart astride the proposed fence line. Smaller poles, mostly of mesquite, were then laid lengthwise on top of each other in between the posts to make a woven wall, or fence. Temporary outbuildings were walled with saguaro ribs or ocotillo stems and roofed with those, or with corrugated tin salvaged from the mine.

The original Bates Well and the first well that Daniels dug, right beside the old Bates, had collapsed. Then Daniels dug what is called Daniels Well...almost in the mouth of Growler Wash, a quarter of a mile or so from the original well. The well referred to as Daniels Well was in use at Bates Well Ranch when Henry took possession in 1935. When Henry bought the ranch, he used water from the Daniels Well. "Bought the ranch" is a misrepresentation of fact here - Henry paid Johnny McDaniel for the buildings and stock, but the land was state land, so neither party had title, and no deed was ever owned by Henry - nor, presumably, Bates, Daniels, the McDaniel Brothers or Behan.

In 1942, Henry brought in the house and located it near site of the original Bates Well. Daniels Well supplied a reliable flow of water for his cattle until a 1951 Growler Wash flood washed it out. In 1953, Henry dug (drilled) a replacement for Daniels Well, but he located it in his front yard, not a quarter mile away in the wash. This well provided enough water for the ranch and its cattle, and Henry settled in. His death in 1976 brought an end to ranching on Organ Pipe Cactus National Monument.

Abraham Armenta: The Lone Farmer



Some of the original buildings are still on the Armenta farm and ranch site.

Only two early ranching-era settlers in the area that would become Organ Pipe Cactus National Monument protected their labor-intensive investments by homesteading their properties. One was Bobby Gray, youngest member of the ranching Gray Family, the other was Abraham Armenta.

As a pioneer, Abraham Armenta was a late-comer—settling in the Valley of the Ajo in the late 1920's. As an entrepreneur, he was a first and only. All the other intrepid Sonoran Desert dwellers in the Organ Pipe area were either

ranchers or miners; Abe Armenta was a farmer. The older brother of the large Armenta family whose father worked for the Phelps-Dodge mine in Ajo, Abraham moved his wife and children to this arid site and built an adobe and brick, tin-roofed, two-room house and some ocotillo and saguaro rib outbuildings, including a chicken coop. He dug a shallow well a few hundred yards west of the house and constructed a "charco"—a shallow tank for water confinement.

Armenta laid out his fields near his water source and planted squash, watermelon, and corn (50¢ a dozen) which he sold to the grocers and restaurants in Ajo. The crops were meager, but provided enough for family use and



Charco (water tank) constructed by Abe Armenta. It is now dry, but still visible at the site.

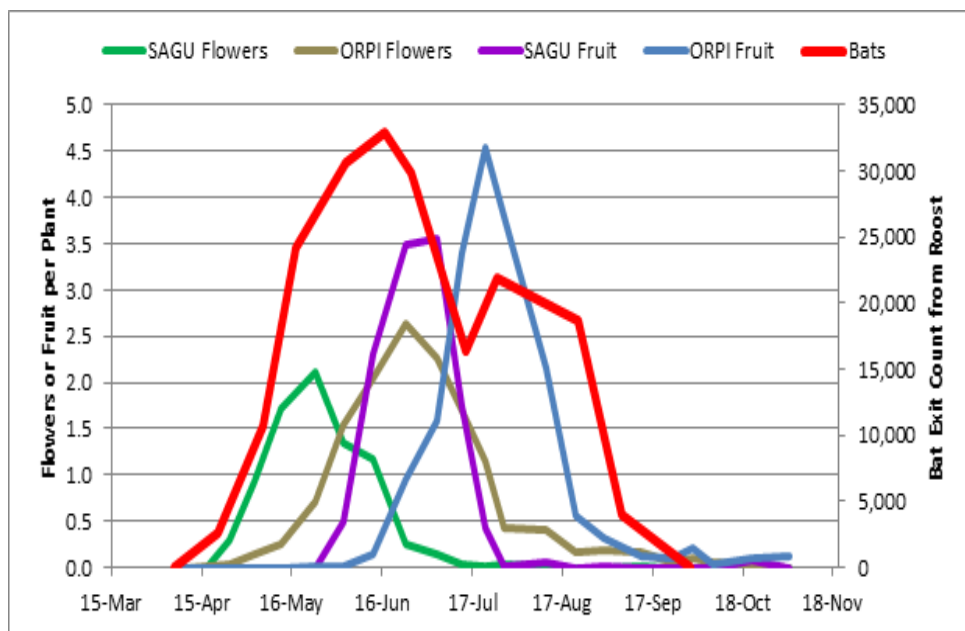
brought in some ready cash from sales. Using his house, outbuildings and produce as evidence of improvements, Abe submitted his application for a homestead claim on his land on July 21, 1934, and four years later, March 21 1938, he was issued his patent for 320 acres. In an effort to increase production, Armenta dug a second well in 1935; at 229 feet he struck water. Alas, still not reliable enough to consistently meet his needs...by 1943 both wells were dry, and Armenta gave up the farming effort and moved on, leaving behind only some dilapidated buildings to show where a man had strived to conquer the desert and make it provide his family with the necessities of life.



Armenta ranch house, partially restored, as it looks today.

Research Today

Bats, Cactus, Flowers and Fruit



Organ pipe and saguaro cacti grow together throughout the bajadas and rocky slopes of the monument, providing important resources for wildlife and humans. Biologists are interested in knowing how the ecology of these iconic species changes over time. To help answer this question, we established a phenology (time line) plot near headquarters in 2009 and another near Alamo campground in 2010 to monitor seasonal changes in flower and fruit productivity. Observations were made approximately every 10 days on nearly 150 plants in the two sites.

The endangered lesser long-nosed bat is a migratory species that has a large maternity colony in the monument in warmer months. These bats leave the maternity roost at night to forage on nectar, pollen, and fruit of organ pipe, saguaro and other columnar cacti. Since 1989, biologists have monitored exit counts of the bats every two weeks or so during summer.

Data from cacti and bats provide a unique opportunity to compare the timing and amount of food productivity with activity patterns of the bats. The graphic above shows average number of cactus flowers or fruit per plant (left axis) and number of bats counted exiting the maternity roost (right axis) over time for both saguaro and organ pipe cactus. Peak productivity differs for the two cactus species, with saguaro preceding organ pipe. The pattern for bats is two phased where the first peak coincides with saguaro flowers, organ pipe flowers, and saguaro fruit and the second peak coincides mainly with organ pipe fruit. The second peak may be caused by the inclusion of young bats after many adults migrated to other areas.

More Study is needed to determine what, if any relationship between the bat's activity increase and organ pipe fruit ripening exists.



Lesser long-nosed bat feeding on cactus flower

Sonoran Pronghorn



The Sonoran Pronghorn Recovery Team, including Organ Pipe Cactus National Monument, is reintroducing the endangered Sonoran pronghorn back into its historic habitat. Down to about two dozen animals in the wild in 2002, the wild herd has been bolstered through captive breeding since 2006.

In 2011-2012, 11 captive-bred pronghorn were reintroduced into the monument. Another 13 were translocated to Kofa National Wildlife Refuge, to begin a second captive breeding program to repopulate western Arizona. The total wild population in the US is now about 110.

The released pronghorn have ear tags and radio collars so biologists can monitor their movements, habitation, health and mortality. It is hoped that over time, areas now unpopulated will support sustainable new wild populations.

The fastest land animals in North America, pronghorn can sprint at up to 60 miles an hour and can run at 40 miles an hour for miles. Adult males weigh 100 - 130 pounds and females about 75 - 100 pounds.

Pronghorn does usually bear one or two fawns from mid-March to mid-July. The two to four pound fawns are up and running in about one hour, and will be weaned in four months. Does usually begin to breed at age 18 months, and continue for life, which can be up to nine years in the wild and 15 years in captivity.

Project cooperators with NPS include Arizona Game and Fish Department, U.S. Fish and Wildlife Service, Cabeza Prieta National Wildlife Refuge, U.S. Air Force Barry M. Goldwater Range, U.S. Bureau of Land Management, Reserva de la Biosfera El Pinacate y Gran Desierto de Altar in Mexico, Phoenix Zoo, US Marine Corps, US Border Patrol, and others.

Sonoran pronghorn are very shy, and at times live on the edge of having enough food and water. Causing them to run or relocate can worsen the effects of these stresses. Observing pronghorn and all wildlife from a distance will ensure their safety and yours.



Sonoran pronghorn.

When photographing any wildlife, it is best to use a longer telephoto lens to lessen the chances of injury to you or the animal being photographed. Approaching too closely can startle wildlife and cause unintended reactions from animals and people. Use of a telephoto lens allows photography from a safe distance.

Summer Wings Over the Sonoran Desert

In the dusky twilight hours, thousands of furry, winged creatures take to the skies. Flapping over the Sonoran Desert, faces yellow with pollen, these bats are the few remaining individuals of the endangered lesser long-nosed bat. In decline because of habitat disturbance and an overharvested food source (agave), the lesser long-nosed bat finds seasonal sanctuary as a summer visitor to Organ Pipe Cactus National Monument.

From their winter grounds in central Mexico, pregnant females leave the males to fly north. Driven by hunger, they follow a trail of night blooming cacti to Organ Pipe Cactus by early summer. Their arrival is just in time for



Lesser long-nosed bat and saguaro flower

the blooming of the saguaro and organ pipe cacti.

Saguaro and organ pipe flowers burst into bloom in the shadow of the night, opening their musky perfumed white petals to the stars. Lesser long-nosed bats find the sweet scent irresistible. Hovering like a hummingbird, a bat pokes its nose deep into a tubular flower and uses its long, brush-tipped tongue to lick up the syrupy nectar inside. As a bat slurps dinner, its furry face becomes coated in powdery pollen. As the bats feast from flower to flower, they also act as primary pollinators for the local cacti.

During the summer, the female bat gives birth to a baby bat pup. The young bats roost in communal colonies in caves or old mine shafts, relying on their mothers to nurse and care for them.

As summer days pass, cactus flowers wilt and fade, eventually to be replaced by fruit. Bats feast on the fruits with relish, devouring the juicy pulp and ingesting tiny cactus seeds. As the bats fly across the desert, they disperse seeds to new locations, sowing the beginnings of a new generation of cactus.

Lesser long-nosed bats stay in the monument until the supply of cactus

fruit is gone. As summer ends, females and young begin the long journey south into Mexico. These endangered creatures of the night are intertwined with the health and ecology of the Sonoran Desert.

Why are Lesser Long-nosed Bats Endangered?

With a range spanning two countries and a variety of habitats, the future of lesser long-nosed bats is threatened. One challenge is human disturbance. When people enter bat roosting caves or mines, bats can be frightened away from their home and young.

Another serious problem is the overharvest of agave (century plants) in Mexico. Agave plants are harvested for the production of tequila, but agave flowers are a major winter food source for lesser long-nosed bats. Bats serve an important role in the survival of agave by pollinating the flowers. Ironically as the agave is overharvested and bat numbers decrease, fewer agave are pollinated and thus fewer plants grow. A delicate balance of the natural world, bats and agave rely on each other for survival. Today Lesser long-nosed bats are an endangered species with an unknown future.

Weather



Desert Rainbow

One thing weather is certain to do is change. In this respect, it is no different at Organ Pipe Cactus National Monument than anywhere else. In spring it seems that things most often turn from good to better and then return to good.

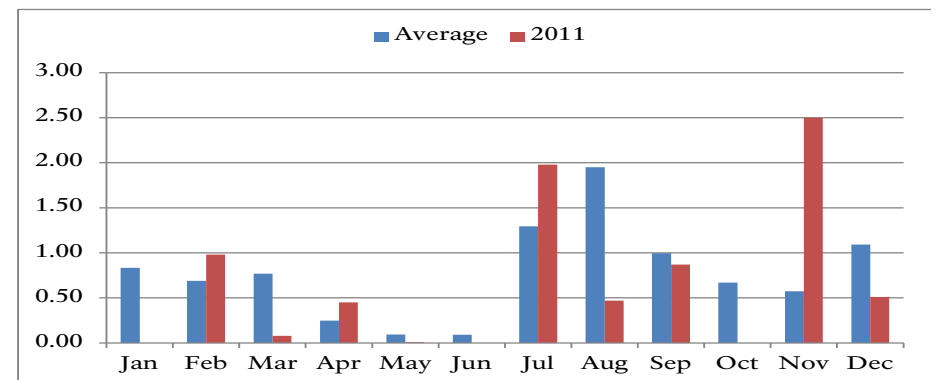
A few soft rains will cause wildflowers to spring from the desert in profusion. The "Blooming Seasons" chart on page 11 gives a good indication of when to come for the best chance of catching the show. For poppies and lupine that would most likely be from early February to mid-April. Winter at Organ Pipe is the gentle time.

Hot days are in store from June through September. Summer monsoons can bring quick, heavy showers and flash floods in the washes. It is dangerous to try to cross a wash when it is flooded, even in a large vehicle, so caution is in order. The muddy-looking water is actually a heavy mix of sand, rocks and woody debris from upstream. It can pack a wallop. Occasionally

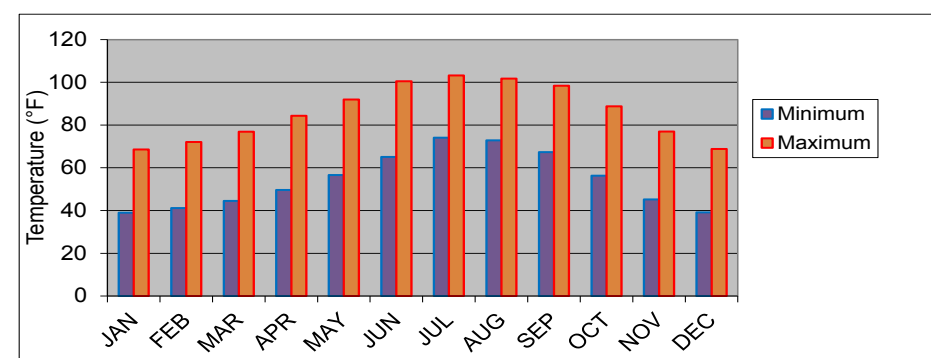
lightning comes with the storms.

Summer is the best time to get a glimpse of Gila monsters and desert tortoises. They often emerge from dens around dawn and dusk.

The charts to the right may help in planning your visit for weather that suits you. The upper chart shows rainfall by month. The blue bars indicate averages from more than 50 years of records. The red bars are for 2011. The lower chart shows average temperatures by month, with violet indicating the lows and orange the highs.



Monthly rainfall in inches (Above)



Average temperatures by month

Ocotillo: It's Not a Cactus?

Looking very much like an overgrown, upside-down spider waving its arms in the air an ocotillo may appear to be dead one day and spring to life with bright green leaves in a matter of a few days after a rain. It has long sharp thorns which may lead some to think it must be a cactus. In reality, it is a shrub common to the Chihuahuan, Sonoran and lower Mojave deserts of the U.S. and Mexico.

Ocotillo seems to defy our common idea of "shrub." From a distance the plant looks dead. A closer look may reveal bits of green in a very woody, rough-textured bark. That indicates the plant is alive. Look even more closely and you will see the small circles on top of the base of the thorns and the place where leaves form. Most of the time the shrub is leafless and dormant, just waiting for rain.

When rain comes, as either gentle, soaking rain of winter or pounding thunderstorms in summer, it will trigger an amazing transformation. Within 48 hours, the stems turn greener, and new leaf buds appear. A few days later, the ocotillo will be hiding those nasty thorns under a luxurious coat of green leaves.

If you are fortunate and visit Organ Pipe Cactus National Monument from late February through early April, you may see clusters of flaming red flowers atop those wavy stems.

These flowers are magnets for migrating and resident hummingbirds, orioles, pollinating insects and other nectar-lovers.

Once the ocotillo finishes blooming, the soil dries and the plant uses its last spurt of rain-induced energy, the leaves turn yellow to red, a hint of Autumn in the wrong season.

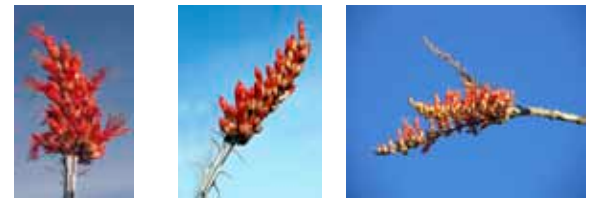
This is the sign that ocotillo is ready to rest. This upside-down spider of a shrub is returning to its drab, dead-looking dormant stage until the next rain.



Ocotillo in full leaf



Dormant ocotillo



Ocotillo flowers and buds

Birds, Birds, Birds:

A Who's Who in Organ Pipe Cactus

Organ Pipe Cactus National Monument hosts over 270 bird species, from year-round regulars to neo-tropical migrants. With an incredible range of topography and habitat, the monument provides home and sustenance to a diverse variety of birds. Many birds in Organ Pipe Cactus are seasonal visitors, stopping over during the cool winter months to forage and continue south.

Pictured here are some of the most commonly seen permanent residents in the monument. How do they survive the extreme, hot summers? Some birds combat the heat by slimming their feathers close to their bodies to minimize the insulating feather warmth. Others reserve their activity to the cool early mornings, or hide in the shade of a bush or rock during the heat of the day. Birds also maintain a normally high core body temperature and expel heat through scaly legs. These qualities allow birds to endure hot desert summers.

The best places for bird watching are along the Alamo Canyon Trail and behind the Kris Eggle Visitor Center.



Curve-billed thrasher



Northern cardinal



Costa's hummingbird



Gambel's quail



Cactus wren



Gila woodpecker

Flower Guide

When Does the Sonoran Desert Bloom?

If you are lucky, you may see the desert carpeted in flowers. After heavy winter rains, plants burst into bloom, some flowering only days after receiving water. Other plants wait patiently for the summer rains to come.

Sonoran Desert wildflowers grow quickly and in large numbers after it rains. Once the soil dries, plants die back. Desert wildflowers are not only beautiful, but they are essential to the survival of many desert creatures.



Buckhorn cholla



Pincushion cactus



Teddy bear cholla



Mexican gold poppy



Mojave lupine



Fairy duster



Desert marigold

Blooming Seasons	Winter Rain			Summer Rain			Winter Rain					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cacti												
Organ Pipe												
Saguaro												
Cholla												
Prickly Pear												
Other Perennials												
Palo Verde												
Ironwood												
Fairy Duster												
Brittlebush												
Ocotillo												
Annuals												
Globemallow												
Mex. Gold Poppy												
Lupine												
Desert Marigold												
Chuparosa												

NOTE: The blooming times of all annuals and many perennials depend upon the amount of rain and the time of year when the rain falls. The chart is only an average.



Spring wildflower display

How do you say that?

Ajo: AH-ho. Spanish for garlic; also a Tohono O’odham word for a copper-colored pigment.

Bajada: ba-HAH-dah. The rocky slopes of a mountain range. Many diverse species take advantage of the bajadas’ well drained, gravelly soil. They are good places to look for wildlife.

Cholla: CHOY-yuh. A group of cacti known for painful spines and easily detachable, jointed branches. Also called “jumping cactus.”

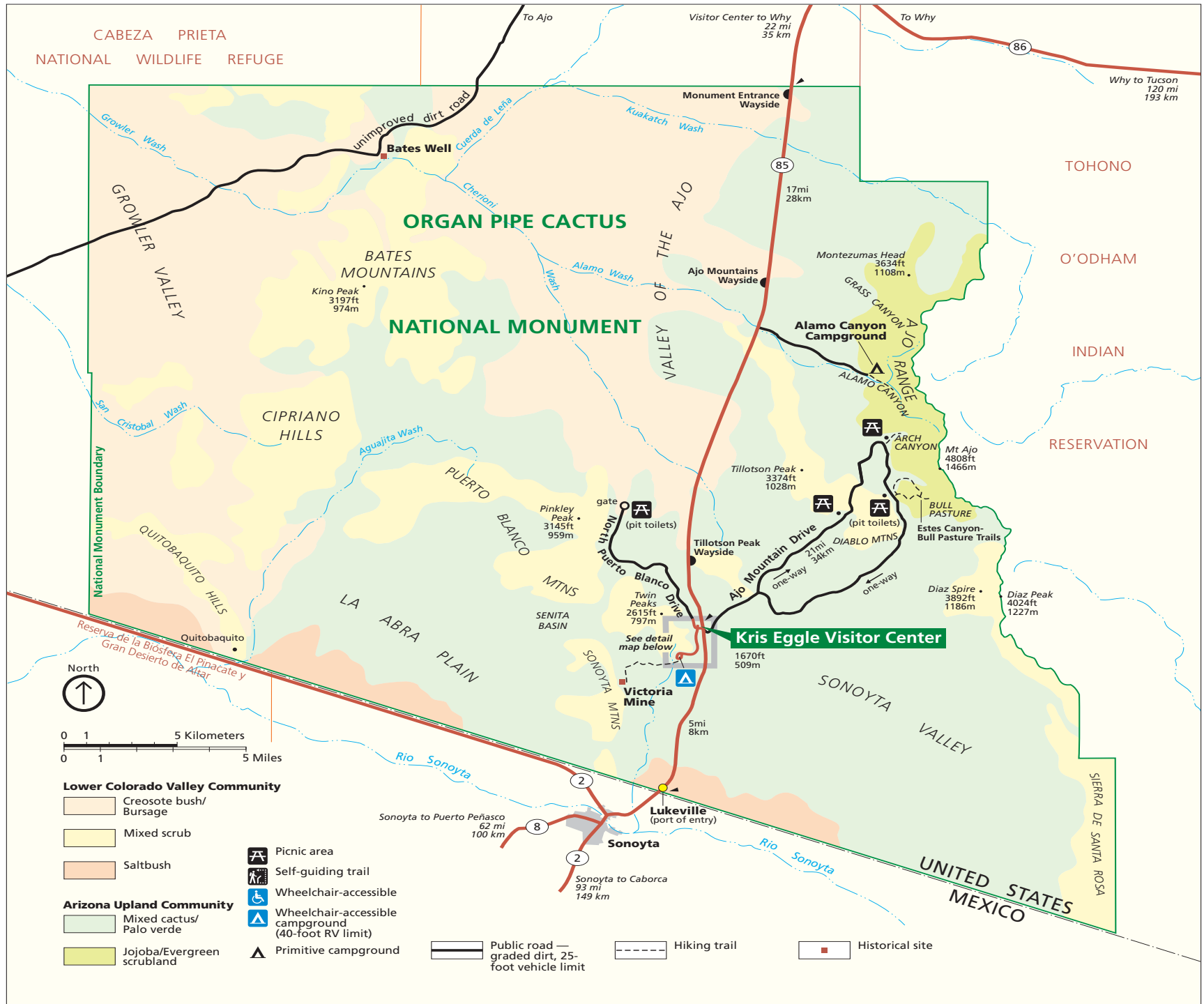
Gila: HEE-lah. As in Gila monster, Gila woodpecker and Gila River.

Ocotillo: OH-koh-TEE-yo. A very thorny plant, often mistaken for a cactus. The ocotillo has the ability to sprout leaves within 48 hours of rain.

Saguaro: sa-WA-roh. Arizona’s tallest cactus (growing to over 70 feet - usually 45 to 50 feet) and a major indicator species for the health of the Sonoran Desert.



Hedgehog cactus



Visitor Center

The Kris Eggle Visitor Center is open 8 am- 5 pm January - March. Please check times for the remainder of the year. Stop by for an informative slide presentation, a 1/10 mile stroll on the handicapped-accessible nature trail, nature and museum exhibit room, bookstore, and answers from a park ranger or volunteer at the information counter.

Ranger led talks, walks and guided tours are offered from January through March.

Mailing Address

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Visitor Center and Campground Area

