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.

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Superintendent’s Welcome

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
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.

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 "cristates."

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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Organ Pipe Cactus National Monument
10 Organ Pipe Drive
Ajo, AZ 85321-9626

Phone
520-387-6849

E-mail
orpi_information@nps.gov

Web site
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.

Information and Services

Emergencies
For 24-hour emergency response, call 911 or 623-580-5515. The closest medical clinic is the Desert Sentia 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/.
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.

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 bufflegrass, 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.
Planning Your Visit

What can I do in this Sonoran Desert Wonderland?

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.

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.

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

International Sonoran Desert Alliance
Art Gallery
401 W. Esperanza
Ajo, AZ 85321
(502)387-6858

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

<table>
<thead>
<tr>
<th>Trail</th>
<th>Distance/Time (round-trip)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor Center Nature Trail</td>
<td>0.10 miles 5-10 minutes</td>
<td>Easy brick path from Visitor Center with exhibits. Accessible to scooters and wheelchairs.</td>
</tr>
<tr>
<td>Campground Perimeter</td>
<td>1 mile 20-30 minutes</td>
<td>Easy loop around Twin Peaks Campground. Pets allowed.</td>
</tr>
<tr>
<td>Palo Verde</td>
<td>2.6 miles 1.5-2 hours</td>
<td>Easy trail between Twin Peaks Campground and Visitor Center with views of the Ajo Range. Pets allowed.</td>
</tr>
<tr>
<td>Alamo Canyon</td>
<td>2 miles 1.5 hours</td>
<td>Easy trail to historic ranching site. Recommended for birding. Footing can be rough.</td>
</tr>
<tr>
<td>Desert View</td>
<td>1.2 miles 45-60 minutes</td>
<td>Easy loop trail to beautiful vistas. Ideal for sunrise and sunset. Benches provided.</td>
</tr>
<tr>
<td>Victoria Mine</td>
<td>4.5 miles 2 hours</td>
<td>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.</td>
</tr>
<tr>
<td>Arch Canyon</td>
<td>2 miles 1 hour</td>
<td>Easy-moderate trail that steadily climbs into canyon. Good views of arch and oak-juniper environment.</td>
</tr>
<tr>
<td>Estes Canyon-Bull Pasture</td>
<td>4.1 miles 2-3 hours</td>
<td>Difficult loop trail with steep grade and exposed cliffs. Spectacular views of monument and Mexico. Estes Canyon is great for birding.</td>
</tr>
</tbody>
</table>

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 spiky, 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.
presented too great a challenge. Historically, inhabitants
by the soft peaceful soughing of the canyon wind through
privilege of living under the cloudless blue desert sky by day
jugs, cook over a camp stove and use a pit toilet just for the
adventurers gladly sleep on the ground with only a thin tent
required a special type of individual. An individual with
inhospitable and unforgiving land. One who doesn't
ite of ease or convenience. One who can adapt to
way the unrelenting poverty, in spite of their tattered clothes and unrelenting poverty,
the early inhabitants met—stifling heat, no water, and few
water supply is of major importance in
Changes in the environment of the Sonoran Desert.
Water, which is of major importance in the Sonoran Desert.
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.

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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 for $2,500.

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

"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 corrals 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.

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 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.
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.
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 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

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.
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 dour, dead-looking dormant stage until the next rain.

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.
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.

### Blooming Seasons

<table>
<thead>
<tr>
<th>Cacti</th>
<th>Winter Rain</th>
<th>Summer Rain</th>
<th>Winter Rain</th>
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<tbody>
<tr>
<td>Organ Pipe</td>
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<td>Saguaro</td>
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<td>Cholla</td>
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<td>Prickly Pear</td>
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**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.

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**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, gravely 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.
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.

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