

# Organ Pipe Cactus

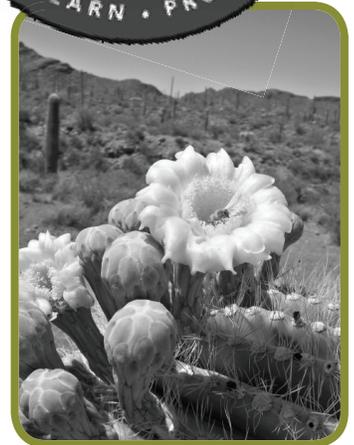
National Park Service  
U.S. Department of the Interior



Organ Pipe Cactus National Monument

## Desert Ranger Guide

(For the Not-so-junior Ranger)



# What is a Desert Ranger?

The Desert Ranger Guide is for the young at heart. A Desert Ranger helps promote the National Park Service's sites, keeps them clean, learns ways to be conservation wise and models appropriate behavior to Junior Rangers and other people of all ages. They also notify Park Rangers of potential safety hazards.

## Becoming a Desert Ranger

*Follow the instructions below to make new discoveries to become a Desert Ranger!*

- *Read pages 2, 3 and 4.*
- *Do any 5 activities in the guide.*
- *When you finish, give your guide to one of the rangers in the Kris Eggle Visitor Center and take the Desert Ranger Pledge. They will give you the Desert Ranger patch and certificate that you've earned.*



## Parks and Monuments; There's a (Slight) Difference...

The major difference between a National Park and a National Monument is the manner in which they are created. A National Park is established through an Act of Congress, and the land so designated may originate from a variety of ownerships. A National Monument is established via Presidential Proclamation. This land is to be taken from existing public (federal) ownership.

# Discover Organ Pipe Cactus National Monument

At first glance Organ Pipe Cactus National Monument, in the heart of the Sonoran Desert, may appear to be empty terrain. But with a little patience you will discover that its washes and mountains are teeming with wildlife and unusual plants. The scenery is cast in varying shades of green. High in the mountains large mesquite and cedar trees grow in sheltered areas. Lower on the slopes and in the basins saguaro cactus thrive alongside organ pipe, prickly pear and cholla cacti.

Set aside in 1937 to protect the northernmost habitat of the organ pipe cactus, the monument also protects habitat for the endangered Sonoran pronghorn, lesser long nosed bat and Sonoran Desert pupfish. More common species include Sonoran Desert tortoise, collared peccary (javelina), kit fox, deer, bobcat and cougar.

A healthy population of reptiles like rattlesnakes, Gila monsters and lizards may be found among the rocks and shrubs. During spring and autumn migrations, a myriad of bird species passes through Organ Pipe Cactus, transforming the monument into a birder's paradise.

Rainfall, more than time of year, determines the seasons at Organ Pipe Cactus and makes the Sonoran Desert one of the greenest and most diverse deserts in the world. The Sonoran Desert has five seasons instead of four - summer drought, summer monsoon, fall, winter, and spring. Two rainy seasons - summer monsoon and winter - help many plants survive.

With over 90% of its area designated as wilderness, the monument offers many opportunities to observe nature in an unfettered state. From the high points classic "basin and range" geology is easily seen.

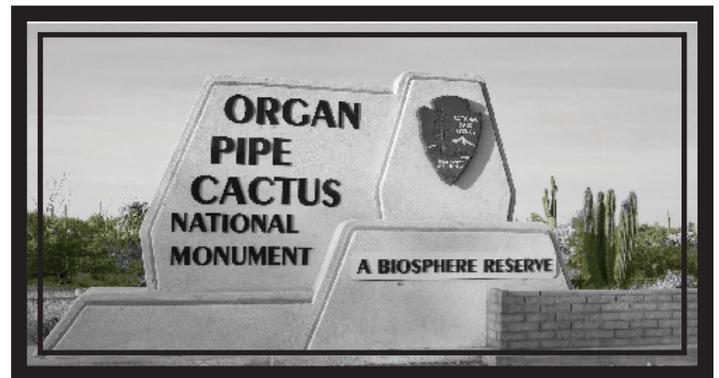
As an International Biosphere Reserve, Organ Pipe Cactus National Monument along with the related reserves of Pinacate and Alta Golfo in Mexico, serves as a benchmark for monitoring and understanding change in the Sonoran Desert and showcases one of the world's most unique and recognizable landscapes.

A common saying about the Sonoran Desert is that patience is rewarded. The Tohono O'odham, Native Americans who have lived on this land for many centuries, are a very patient people. They have learned the ways of the desert and survive by living within its essence. Today the Tohono O'odham live in communities next to the monument and still return to participate in ancient ceremonies and to gather traditional foods.

Crystal clear night skies can be mesmerizing. So many stars are visible that it may be difficult to focus on any single one or even pick out a constellation. After a blazing orange sunset, they appear one by one, then suddenly seem to explode into view almost like magic. With nights like those at Organ Pipe Cactus, is it any wonder why many of our ancient myths were first imagined in the heavens?

When a breeze blows through an organ pipe cactus, the needles hum and the pitch changes in tune with the speed of the air. As the wind plays across the desert, an evening concert of quiet sounds evokes a peaceful symphony.

There is no better place on Earth than Organ Pipe Cactus National Monument to see and feel life at the edges and by doing so, perhaps learn a little more about ourselves.



# Safety First!

## Take 5 Hints From the Desert...

- 1. Saguaro cactus have shallow roots to drink as much rain water as possible. You don't have roots, so you need to drink more often, even when you're not thirsty! Carry plenty of drinking water on short and long hikes and on car rides. ( Drink a gallon of water per day when in the desert.)**
- 2. Creosote plants protect themselves with a wax-like coating on their green leaves. You need to apply your own coating: sun-screen and a hat!**
- 3. How would you like a nice plate of grass, leaves, cactus, grubs, beetles, and deer fur to eat? Animal food is not good for you, and people food is not good for them! Do not feed the animals.**
- 4. Animals use the trail too. Please watch your step! Look out for cactus too. Give them plenty of room because they "bite" more often than insects! If a cactus gets stuck on you, use tweezers or a comb to get it off.**
- 5. Quail stay in groups for protection. If you get lost from your group, stay in one spot and wait for help.**



# Bingo

Sometimes you have to scout around for signs of animal life in the desert. Sometimes you have to sit quietly and wait for an animal to come out of hiding. And sometimes you just have to look extra carefully to see something you may have missed.

As you travel through Organ Pipe Cactus National Monument keep an eye out for any of the items below. Make an X through any you see. Get 5 in a row up, down, across, or diagonally and you have BINGO!



# Myths Versus Truths

Fill in the blank with a "M" if you think it is a myth or a "T" if you think it is a truth.

1. It never rains in the desert. \_\_\_\_\_
2. You can drink out of a cactus. \_\_\_\_\_
3. The Sonoran Desert has five seasons. \_\_\_\_\_
4. You must tourniquet a venomous snake bite. \_\_\_\_\_
5. Flash floods can occur in the desert. \_\_\_\_\_
6. Organ Pipe Cactus National Monument hosts over 270 bird species. \_\_\_\_\_
7. Jumping cholla really do do jump! \_\_\_\_\_
8. If someone gets bit by a venomous snake you should try to suck out the venom. \_\_\_\_\_
9. When cornered, Gopher snakes sometimes imitate rattle snakes as their defense. \_\_\_\_\_
10. The exoskeleton of all scorpions glow green under UV light (blacklight). \_\_\_\_\_
11. Cactus spines are poisonous. \_\_\_\_\_
12. Organ Pipe cacti can live to be 150 years old. \_\_\_\_\_

## Secret Desert Ranger Message:

Unscramble the words to reveal the secret message. Write your answer on the lines.

*"keAT nitoghn tbu pticesur,*

\_\_\_\_\_

*vLeae gthinon tub ntstofipor,*

\_\_\_\_\_

*Klil hgnoint ubt meti."*

\_\_\_\_\_

# Tour the Museum

The Sonoran Desert has been home to people throughout time. The Tohono O'odham or \_\_\_\_\_ traditional calendar follows the cycle of plant, animals and rain. The five seasons are: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

The \_\_\_\_\_ trees are an important resource for the O'odham. The wood and fiber are used to make \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_. The beans are an important food source containing more protein than soybeans.

The harvesting of the \_\_\_\_\_ fruit marks the beginning of the New Year for the O'odham. The fruit is called \_\_\_\_\_ into syrup, jam, jelly and wine.

The \_\_\_\_\_ beans are among the most heat and drought resistant crops in the world. They are an excellent source of \_\_\_\_\_ and complex carbohydrates.

The development of \_\_\_\_\_ in the area resulted in the local ranching industry.

The \_\_\_\_\_ plant is used to build houses and fences. Cut, buried stems often root, creating a living fence.

Water holes carved into the bedrock by runoff from powerful summer storms are called \_\_\_\_\_, the Spanish word for "earthen jar or bucket."

\_\_\_\_\_ is the most drought tolerant plant in North America.

The Sonoran Desert is one of the greenest and most diverse deserts in the world. Rainfall occurs in \_\_\_\_\_ and \_\_\_\_\_ seasons.

The Organ Pipe Cactus is limited in its range by \_\_\_\_\_.

# Find the Cristates

**with bonus arches and wannabees**



This may take a while, taking water and snacks on your drive is encouraged.

Cacti, like people are all different. No two are exactly alike. They sometimes have their oddities - some small and others more obvious. In humans physical oddities are often referred to as growth anomalies. In cacti, an interesting anomaly type is called a Cristate. That is because they often resemble the crests found in medieval times. Others are anomalous because of split arms or odd textures in the pleats

Saguaro and Organ Pipe cactus with anomalies or cristates are scattered across Organ Pipe Cactus National Monument for you to discover. The following list shows locations of a few anomalies that can be seen from the Ajo Mountain Drive (AMD). Some of the many arches in the Monument have been put in the list as well. Keep a sharp eye out since many of them are quite small and distant.

GPS coordinates are from the indicated observation point, but you do not need one to locate the sites. Stop numbers refer to the stops listed in the Ajo Mountain Drive Guide Book. Some of these are more easily seen with binoculars. How many can you find? Circle the numbers as you see them.

**It will be easier if you begin at Stop 1 on the Ajo Mountain Drive by setting your trip meter or making note of your odometer (mileage) reading.**

**1. Mile Point 1.4: AMD Stop # 2 :** A pullout for parking is on the right side of the road. If you begin at the sign, walk across the road and then 12 paces (24 steps) back in the direction you just drove in from, you will see an organ pipe cactus with a cristate about 20 feet off the road to your right.

**GPS: N 31° 58.0054 W 112° 46.6926**

**2. Mile Point 5.9: AMD Stop #7:** This pullout is on the left side of the road. Facing the sign and assuming that this is 12 on a clock face, if you look to your right at the 2 position, you will see a large saguaro wannabee cristate. It is near the area where the cliff and the slope merge.

**GPS: N 32° 0.6552 W 112° 43.8415**

**3. Bonus! Same Location- Arch 1 wannabee:** You may need binoculars for this one. While facing the sign, let your gaze follow the left edge of the mountain directly in front of you down from the top to where the light colored tuffa begins. If you study the small outcrop closely, a tiny hole through the rock will become visible. Arch or Wannabee???

**4. Mile Point 6.7: Arch 2 or Wannabee:** Pull safely off the road into a turnout to the left of the road. To your front left you will see a large boulder. If you stand near to and face the boulder, you will see a small arch up the hill just down from and left of the summit. **GPS: N32° 01.160 W 112° 43.706.**

**5. Mile Point 8.5: AMD Stop #9:** The turnout is on the left. 35 yards to the right is likely the largest organ pipe cactus in the park. It will be worth the effort to walk over and admire the elegance of this plant. If a breeze should come up, you might hear the music in its arms.

**GPS: N32° 02.0395 W 112° 43.3024**

**6. Mile Point 8.7: AMD Stop 10: Arches 3 and 4:** Turnout for parking is on the left side of the road. Look straight down the road and up to the top of the ridge on the right side of Arch Canyon. These are the two largest arches in the park. If you stop at the turnout just a little farther on, you will find an interpretive site telling the geologic story of the arches and the geology of the Monument. GPS N32°02.297 W112°43.200

**7. Mile Point 9.6: Arch 5:** By moving into the turnout in the curve, a good sized arch can be seen to the right and along the ridgeline where there is a small rocky outcrop. GPS: N32°0.1 W112°42.851

**8. Mile Point 10.4: AMD Stop 11:** There is a giant longhorn bull face on the face of the upper canyon wall to your left. . Can you see it?

**9. Mile point 11.1: Arches 6, 7, 8 and 9: For Determined Arch Hunters:** From the wide space near the curve in the road, four very small arches can be seen from this location along the top edge of the ridges. Two are on each side of the road. Binoculars will help greatly. Good luck with this challenge. GPS: N32°0.2815 W112°42.939.

**10. Mile Point 11.6:** No turnout is available here, so if you should stop, pull as close to the shoulder as possible so others may pass safely. This is an organ pipe cactus on the left 10 yards off the road behind a Palo Verde tree and a large saguaro. It has three well defined cristates and two others just beginning. GPS: N32°0.2815 W112°42.939.

**11. Mile Point 12.2: AMD Stop 13:** Binoculars will be handy for this saguaro cristate since it is so far off the road. After parking safely in AMD Stop 13's turnout, it is necessary to walk 120 feet back in the direction you just came from. A small cholla cactus sits just to the left of a dead palo verda on the right side of the road. By standing and looking across the cholla and just to the left of two large saguaro cacti you will see a saguaro cristate about 400 feet off the road. It is short, so you will need to keep your gaze about four feet above ground level. GPS: N32°58.371 W112°48.372.

**12. Mile Point 16.5:** The organ pipe cristate at this point is best seen from the bottom of the wash, but it is not safe to park here. If you want to stop, it is recommended that you drive up to the top of the wash so oncoming traffic from behind can see your vehicle, then walk back and observe/photograph the cristate from a safe location. It is 40 yards above the north (left) road shoulder as you reach the bottom of the wash on foot. Very large fan cristate. GPS: N31°57.6730 W112°45.4704

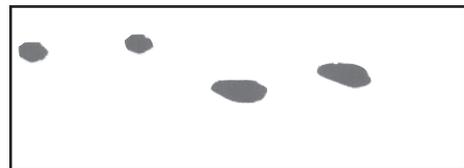
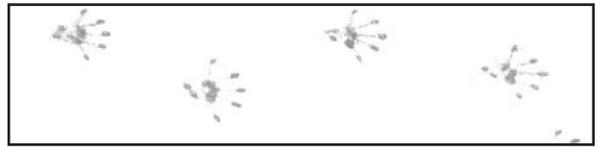
**13. Mile Point 16.9: AMD Stop 17:** About 40 yards off the road and slightly to the right of the turnout you will see a fairly large saguaro. If you look closely, you will see that this cactus is not a true cristate but is rather wavy in the pleats - an interesting and attractive anomaly. GPS: N31°57.6915 W112°45.6907



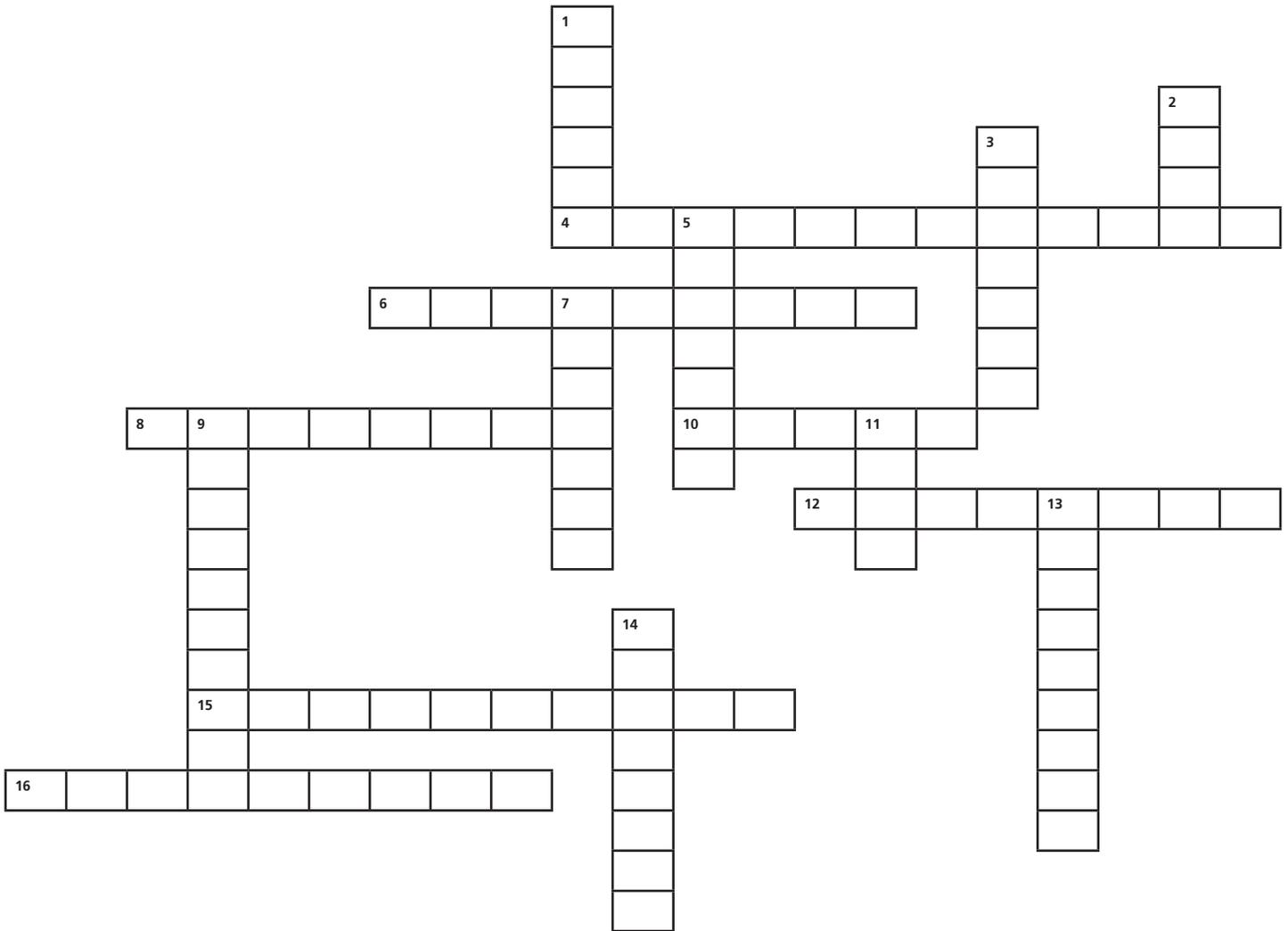
# "Tracks"

Many people on hikes want to see animals. Most animals are shy and do not want to be seen. People use animal tracks they see to try to find animals. Be careful though, some animals may be out hunting or be frightened by your presence if you surprise them.

Draw a line from the animal to the tracks it makes.



# "Don't Be Puzzled"



## DOWN

1. Organ Pipe Cactus NM is in the Sonoran \_\_\_\_
2. Large venomous lizard
3. The study of rocks
5. Their name has come to mean "The people who went away"
7. Only fish at Organ Pipe \_\_\_\_\_ Desert Pupfish
9. Bird that builds its nest in a cholla
11. Natural hole through a rock
13. Tree whose name means "green stick"
14. A \_\_\_\_\_ Rat may collect shiny things around your camp

## ACROSS

4. Native Americans at Organ Pipe Cactus
6. Organ Pipe Cactus is a National Monument and an International \_\_\_\_\_
8. It resembles a cactus but is not. It is tall and thin looks a like a clump of spindly, thorny stems.
10. A lichen is made up of a fungus and an \_\_\_\_\_
12. Watch out for the tail on this eight legged creature that lives under rocks.
15. This famous bird really does not go "Beep Beep"
16. The fastest land animal in North America.



# Pledge

*Organ Pipe Cactus National Monument's Desert Ranger Pledge:*

**As a Desert Ranger, I will help to preserve and protect Organ Pipe Cactus National Monument by sharing my knowledge of the park with others, demonstrating appropriate behavior to Junior Rangers and other people of all ages, and supporting conservation of the park's natural and cultural resources.**