

9. On “holey” ground

Do you notice any holes surrounded by a crater? You’ve probably found the home of harvester ants, one of our busiest underground residents. Ants march out on warm days to collect seeds from nearby wildflowers and bushes which they bring back to the nest and hull. Ants then discard the seed chaff outside their hole, building a crater. These ants act as gardeners, planting seeds across the desert.



An ant hill surrounded by seeds

11. Sure sign of water

Here is your first glimpse of the palm oasis, only 1/2 mile ahead. Where there are California fan palms, there is water. Many of these palm groves grow along earthquake faults, where geological forces have created conditions that allow water to seep toward the surface. The groves are planted with the help of coyotes. They eat seeds at one oasis and later, when they drink water elsewhere, often leave fertilized seeds behind.

12. Spine-tinglers

All around this area, we have two spiny desert plants: catclaw and honey mesquite. The most obvious difference between them is that catclaw spines are curved while mesquite spines are straight. Can you detect any other differences?



A wasp on a honey mesquite pod

13. Stone Steps

While most of the rocks you stepped over were placed there by water, these stones were likely placed by the Civilian Conservation Corps. During the 1930s, the CCC helped develop the park we enjoy today. You can still see several other stone structures they built in the area.

14. Almost there!

The oasis is just minutes ahead! Please remember, the future of the oasis and other wild places is in your hands. All desert life is precious and sometimes rare, so please respect the plants, birds, insects, mammals and other wildlife that live here.

15. Native Shade

The California fan palm (*Washingtonia filifera*) is the only palm tree native to California. Notice the skirt of palm fronds. The frond skirt protects the bark from heat and water loss. Unfortunately, many of these palms have lost their skirts! Fires and tree-trimming are a threat to these water-loving trees.

These palm skirts provide shade for the palm itself, but it also creates a sheltered habitat for birds, insects, bats and more! Many different types of animals feed, nest, and breed in the trees. Listen for chirping, squeaking or rustling in the palms.



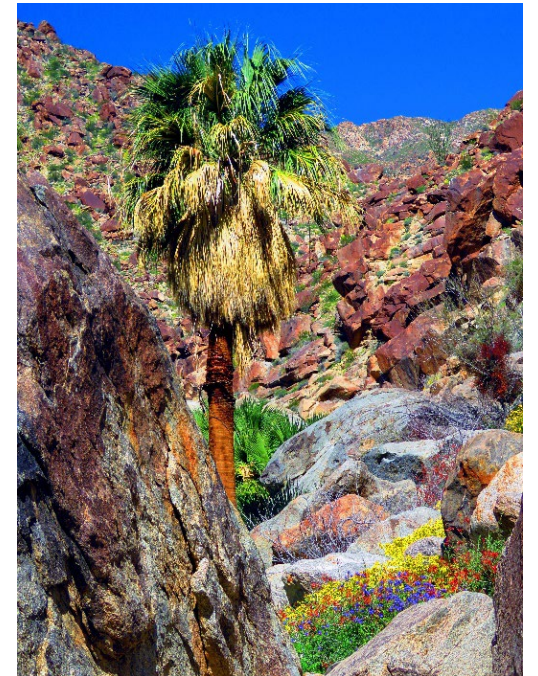
Native California Fan Palms with Skirts

This publication is available in alternate formats by contacting the Colorado Desert District at 760-767-4037.

Anza Borrego Desert State Park®



Borrego Palm Canyon



Welcome to the Borrego Palm Canyon Nature Trail at Anza-Borrego Desert State Park! This self-guided hike to the lush palm oasis deep in the canyon is 1 ½ miles from the trailhead and 3 miles roundtrip. Allow at least two hours to complete and bring plenty of water.

1. Don't touch!

Lack of water is not a problem for beavertail and cholla cacti. When it rains, the cacti absorb moisture and store it for later use. Beware the "polka dots" on the beavertail's pad. They contain dozens of tiny spines that are painful when touched.

2. Leaves or no leaves?

This tall spindly ocotillo's life revolves around rainstorms. When there is dry weather, the leaves turn autumn colors and fall to the ground. After a rainfall, leaves burst out within 24 hours and they fully grow in five days! The leaves use sunlight to make food for the ocotillo.



Ocotillo leaves after rain

3. Ready for a flash flood?

You're standing in a desert wash. Imagine a cloudburst on the mountain that floods water through this temporary stream bed. Clouds form over the Sea of Cortez, move north, and create monsoons here. Flash floods are common, especially in July and August. Remember to always stay inside when a flash flood occurs, as it can quickly become very dangerous in the desert!



Desert lavender against a rock

4. Follow your nose

Smell the leaves of this desert lavender bush. The plant's rich floral scent attracts hundreds of bees who pollinate its flowers during its bloom from October through May. Look carefully at the leaves. When the soil is moist, the plant grows large, thin leaves to maximize photosynthesis. When the soil is dry, the plant grows small, thick, hairy leaves to prevent moisture loss.

5. Rolling rocks

Mighty flash floods washed these rocks and boulders down from the mountain. Boulder displacement created splendid habitat for desert wildlife here. Pack rats build nests of twigs. Desert iguanas and side-blotched lizards do push-ups on the sunbaked stones' surface. Snakes and spiders find shelter in the winding crevices. Without these rocks, our desert ecosystem would look very different.



A spider's web in between rocks

6. It's alive!

Some rocks are painted with thin coats of bacteria! Bacteria absorb manganese and iron from the atmosphere which causes them to grow black or reddish. To prevent drying out, bacteria stick tiny particles of clay onto themselves which creates a brownish color. This desert varnish took about 10,000 years to form. These bacteria may represent some of the oldest living colonial life forms!

7. Blooming Beauty

You may see lush green desert willows around the area. These willows create a home for birds like California quail and Costa's hummingbirds. Not a true willow, this desert shrub thrives where its roots can reach water. Sometimes their roots extend sixty feet below the surface. In late spring or summer, look for delicate, two-lipped, pink or white flowers.

8. Home to Indigenous Peoples

Scramble around these boulders to find evidence of the day-to-day lives of the Cahuilla in the past. Morteros may be carved in rocks, created by Cahuilla to grind seeds and plants. Near the morteros, look for grinding slicks. Cahuilla chose Palm Canyon for a village site because of its flowing stream. Additionally, the canyon walls brought shade from the late afternoon sun, and shelter from winds. The Cahuilla still practice native management of palm groves and continue to live in Southern California.

10. The hills have eyes

You're probably being watched by the Peninsular bighorn sheep. Due to habitat loss, these grazers are listed as an endangered species. Extremely camouflaged, only the movement of white rumps gives them away.