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**California State Parks,  
Mojave Sector Office**  
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(661) 946-6092  
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**Location:** Lancaster Road, west of Lancaster; between 205th and 210th Street West. Park along Lancaster Road and walk in at the main gate.

**Park Hours:** Sunrise-Sunset

**Admission:** Free

**Please Observe the Following Rules:**

ALL features of the park are protected; collecting or damaging natural or cultural features is prohibited.

Dogs are not allowed on any California State Park trails, with the exception of Service dogs.

**For More Information:**

[www.parks.ca.gov](http://www.parks.ca.gov)  
[www.Facebook.com/  
RipleyDesertWoodland](http://www.Facebook.com/RipleyDesertWoodland)

# Arthur B. Ripley Desert Woodland State Park

## RARE JUNIPER TRAIL



### 1 Mile; Easy walk

Enjoy the park's self-guided nature trails and educational display, and relax in the shade of the picnic table ramada.



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This rare Joshua tree California Juniper habitat once covered much of the valley floor, but most was lost to the agricultural boom beginning in the late 1800's. Remaining stands are now threatened by solar energy.

This habitat is a haven for animals, and in favorable conditions, the Joshua trees bloom with a soft white pineapple shaped flower. In the spring you will find a variety of annual wildflowers alongside the trail.

The best part of this trail is experiencing the sights, smells and sounds of the Joshua tree/California juniper woodland, and the feeling that you are a long way from any human development.

Note as you move along the trail that there are both female junipers (with berries), and males (with tiny cones on the ends of the twigs). The smaller, younger junipers may have neither. How many wood rats nests can you find at the base of the junipers?

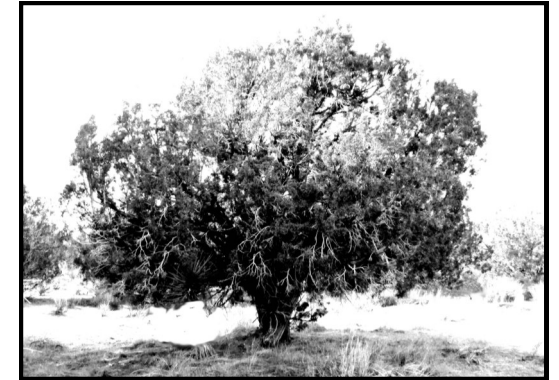
But take caution as you explore as one of my former students said, "When you get too close to a Joshua tree, you bleed!"

**Please proceed approximately one quarter mile down the Ripley Nature Trail to begin the Rare Juniper Trail.**

Text by Milt Stark

### 1. A Tall, Single Trunk

A seedling of a California juniper has a single trunk. Typically, the seedlings form a "burl" at the base from which multiple tree trunks then grow. Most of the junipers around you have 2-12 trunks.



In this unusual specimen, the burl did not form. Single-trunked junipers are very rare; we have found only seven in this woodland but none are as well developed as this one.

### 2. A Second Single-Trunked Juniper

This also appears to be a single-trunked juniper. No burl is found at the base. For unknown reasons, it is growing horizontally with the limbs at the far end.

A Desert Woodrat (Packrat) has used this tree's unusual form to create a grand entrance to its midden.



### 3. If Tree Stumps Could Talk

California juniper wood was historically used for firewood and fence posts by the valley's homesteaders. Junipers have a strong smell of cedar when cut, and the wood takes many years to decompose.



This and the next single-trunked stump must have been magnificent trees before all of the limbs were cut off, which likely killed the tree.

All cutting of junipers in this woodland occurred prior to the establishment of the park in 1988.

### 4. Count the Rings

Step around the side of this trunk to count the tree rings, with each ring typically representing one year of growth. This tree, when cut, was over 150 years old.



Juniper tree rings show more growth on the north side of vertical trunks, and on the undersides of horizontal-growing trunks. The cut area on this trunk reveals that it grew from the approximate center outwards.

### 5. Surviving after Cutbacks

When a trunk is cut, it will die back only to the burl. As this tree demonstrates, as long as at least one trunk is left, the burl survives and the trunk continues to grow.

*Fires are extremely damaging in the desert. Many California plant species resprout from their roots after a fire, but the Juniper and most other native desert species do not.*

*The land takes decades to recover, with "fire followers" such as bush poppy, golden ear drops or rabbit brush filling in.*

A juniper at the northwest end of the park was half damaged by fire in 2006. The dead trunks will remain there for many years while the survivors on the same burl continue to grow.

Burls produce new trunks up until the tree stops growing, possibly at between 75 and 130 years old.

### 6. Mysterious Wayward Plant Area

Some plants in this area are growing many miles from their normal range. These yuccas (*Yucca whipplei*) ordinarily grow in the foothills to the south. The cotton thorn, the flattop buckwheat, and the Anderson thorn typically grow near Littlerock and in areas of Quartz Hill that are now developed. Cheese bush is normally found north of Rosamond.

Why we find a concentration of these wayward shrubs in this specific location is a mystery.



### 7. Juniper with Male Cones and Female Berries

Many tree species, such as California juniper, have separate male and female forms. Pam

McKay, a Victor College professor, conducted a study which indicated that about 3% of California junipers change sex each year.

This juniper tree, and two others farther down the trail, appeared to have been changing sex at the time this trail was built, in that they had both male cones and female berries. Now they only have male cones.

*California junipers are extremely drought resistant. The long tap root collects moisture from deep in the ground, peripheral roots collect surface moisture, and the leaves are tightly bound in the twigs which reduces moisture loss.*

### 8. Recovering Farmed Area

The field of rabbit brush to the south of the trail is an area that was farmed up until 1972. The few small Joshua trees in this area were planted in an effort to restore the area back to its original condition.

Juniper seeds rarely germinate in open land, however germination may be instigated by passing through the digestive tract of native animals. The dozen or so junipers in the field were probably germinated from seeds from coyote droppings. Rodents may also carry the seeds. We have never observed a juniper seedling underneath a juniper.

The trail passes a colony of scarlet bugler wildflowers.

### 9. The Illusion of an Ordinary California Juniper

As we approach this tree, it appears much like the other junipers in this woodland. But as we step around to the west side of the tree, we are treated with the sight of a tree growing a surprising distance from its roots.

### 10. "Big Mama" Study Specimen

There are about nine trees in this area which prolifically produce berries, with this one producing the most. It is also nearly the largest in this woodland with 15 trunks, earning it the nickname "Big Mama." For unknown reasons, few female trees in this woodland produce many berries. However, from our observations there are few "seed" trees in other juniper woodlands as well.

In winter, male cones and female reactors form. Wind distributes the pollen, and the berries that form in March and April will stay on the tree until August or September of the *following* year. So, between March and August of any year there will be two berry crops on the trees simultaneously.

Local Indians harvested the berries in August and pounded them to remove the flesh. It was eaten raw, or they dried and ground it to use in their bread or mush.

*We hope you have enjoyed your walk through this Joshua tree/California juniper woodland. You may also enjoy the ¼ mile Ripley Nature Trail, and learning about the wildlife and wildflowers of the park.*

*Revisit Arthur B. Ripley Desert Woodland State Park any time of the year it is a new experience each season.*