WELCOME

to Arthur B. Ripley Desert Woodland State Park. On this 560-acre site, you will find a prime example of a virgin forest of Joshua trees and California junipers. Except for the non-native annual grasses that have replaced much of the native bunch grasses, this is how the western part of the Mojave Desert likely appeared to early explorers such as Pedro Fages (1772), Father Garces (1776), or John C. Fremont (1848) as they ventured through the area.

Joshua trees and California junipers are the dominate species of plants, with a large undergrowth of California buckwheat, golden bush, Mormon tea, blue sage, and beavertail cactus. In the spring following a wet winter, many species of annual wildflowers bloom throughout the park. This habitat is unique in that it is a transition area between desert and mountain climates, resulting in a mix of plants that are usually not found together.

The park is named for Arthur Ripley (1901-1988) who willed the property to the State. As a farmer, he cleared and farmed a large amount of acreage in the western part of the Antelope Valley, but he also was concerned enough about the Joshua/juniper woodlands to leave this area in a pristine state.

Follow the numbered trail posts to view these points of interest:

1. The light green, rounded shrubs near the junipers are the linear leaved goldenbush (*Ericameria linearifolia*) which are quite prominent on this side of the aqueduct. In the spring, they are covered with yellow, simple, daisy-like flowers.

2. As you walk through the park, look for the many animal trails, like the ones in front of you and off to



the right, which have been established for hundreds of years. The most common animal you might see on your walk is the black-tailed jack rabbit and sometimes a cottontail rabbit. Other creatures in the park are: woodrats, Antelope ground squirrel, coyotes, ravens, kangaroo rats, the meadow mouse, roadrunners, king snakes, rattlesnakes and mourning doves.



3. California junipers (*Juniperus californica*) with cones are male, whereas the ones which have berries are female.

However, these junipers have been observed to change sex! More information about the peculiarities of the park's junipers can be found by taking the "Rare Juniper Trail" and its brochure.

The bluish-green berries or cones will take a year and a half to mature, and is food for birds and rodents. Coyotes eat them, but they seem to pass through without being digested. As you look around, you will see very few small junipers. The seeds in the cones are very difficult to germinate.

4. To the right of the numbered post, the silver- leaved shrub is blue sage (*Salvia dorrii*). This plant is very fragrant, especially in the spring and during rain showers. The blue flowers grow on tall spikes during spring months. This



plant belongs to the mint family, which all have square stems. A close relative and also in the mint family is the annual chia, dead stalks of which may be seen in many places along the walk throughout the year. Look for 10- to 18-inch-high dead stalks which appear to have had two round pods, one of which the stalk grows through.

5. Note the small Joshua trees (*Yucca brevifolia*, var. *herbertii*) in front of you. These could have germinated from seed but probably are sprouts

from the underground rhizomes of a larger tree. In this manner, the mother tree clones itself. Although Joshua seeds germinate fairly easily, most of the seeds are eaten by birds and small animals and the larva of the pronuba moth which pollinates the blossom.

6. Note the crown sprouts growing from the base of the Joshua trees in front of you. Probably no other tree grows in such grotesque forms as does the Joshua, especially these found in this park. The herbertii variety grows mostly in deep sandy soil and rarely grows more than 14 feet high. Also note that as the leaves (the green spikes on the upper end of the limbs) die, they turn grey and fold down against the branch or trunk. As the tree ages, these dead leaves fall off leaving a bark-like covering. The age of these slow growing Joshuas is unknown. Some botanists believe that they may grow for about 200 years while others believe they live much longer than that. The trunk of the tree does not have growth rings to indicate age like the junipers, but rather contain a fibrous material like a palm tree.

7. The pieces of wood on the ground in front of you are called petrified yucca. Some of this material is quite dense and very heavy. Edmund Jaeger, the noted botanist, writes about this material, "The so-called petrified wood, much prized as fuel by desert settlers, is made by the plant as it lays down silica in the cell walls in its attempt to wall off the injuries done by the borers, by fire, or by wind." The rest of the wood of the dead Joshua tree is very light weight and fibrous.

8. To the left of the post and also to the right of the juniper are beavertail cacti (*Opuntia basilaris*), one of the two cacti which are indigenous to the Antelope Valley. In the spring, these plants produce very



showy, magenta colored flowers as much as three inches across. The wine-colored fruit was eaten by the Native American Indians and makes an excellent jelly.

As you walk to the next point of interest, take a look at the mountains to the north (to the left) of the path. These are the Tehachapi Mountains rising to an elevation of 7,988 feet. They are the southern end of the Sierra Nevada Range and separate the San Joaquin Valley from the Antelope Valley. One of the original spellings of the name was "tehichipi", presumably a Native American Indian word, or at least the way the settlers spelled the Yokut Native American word, but the Southern Pacific Railroad changed the name to its present spelling. Also, on the right of the path, look for the dead juniper in stark contrast to the living trees.

9. If you will look closely at the ground to the left of the post, you will see small black spots on the earth which, when wet, look like black moss. These are "cryptogamic crusts" formed by cyanobacteria, the oldest form of life known. The sheaths formed by the cyanobacteria give the soil great stability and tensile strength and enhance resistance to erosional forces such as wind and water, as well as hide moisture and nutrients to be used by desert shrubs.

10. Junipers were cut by early settlers for both firewood and fence posts. Even today one can find a few of these posts still standing, as they resist decay almost as well as redwood. When the wood is cut, a distinctive cedar smell is present.



If you look at the debris under the juniper bush, you might see openings to animal burrows. But, please do not disturb

anything. In the live juniper to the right, the large pile of twigs is a wood rat's nest; there is a great

many throughout the park. See how many you can spot. Also, check out the juniper stump to see the growth rings where the limbs were cut.

11. The large bushy tree in front of you is a blue elderberry tree (*Sambucus nigra ssp. caerulea*), growing somewhat out of its usual habitat in the canyons and foothills to the south.

The berries are eaten by birds and small animals or made into a jelly by humans. Early Europeans believed that the witches lived in the elder trees.

12. The large groups of green plants near the post having thin stems and apparently no leaves are Mormon tea (*Ephedra nevadensis*). In the spring they do have insignificant leaves. The male plant will have orange stamen-like growths from the nodules, while the female plant will produce small green cones. The local American Indians, the Kitanemuk, made a tea from the plant which was used to treat upper respiratory problems. They would also place bunches of the plant in the springs to sweeten the water.

As you return to the parking lot, look to the South just beyond the parking lot to a large field of greygreen shrubs. This is rabbit brush (*Ericameria nauseosa*), an early-stage recovery plant that began growing after the field was last planted with grain in 1971. During the fall months, these shrubs are covered with yellow blooms. The goal of California State Parks is to replant the field in Joshuas and junipers in order to help restore it to its original state.

Other annual flowers which may be seen in the park in spring are chia, rock cress, golden gilia, filaree, goldfields,



coreopsis, fiddleneck, blue dicks, pennyroyal, vinegar weed, and scarlet bugler.

ARTHUR B. RIPLEY DESERT WOODLAND STATE PARK



SELF-GUIDED NATURE TRAIL

Text by Milt Stark



Please remember, this is a State Park and all resources must be left in place. THANK YOU!

Free day-use entry on Lancaster Road, between 205th and 210th Street West