

Man, the Tree, the Legend

Of all the trees in all the canyons of the world, only one has a special meaning for the Agua Caliente Band of Cahuilla Indians.

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By KATE ANDERSON





ABOVE: Century-old palm trees tower above the floor of Palm Canyon in the Indian Canyons. OPPOSITE: One Cahuilla legend that tells the story of the Washingtonia filifera's origins claims that Moul, a leader of the Sungrey tribe, transformed into the Coachella Valley's first palm tree to benefit his people.

ave you ever wondered how the myriad palm trees that surround us in the Coachella Valley ended up here? With more than 2,800 species of palm trees in the world, only one - the Washingtonia filifera - is native to California, and it holds a

significant place in the history and hearts of the Coachella Valley's native people. For the ancient Agua Caliente, the Washingtonia (also known as the California fan palm and the desert fan palm) was essential, as it provided sweet fruit to eat as well as fronds to build shelter and frond stems that could be shaped into utensils for eating and bows for hunting. Recognizable for its "skirt," or the dried fronds that hang down the trunk, the palm served another important purpose: It alerted native people to water sources, a crucial part of survival in the desert. Even the name is significant: *filifera* means "thread-bearing," a reminder of the delicate fronds that line the fan-shaped leaves, while *Washingtonia* is named for the first U.S. president.

According to Stories and Legends of the Palm Springs Indians by Francisco Patencio and Margaret Boynton, the Cahuilla legend of how the first palm tree came to be in the Coachella Valley involves the leaders of five Native American tribes who made their way over the San Gorgonio Pass and into the Coachella Valley, which at that time had no palm trees.

One of the men, the leader of the Sungrey tribe, felt his time on Earth was coming to an end. Wanting to leave behind something to benefit his people, he announced he was going to be a palm tree and stated that his name would be Moul. As he stood straight and tall, bark began to grow around him, and leaves grew from the top of his head until he had fully transformed into a palm tree. The same Cahuilla legend states that Moul's metamorphosis took place in Indian Wells, and soon people from different locales came to see the tree and eat its sweet fruit. They carried Moul's seeds back with them, which explains how the palm came to populate the rest of the valley. In addition to providing sustenance for his people and indicating the presence of water, Moul provided shade on a hot day.

The Washingtonia filifera can grow as tall as 90 feet, and its white flowers bloom from February to June. From June to November, it produces a black fruit that is sweet like honey or raisins. Robert James Hepburn writes in Plants of the Cahuilla Indians that the tree's fruit was eaten fresh or made into a drink. The seeds would be dried and placed inside gourds to make rattles.

Researcher James W. Cornett, a consulting ecologist and author of *Desert* Palm Oasis: A Comprehensive Guide, has spent much of his life studying Washingtonia filifera palm trees, which he refers to as the desert fan palm. "Many years ago, I received a research grant to study the ecology of desert fan palm oases," he says. "In the mid-1980s, it was believed that the desert fan palm should be listed as an endangered species. I thought we should go census all the palm trees in the southwest and Mexico and see how they were doing."

What Cornett discovered was stunning. Not only were the Washingtonia filifera palm oases healthy, they were continuing to grow and spread. "We had counts from 1936 to 1955 by Randall Henderson," he says. "He counted about 15,000 palms, and lo and behold, our count indicated more than 30,000."

Cornett says the rate of increase seemed to begin after WWII, and his research found the palm trees in places they had not previously been, such as Death Valley



AND COUNTING ...

The Indian Canyons in Palm Springs are home to some of the largest undisturbed palm oases in the world. Here's how a few of them stack up.

PALM CANYON

2,511 adult trees

ANDREAS CANYON

1,076 adult trees

MURRAY CANYON **688** adult trees National Park in California and even across the state border in Nevada. Cornett's studies have found that there

are approximately 168 locations where *Washingtonia filifera* palms are known to grow naturally, and these regions span across California, Arizona, Baja California, and Nevada.

"It is the largest palm in North America," he says. "In biology, we call it the most massive palm."

Like all palms, the *Washingtonia* is not a tree per se but a monocot, which means it falls into the grass family along with wheat and aloe. Thus, researchers can't count the rings to determine its age, but instead must use a technique called repeat photography, where they take photos from the same location over a period of time and compare the number of trees that appear in each photo.

"On average, these palms probably have the same life span of a very old person, maybe 80 to 100 years," Cornett says. "The oldest palm we could document was 136 years old."

The growth rate of a palm tree is around 1 foot per year until it reaches about 40 years old, and then the growth rate slows.

The geographical expansion of the *Washingtonia filifera* throughout the valley and the presence of the Cahuilla Indians are deeply linked.

"Cahuilla Indians played a major role in the expansion [of the palms] by transporting seeds to newly discovered water sources," Cornett explains, adding



that natural occurences, such as fire and flood, also helped spread the palms.

"Palm Canyon is the largest undisturbed palm oasis [of any kind] on planet Earth," he says. "I have visited oases throughout the world — and I have never found one that is as large and as undisturbed as Palm Canyon, which has more than 2,000 adult palm trees."

There are other large groves of palms around the world — date palms, for instance — but they are agricultural palms that have been planted, watered, and tended, Cornett says, adding that they have been "modified by the hands of humans."

"If you go to Palm Canyon, you see the palms growing in their natural state," he says. "The Tribe is the caretaker of the very best palm oases in existence." Visit the Indian Canyons at the southern end of Palm Springs to see the *Washingtonia filifera*. Measuring more than 15 miles long, Palm Canyon boasts a moderately graded footpath and opportunities to hike, meditate, or picnic near a stream. The Trading Post offers maps, art, books, jewelry, pottery, baskets, and refreshments. Nearby, the tranquil and lush Andreas Canyon has more than 150 species of plants within a halfmile radius. Hike its scenic trail to spot birds, palm trees, centuries-old bedrock mortars and metates used for food preparation, rock formations, and Andreas Creek.

For more information about visiting the Indian Canyons, go to www.indian-canyons.com.

OPPOSITE: Palm Canyon as seen from Hermit's Bench, circa 1936. Approximately 41 adult palms are visible. ABOVE: Taken from the same location in Palm Canyon in 2007, this photo shows that the number of adult palms had increased to 65. Researchers like James W. Cornett use this technique of repeat photography to monitor palm tree populations.