



## The call of the Wild

**Sources:** <u>Underlined words</u> link to them

alifornia has the <u>largest state park system in the United States at 279 parks</u>. Protecting the world's tallest trees, California's coast redwoods, *Sequoia sempervirens*, is central to the purpose of <u>48 of those parks</u>, which stretch 450 miles down the coast from the <u>Jedidiah Smith Redwood State Park</u> on the Oregon border to <u>Limekiln State Park</u> at Big Sur in Monterey County, between the Bay Area and Los Angeles.

That's a lot of state resources being directed to plants — iconic though they are — in no danger of extinction. There's one in my backyard and dozens in my neighborhood. You can buy a seedling at most nurseries in town for about \$10, and the thing could be 100 feet / 30 meters tall in 50 years.

But the protection the parks offer is not simply about preservation of a species, cousins of the shorter, fatter giant sequoias, *Sequoiadendron giganteum*, in the Sierra Nevada. The parks are about allowing the redwood to fulfill a natural role it can only carry out in the Wild. And they're about what that role in the world means for we preservers and the necessity for the Wild itself. State level stuff on the model of the National Park Service.

The Wild is the only environment in which the redwoods' roots can spread unimpeded by sidewalks, conduit, water mains and building foundations. The only place they can cluster with their offspring in groves that shade and cool streams so salmon and steelhead can spawn, where these trees literally condense liquid water from fog with their needles and make it rain, where they breathe in carbon dioxide from the air and return oxygen to us, reducing global warming simply through their own respiration.

The Wild produces economic benefits through those natural processes, and that's before including a tourism industry that the Wild supports. But the full range of the Wild's intangible emotional and spiritual benefits to human society can't be recorded on a spreadsheet — the escape, the inspiration, the mental sustenance that 9-to-5 cannot provide and more often squelches. We so seldom see how allowing Nature to proceed in her own way can be in humanity's self-interest. We're part of Nature, too.

Before European settlement, about 3,400 square miles / 9,000 square kilometers of redwood forest existed in coastal California, an area more than half (62%) the size of Connecticut. Since 1850, 95% of those trees were logged. In the aftermath of San Francisco's 1906 earthquake and fire, there simply was no stronger or more fire-resistant building material in the state.

Most of the remains of those ancient forests now are inside state parks and, in California's northwest corner, within three state parks surrounded by the new Redwood National Park created in 1968. Redwood was expanded 10 years later and, in 1980, the United Nations recognized it as a World Heritage Site and an International Biosphere Reserve. In 1994, a partnership was created in which the four parks are operated as one entity with the state parks keeping their names: Jedidiah Smith, Del Norte Coast and Prairie Creek.

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Of that sliver of California's original unlogged redwood forest, nearly half — 45% — now lies within Redwood National and State Parks, which stretches along 60 miles / 97 kilometers of coastline. The park also contains some of the second-growth redwood forest (land where new trees were planted) that now totals 2,300 mi<sup>2</sup> / 6,000 km<sup>2</sup> statewide.

The public appeal of this park has less to do with forest and natural protection in general, however, than the fact that somewhere within it stands the world's tallest known tree.

In 1963, the 363-ft / 111-m tall Libbey redwood in the Tall Trees Grove in Prairie Creek Redwoods State Park, not far from the Lady Bird Johnson Grove where I hiked, was measured and crowned the world's tallest tree. Its designation, first reported in *National Geographic* magazine, was one of the events that led to the national park's creation. But since then, 16 taller redwoods have been measured in the park. The "tallest" designation is currently held by the 380-ft / 116-m Hyperion tree, measured in 2006. It's in the vicinity of the Tall Trees Grove but not on the Tall Trees Trail.

Hyperion's exact location is not publicly identified because of the damage done to the trees when people trample on their fragile roots and flatten their protective barrier of ferns. The trailhead to the grove itself is at the end of 6 mi / 10 km of winding dirt road and requires obtaining one of 50 free daily parking reservations, which require at least a day's advance notice to reserve. Two years ago, the park instituted a \$5,000 fine for anyone rangers deem to be too close to the tree.

Hyperion's exact height is an average of the measurement to the top on its uphill and downhill sides because it's located on a mountainside. The second- and third-tallest trees, Helios and Nugget, are near Hyperion and are within about 6 ft / 2 m of Hyperion's height. The three are estimated to be 600 to 800 years old, still kids growing in a lifespan that could stretch to 2,400 years. Hyperion has grown nearly 2 ft / 0.7 m since its first measurement and theoretically is in danger of losing its title to known or yet-to-be-measured neighbors.

Indeed, Hyperion almost didn't make it into the record book in the first place. Then-President Jimmy Carter's 1978 expansion of Redwood National Park included the then-unnamed Hyperion just barely inside the park's new boundary. That was nearly three decades before Stephen Sillett, a botanist and now chair of Redwood Forest Ecology at California State Polytechnic University, Humboldt — who pioneered climbing the giant trees and studying their canopies — climbed the tree and measured its height by hand.

Noting the clear-cut area just beyond Hyperion, Sillett told <u>The New Yorker magazine in 2006</u>. "I think the tree was less than two weeks from being cut down."

















## Notes on photos

TREETOPS and DISAPPEARING INTO THE FOREST — Although the park's name includes the word "redwood," three species of tall trees — each of which grows to 300 feet / 100 meters or taller — found in the forests of North America's cool, damp Pacific Coast in Alaska, British Columbia, Washington, Oregon and California. The ranges of the coast redwood, coast Douglas-fir and Sitka spruce overlap in Redwood National and State Parks, with all three represented in Prairie Creek Redwoods State Park where the Lady Bird Johnson grove and trail in these pictures are located. The second of these pictures, on the page immediately before this one, gives human scale to how tall these trees are. The short and gentle 1.4-mi / 2.25-km trail is through old-growth forest on a ridge top whose sides had been logged up until 1967. Today, new-growth forest has grown back to surround the old-growth grove.

**FERN CANYON LOOP TRAIL** and **FIVE-FINGERED FERNS** — If it looks primeval, that's because it is. Some of the many species of ferns that grow from the 80-to-100-foot / 25-to-30-meter walls in Fern Canyon contain DNA that has been traced back 325 million years. The other reason it looks primeval is because the canyon was used for this scene from "Jurassic Park, Lost World." The canyon was donated to Prairie Creek Redwoods State Park in 1965 by the Pacific Lumber Co., a major redwood logger, for the understandable reason that there are no redwoods but plenty of economically worthless ferns there. The hike is short and easy, but part is in the creek on the canyon floor where the water most of the time is about ankle deep. There are places where scrambling over or under fallen timber from past storms is part of the drill.

**FOREST FLOOR** and **DEL NORTE COUNTY IRIS** — For people used to visiting the giant sequoias in Sequoia or Yosemite national parks, one of the immediate environmental differences you notice in Redwood National Park is the abundance of water along the coast. Northwestern California gets about 100 inches / 250 centimeters of rainfall a year, making it one of the rainiest regions of the country. That and shade from the tall tree canopies create a bountiful place for ferns and other undergrowth to live. Some of the flowering plants here live only here, as in the case of the <u>Del Norte County iris</u>.

**RED WOOD** — Just as in the human world, life is a fatal condition, even for trees as long-lived as the redwoods. There's plenty of evidence of that on the forest floor, where trees dead of old age or winter storms lie slowly decomposing, feeding and providing habitat for younger plants and wildlife. Because this redwood fell across a trail, it gave the park service a chance to show a giant tree's interior without cutting one down.

**BEACH QUEEN** and **KING OF THE REDWOODS** — This female Roosevelt elk was one of five I saw on an evening walk on Gold Bluffs Beach immediately after my Fern Canyon hike. Each was accompanied by a young elk born last spring. The guy with antlers I photographed on my 2019 trip near the Elk Prairie campground. Roosevelt elk, native to the Pacific Northwest, are the largest North American elk species, with cows growing to about 625 pounds / 285 kilograms and bulls to about 1,200 lbs / 540 kg. Size alone indicates a need for caution, but cows can be particularly temperamental in the spring calving season and bulls in the fall mating season. There several herds in Prairie Creek Redwoods State Park ranging from 10 to 250 animals, and they're commonly seen on Gold Bluffs Beach, Elk Meadow, Elk Prairie and in the town of Orick.

FALSE KLAMATH COVE and KLAMATH RIVER OVERLOOK — Driftwood from coastal forests is common on all of California's northwest beaches like Wilson Creek at False Klamath Cove. A bit farther south is the real mouth of the Klamath River, which is second only to the Sacramento among California rivers for the volume of water it delivers to the sea. The Klamath is in the midst of the largest dam removal project in the United States, which by the end of this year will see four dams removed. The river mouth and lower 40 miles lie within the Yurok Reservation. Its 5,000 enrolled members make it the largest of California's native tribes.

