Sustaining Grandeur

The First 100 Years of Save the Redwoods League

THE BANCROFT LIBRARY GALLERY

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BUILDING PARKS ACRE-BY-ACRE

"We must be contented to secure what we can get from time to time and eternally press forward to what is yet to get." – Thomas Jefferson

Newton Drury, who became Save the Redwoods League's executive secretary in 1919 and was serving as its board chair when he passed away in 1978, hung that quote on his office wall. It typifies the League's long-view approach to conservation.

Most coast redwoods were in private hands when the League formed in 1918. Landowners, often lumber companies, were at times open to negotiating sales to the League, and, at other times, governmental pressure brought them to the table. The League attracted financial support from across the U.S., and state or federal sources sometimes matched those funds when the League purchased land for parks. The goal of assembling entire redwood landscapes, rather than small "islands" of old-growth groves, can take decades.

To date, the League has protected more than 200,000 acres of redwood forest and helped establish more than 66 redwood parks and reserves, protecting most of the old-growth redwoods that remain on Earth.

CONSERVATION HIGHLIGHTS

A mix of local, state, and federal entities manage over 100 parks, forests, recreation areas, natural reserves, open space preserves, and national monuments that protect either coast redwoods or giant sequoia. The map to the right and the notes below highlight just a few of them.

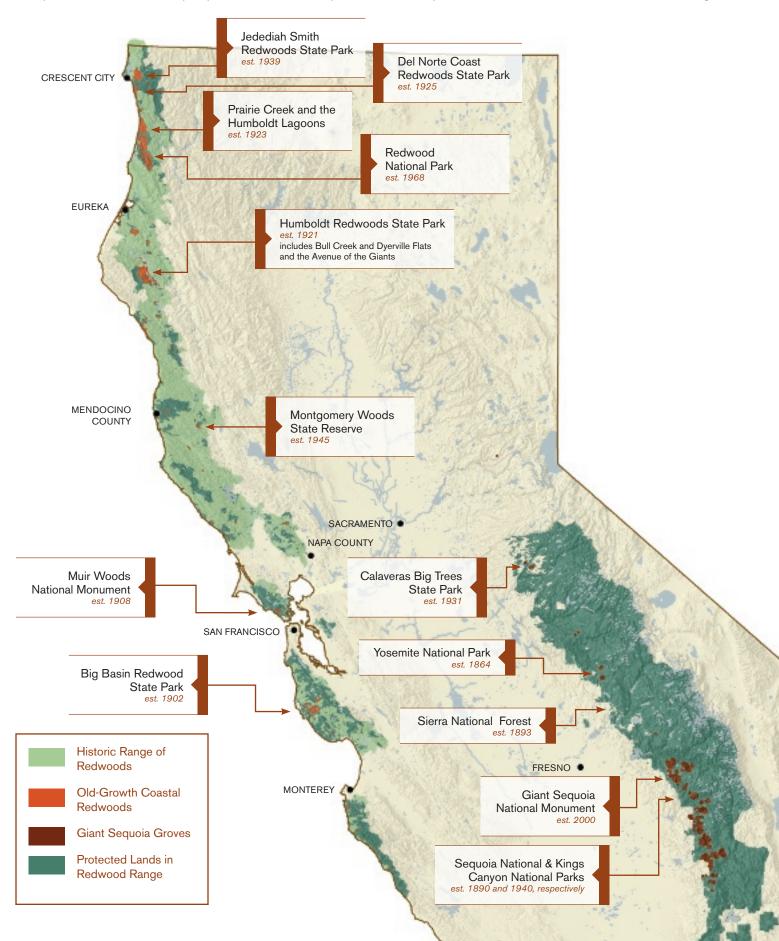
- Redwood National and State Parks. In 1923, the League began acquiring land for these four parks, Redwood National Park and Jedediah Smith, Del Norte Coast, and Prairie Creek Redwoods State Parks. Overcoming its reluctance to pay for park land, the federal government, in consultation with the State of California, the League, and other conservation groups, established Redwood National Park in 1968. Together, these cooperatively managed parks include over 131,983 acres today and contain 45 percent of the California's remaining old-growth coast redwoods and half of the world's tallest trees.
- Humboldt Redwoods State Park. A site cherished by the League's founders, this park has been pieced together with over 300 League acquisitions executed between 1921 and 2012. The park contains the world's largest expanse of old-growth redwood forest.
- Muir Woods National Monument. Donated by William Kent to the federal government in 1908, this site was declared a National Monument by President Theodore Roosevelt under the provisions of the Antiquities Act of 1906.
- Big Basin Redwoods State Park. In response to lobbying from the Sempervirens Club, the State of California enacted its first measure to protect coast redwoods-purchasing 3,800 acres in Santa Cruz County. Since then, the park has been expanded to over 18,000 acres, including acquisitions underwritten by the League.
- Yosemite National Park. Yosemite Valley and the Mariposa Grove of Big Trees were granted from the federal government to California in 1864. In 1890, Yosemite National Park was formed alongside the state park, and 16 years later the areas were unified as a national park.

Collectively, the more than 100 publicly-owned redwood sites in California receive over 31 million visits each year.



REDWOOD REGIONS

The parks noted on the map represent a small sample of the 100+ public redwoods sites in California and Oregon.



COAST REDWOODS SEQUOIA SEMPERVIRENS

"The redwood is the glory of the Coast Range. It extends along the western slope, in a nearly continuous belt about ten miles wide, from beyond the Oregon boundary to the south of Santa Cruz, a distance of nearly four hundred miles, and in massive, sustained grandeur and closeness of growth surpasses all the other timber woods of the world." – John Muir, 1901

SIZE: Coast redwoods are the world's tallest trees, and the tallest examples grow in northern California where they receive nearly twice as much rainfall as their central coast counterparts. When trees have more access to water, the pores in their leaves stay open longer and store more carbon dioxide, the raw material needed for photosynthesis and growth. The trunks of coast redwoods can be up to 24 feet around near the ground. Their height can top 300 feet, and the tallest specimen measured is 380 feet.

AGE: Coast redwoods can live over 2,000 years. The average age of a tree in an old-growth coast redwoods forest is 500 to 700 years old, according to the National Park Service.

REPRODUCTION: Young coast redwoods can sprout from the base of the parent tree, taking advantage of energy reserves contained within the established root system. In contrast to the tree's size, its cones and seeds are small-100,000 seeds weigh only a pound.

ROOTS: These trees do not have a tap root; they have shallow root systems that extend over 100 feet from the base, intertwining with the roots of other redwoods. This increases their stability during strong winds and floods.

BARK: Coast redwood bark is highly protective. It grows up to 12 inches thick, is rich in tannins (discourages insect damage), and is low in resin and volatile oils (contributes to fire resistance).

ELEVATION: Coast redwoods can be found from sea level up to an altitude of 3,000 feet.

CARBON SEQUESTRATION: Coast redwoods store three times more carbon per acre than any other forest on Earth.

OWNERSHIP: Most of the coast redwood acreage remains in private hands. About 22% is highly protected from logging, subdivision, and development, and another 12% are partially protected from those activities.

GIANT SEQUOIA SEQUOIADENDRON GIGANTEUM

"Primeval forest, splendid as the world has known, the sun glistening on dew-laden foliage, birds singing, squirrels and quail calling-what more could youth ask of a world of dreams?" – Helen Whitney, recalling an 1853 visit to the Calaveras Grove of Big Trees

SIZE: Giant sequoia are the most massive trees on Earth. The tallest reaches 316 feet. The largest circumference measured was 113 feet. Their heft helps them withstand strong winds. The largest example stands in Sequoia National Park and is estimated to weigh 642 tons.

AGE: Sequoia can live to be more than 3,000 years old.

WATER: The largest sequoia require thousands of gallons of water each day to grow, which they get mostly from melted snow that has soaked into the ground.

FIRE AND REPRODUCTION: Sequoia seedlings need nutrientrich soil, lots of sunlight, and an area free of competition from other plants to thrive-conditions which fire helps create. Fire also helps to open sequoia seed cones, which can house living seeds for up to 20 years. It also destroys soil fungi that would otherwise kill young sequoia. Fire suppression policies in recent years have increased the growth of dense, brushy undergrowth and reduced the likelihood of giant sequoia regeneration.

ROOTS: Giant sequoia normally develop an extensive, shallow root system early on. Eventually, the roots of larger trees reach out 100 to 200 feet. Large roots are unlikely to be more than three feet in diameter, and most of them are much smaller. The entire root system is likely to be within four or five feet of the soil surface. Because giant sequoia need well-drained soil, compacting the soil by walking around their shallow roots can damage these trees.

BARK: As the giant sequoia grows, its cinnamon-red bark splits and becomes thicker every year. In some places the bark can be up to two feet thick, which protects the trees from fires. Tannis in the bark repels insects.

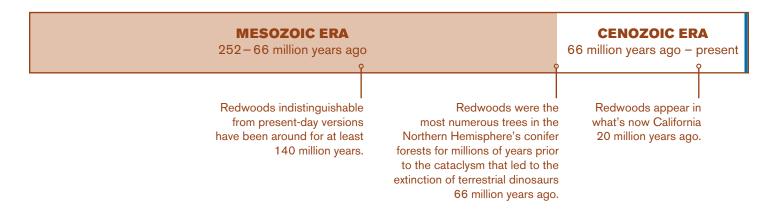
ELEVATION: Sequoia are found at elevations of 4,600 to 7,050 feet.

OWNERSHIP: These trees are found growing naturally in 73 distinct groves along the western slopes of the Sierra Nevada. Most sequoia, standing on a total of 48,000 acres, are protected, and 1,200 acres of the giant sequoia region are privately owned.



GEOLOGIC TIME SCALE

Today's redwoods are part of an ancient lineage. The blue line on the right-hand side of this figure depicts the period during which *Homo sapiens* have existed (about 200,000 years).



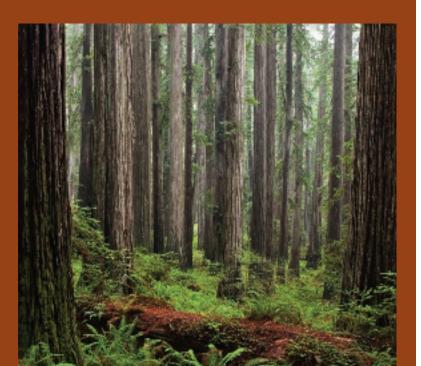
MODERN MILESTONES

- First Spanish mission and presidio in the coast redwoods region built near Monterey Bay.
- California's first water-powered sawmill used for commercial purposes opened near Santa Rosa.
- Coast redwoods recognized as a distinct genus and named Sequoia.
- Giant sequoia recognized as another species of *Sequoia*.
- **1864** Yosemite Valley and the nearby Mariposa Big Tree Grove transferred from the federal government to the State of California "upon the express conditions that the premises shall be held for public use, resort, and recreation." The area was folded into Yosemite National Park in 1906.
- The Timber and Stone Act authorized the sale of several million acres of federal land to private interests for \$2.50/acre, including vast swathes of the coast redwoods territory.
- Sierra Club founded.
- Sempervirens Club founded.
- **1902** California Redwood Park (later renamed Big Basin Redwoods State Park) established thanks in large part to the Sempervirens Club. This was the state's first step toward protecting coast redwoods.
- Approximately 85 percent of the old-growth coast redwoods remained unlogged.
- Muir Woods declared a National Monument, the federal government's first step to preserve coast redwoods.
- National Park Service established within the Department of the Interior.
- Save the Redwoods League founded.
- Women's Save-the-Redwoods League of Humboldt County founded.
- The League made its first land acquisition in the coast redwoods for Humboldt Redwood State Park and also dedicated its first memorial grove.
- The League successfully lobbied for laws that create a single state park commission; provide for a statewide survey of potential park sites; and place on the ballot a \$6 million bond measure to support park land acquisitions (approved by voters in 1928).

- **1931** The League made its first acquisition in the giant sequoia region for Calaveras Big Trees State Park.
- **1950S** The pace of redwood logging increased sharply. During each year of the 1950s, coast redwoods fell at a rate three times that of any year in previous decades.
- **1953** League acquisitions surpassed 50,000 acres across a total of 12 sites.
- **1960** About 10 percent of the original coast redwoods belt remained uncut.
- **1968** Redwood National Park established.
- **1970** The California Environmental Quality Act became law.
- **1973** Annual redwood-lumber production hit an all-time high of 1.3 billion board feet.
- **1974** Z'Berg-Nejedly Forest Practice Act took effect, ensuring California's Board of Forestry is controlled by those who have no financial connections to the forest industry.
- **1978** National Redwood Park Expansion Act approved.
- **1986** League acquisitions surpassed 100,000 acres across a total of 35 sites.
- **1997** The League awarded its first grants for scientific research to understand redwood forests and how to protect them.
- **1999** The League awarded its first grants to schools, parks and educational organizations to enable youth people to experience and learn about redwood forests. Also, the federal and state governments purchased the Headwaters Forest Reserve from Maxxam, Inc.
- **2002** League acquisitions surpassed 150,000 acres across a total of 53 sites.
- **2004** The League began its first forest restoration project in the heavily logged Mill Creek addition to Del Norte Coast Redwoods State Park.
- **2009** The League's Redwoods and Climate Change Initiative began, and it included researchers from UC, Berkeley, Humboldt State University, the Marine Conservation Institute, and other organizations studying the impacts of climate change on redwoods.
- **2014** League acquisitions surpassed 200,000 acres across a total of 65 sites.

THE NEXT 100 YEARS

Save the Redwoods League envisions a vibrant redwood forest of the scale and grandeur that once graced the California coast and Sierra Nevada, protected forever, restored to reflect the oldgrowth characteristics that were lost, and connected to the visiting public through a network of magnificent parks that inspire the world with the beauty and power of nature.



MARKING THE 100TH ANNIVERSARY

of the founding of Save the Redwoods League, *Sustaining Grandeur* is a collaborative exhibition sponsored by the Friends of The Bancroft Library and the League. The exhibition explores the organization's first century protecting California's redwood forests and the surrounding lands that sustain them. It is open to the public. The exhibition documents the League's acquisitions of land, beginning in 1918, and its partnerships and negotiations with local, state, and federal governments as well as the timber industry, work that resulted in the creation of some of California's most treasured parks.

APRIL 20, 2018-AUGUST 2018

The Bancroft Library Gallery Monday–Friday, excluding holidays 10:00 a.m. – 4:00 p.m. and Cal Day–April 21, 2018 <u>10:00 a.m. – 4:00 p.m.</u>

[Cover image] In the Calaveras North Grove, Calaveras BigTrees State Park. Photographer unknown, circa 1920s. Save the Redwoods League photograph collection, BANC PIC 2006.030–PIC

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