

Coast Redwoods

A magnificent contribution to the biodiversity of California is the coast redwood (*Sequoia sempervirens*), known as the world’s tallest living tree. Many visitors are awestruck when standing amid old growth giants towering well over 300 feet skyward, with huge bases ranging in diameter from 10 to 25 feet.

Redwoods are remarkably adapted to sprouting new growth after falling, burning, or being cut. Fallen trees even serve as “nursery logs” where seedlings begin their growth in the deep, moist furrows of the long-lasting bark. Redwoods are also extremely long lived. In old growth forests, the average age is about 600 years, with a few trees exceeding 1,500 years.

Coast redwood forest is found only along the coast from southern Oregon to Monterey County. Coastal fog helps provide critical moisture during the drier summer months. Strong winds off major points such as Cape Mendocino and Point Reyes disperse the fog, causing “wind gaps.” This is one theory to account for the discontinuous distribution of redwoods along the coast.



Del Norte Coast Redwoods State Park
Photo: California State Parks, 2020

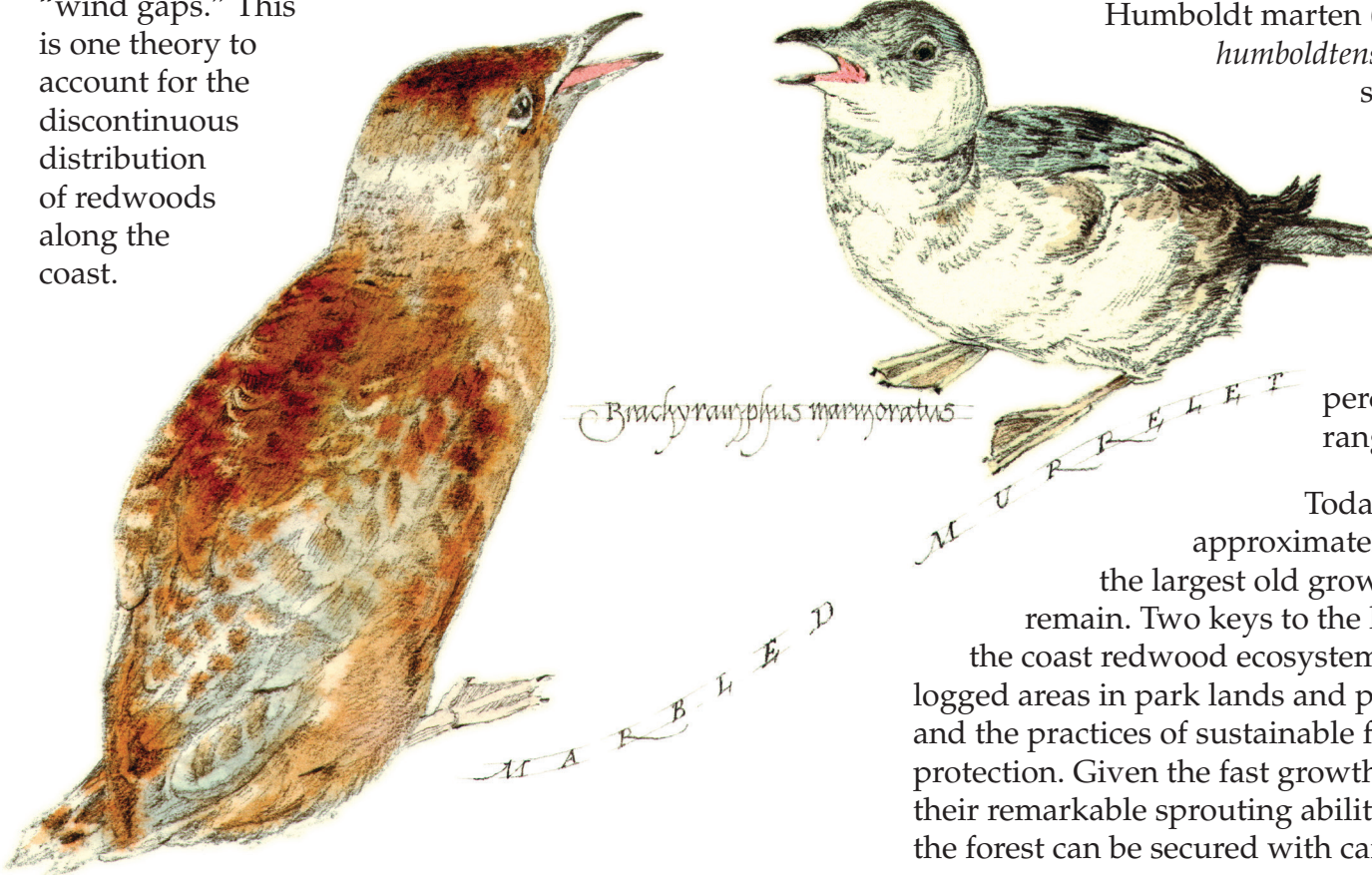
Summer fog is expected to decrease in the future as climate change alters sea surface temperatures (see the Climate Change chapter). This may also impact the distribution of coastal redwood forests.

Some animals occur in higher densities in old growth redwoods than in harvested redwood forests. Examples include Marbled Murrelet (*Brachyramphus marmoratus*), an endangered seabird that nests in redwoods; Southern Torrent Salamander (*Rhyacotriton variegatus*); and Tailed Frog (*Ascaphus truei*).

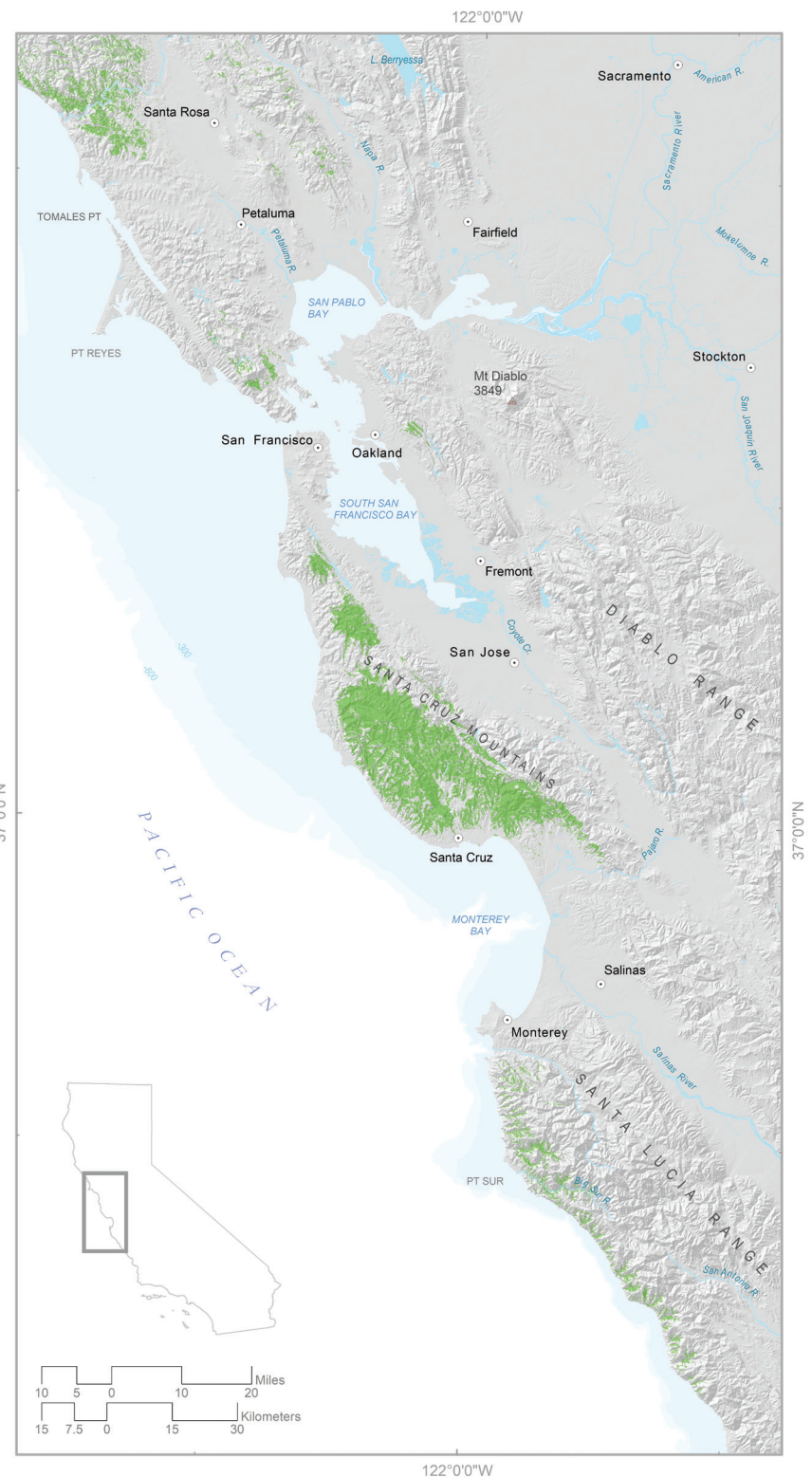
Coastal redwood forest also supports the Humboldt marten (*Martes caurina humboldtensis*). Only two

subpopulations of this endangered marten have been observed in the northwest corner of the state, occupying less than seven percent of their historic range within California.

Today, it is estimated that approximately five percent of the largest old growth redwood forests remain. Two keys to the long-term viability of the coast redwood ecosystem are the regrowth of logged areas in park lands and private timber lands, and the practices of sustainable forestry and stream protection. Given the fast growth rate of redwoods and their remarkable sprouting abilities, the biodiversity of the forest can be secured with careful management.



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 Coastal Redwood Distribution

Sources:
 Vegetation – Sonoma County [ds2691]
 California Department of Fish and Wildlife (2018a)
 Classification and Assessment with Landsat of Visible Ecological Groupings (CALVEG)
 U.S. Forest Service (2019)

Note:
 Coastal Redwood data for Sonoma County extracted from *Vegetation – Sonoma County*, with the remainder of the state represented by CALVEG.