

Coast Redwoods

Supplies

- redwood cones
- fog bottle
- redwood round

Background information

Fossil evidence tells us that coast redwood trees used to grow in Santa Barbara County many thousands of years ago, but now they are restricted to the wetter northern coast of California. You can visit redwood groves in the foggy, coastal Big Sur area of Monterey County. Coast redwood trees (*Sequoia sempervirens*) grow to be the tallest trees on earth at over 300 feet in height high. Despite their immense height, their root system can be very shallow (only about 3 feet deep) which extends up to 100 feet out from the trunk to feed and anchor the tree.

- Our towering grove of coast redwoods was planted in the canyon along Mission Creek in the 1930s and is still young for these long lived trees.
- Some redwoods are over 3,000 years old.

These trees are different from their massive cousins, the Giant sequoia (*sequoiadendron giganteum*). Giant sequoias grow inland on the Western slopes of the Sierra Nevada and usually don't grow quite as tall as the coast redwoods. What they lack in height, however, they make up for in girth; you could squeeze 2,00 adult humans, 7 blue whales, or 21 school buses inside the largest tree.

- This is a good time to check out our redwood round in the Arroyo Section. This Giant sequoia was 850 years old when it fell, but is still just a runt.

At the Santa Barbara Botanic Garden

Search the ground for the cones dropped by these epic trees. They are actually very small. Think of a cone dropped by some other confers, how do they compare?

Use a spray bottle with water to mist the needles. You can see how they have 'drip tips'. The shape of the needles allows them to accumulate fog as water droplets and 'drip' these drops over the root zone of the tree. Fog is often a significant source of moisture in coastal areas. In one area of San Luis Obispo County, for example, fog has been measured as adding ten or more inches of precipitation to annual totals.