

California Native Plant Adaptations

Now that you've explored adaptations of plants growing in the tropics where it's warm and wet, let's see how plants survive in California where plants must live through a drought half of every year.

California is one of five regions in the world with a mediterranean climate. The Mediterranean Basin, Western Australia, The Cape of South Africa and Chile all share our mild, wet winters and long, dry summers. Comprising only two percent of the earth's landmass, the mediterannean climate's long annual drought presents a decidedly difficult challenge for plants to get their needs met.

The native plants of California have developed many adaptations to survive the summer. You may recognize some of the California native plants' adaptations from some of those you observed at the Conservatory, particularly in the Highland Tropics gallery. These similar strategies all serve to either store or collect precious water.

(Note that not all California native plants are drought tolerant. Plenty of plants are native to rivers, streams and bogs needing a steady flow of water. This activity deals with drought tolerant plants exclusively.)

Drought tolerant California native plant adaptations you can find include:



Thick, leathery leaves that resist evaporation.
Evergreen oak (*Quercus*)





Very small leaves to minimize evaporation.
Wild lilac (*Ceanothus impressus*)



Leaves are held upright to minimize exposure to the sun.
Manzanita (*Arctostaphylos*)





Silver-colored, hairy leaves reflect sunlight from the plant.
Salt bush (*Atriplex*)



Drought-deciduous plants. Rather than losing their leaves for the winter cold, some California natives lose their leaves during the summer drought to decrease their water needs.

California buckeye (*Aesculus californica*)





Some plants, called annuals, live out their life in one season, dying after they set seed. They typically bloom in spring, set seed and die as the summer drought progresses. Annuals are more diverse in the mediterannean climate than anywhere else. There are no annuals in the tropics.

California poppy (*Eschscholzia californica*)

Where to See Natives

You can see these plants and others at the native plant garden in the San Francisco Botanical Garden (<http://www.strybing.org>) in Golden Gate Park. In Berkeley you can find native gardens at The University of California Botanical Garden (<http://botanicalgarden.berkeley.edu>) and at Tilden Park (<http://www.nativeplants.org>).

