



Foothills

Nature Notes

CITY OF PALO ALTO • COMMUNITY SERVICES DEPARTMENT • OPEN SPACE, PARKS AND GOLF DIVISION

Plant Communities

Have you ever noticed the different zones of vegetation you pass through on a drive from Palo Alto to the coast? No less than seven plant communities should be evident as you climb the 2,000 feet up the eastern foothills of the Santa Cruz Mountains and then drop down the western slope to the sea. Plant communities are natural assemblages of plants which occur in response to many environmental factors, the most important of which is the availability of water. Other factors include light, temperature, soil, slope, fire, and competition between species. As plant species compete, one plant community may be succeeded by another. Eventually a climax community develops which maintains itself until there are changes in the environment. As might be expected, a plant community is inhabited by characteristic animals best adapted to that situation.

Botanists now recognize about 30 plant communities in California. Ten occur in the Santa Cruz Mountains, and three — Foothills Woodland, Grassland, and Chaparral — cover most of the foothills preserves. About 500 species of plants comprise these plant communities, providing food and shelter for a wide variety of animal life.

Foothills Woodland The shady woodlands of the foothills are characterized by such plants as California Live Oak, California Laurel, Toyon, Buckeye, Poison Oak, and Woodfern. Among the common animal inhabitants are the Dusky-footed Woodrat, Deer Mouse, Gray Squirrel, Chestnut-backed Chickadee, Slender Salamander, and California Oak Moth.

Grassland Grasslands tend to occur where moisture or soil conditions are unsuitable for trees or where existing vegetation has been destroyed by fire, overgrazing, or other factors. Many California grasslands today were originally covered with brush or forests. Similarly, most native grasses, perennial bunch grasses, have been crowded out by aggressive, introduced, annual grasses from Europe, such as Wild Oats and Foxtail. Animals of the grassland include Pocket Gophers, Meadowlarks, Kestrels (Sparrow Hawks), Gopher Snakes, Fence Lizards, and grasshoppers.

Chaparral Chamise, Manzanita, Ceanothus, and other woody, scrubby plants typify local chaparral stands, generally found on well-drained, south-facing slopes.

Fire maintains chaparral by destroying competing species, while chaparral plants sprout readily from root crowns and seeds unharmed by fire. Animal residents include Gray Foxes, Merriam Chipmunks, Bewick's Wrens, and California Thrashers.

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