

Re-Oaking the Valleys: Bringing Native Trees Back into the Bay Area's Suburban Landscapes

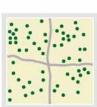
A century ago, many of California's now-suburban landscapes were oak savannas, dominated by stately valley oaks. Early towns were designed to take advantage of the trees' natural beauty and the practical benefits of shading during the hot summer. Most of the savannas were cleared before 1900 to make way for orchards; their former distribution has been largely forgotten. Our research, soon to be published in the journal *Restoration Ecology*, shows that the dispersed natural spacing of these trees is consistent with the structure of contemporary suburban landscapes, and that strategic reintroduction could provide valuable functions for people and the ecosystem.

This simple idea would elegantly retrofit suburbs into the California landscapes they inhabit, transforming neighborhoods that often lack effective tree cover, ecological amenities, and sense of place. Strategically incorporating native trees in the many underutilized spaces (medians, parking lots, commercial lawns) will create an aerial canopy that reduces the urban heat island effect (and associated health and energy impacts) while storing carbon and reducing runoff. Designed within a regional context to link neighboring populations of oaks and oak-associated birds, Re-Oaking will also help reestablish native species. Creating viable densities of valley oaks -- whose distance of genetic exchange is relatively small -- may help this much revered but declining endemic California tree persist in the face of climate change.

> - ROBIN GROSSINGER SFEI, HISTORICAL ECOLOGY PROGRAM



SUBMITTED TO INHABIT.COM AND DWELL MAGAZINE DESIGN COMPETITION August 2009



VALLEY OAKS OCCUR IN VARYING DENSITIES. Visitors identify dense groves, areas of "scattered" trees, and open "glades." Dirt roads go around trees and, for the most part, so do ranching and early agricultural activities

CIRCA 1800:



PRE-WORLD WAR II: MOST OF THE VALLEY FLOOR HAS BEEN CLEARED for orchards, but a few trees remain in pasturelands, along roadsides, and as a shade trees in town and on farms.

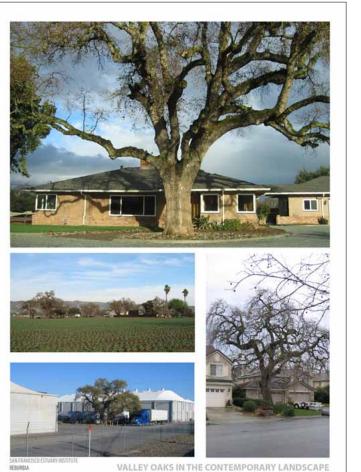


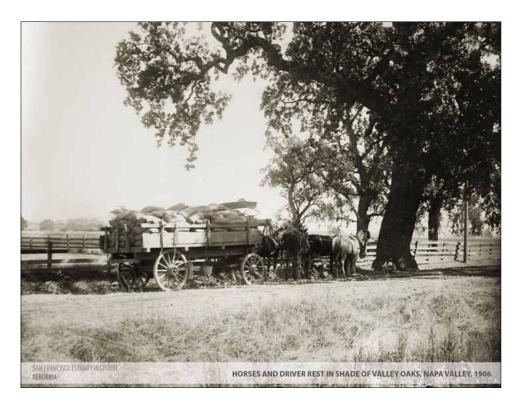
DESPITE SOME PRESERVATION OF EXISTING TREES, oak decline conti Residential and commercial development expands into forme orchards.



REBURBIA

REBURRIA SIMILAR DENSITIES AND PATTERN TO HISTORICAL CONDITIONS could be achieved through strateg planting and stewardship along roads, in parks and yards, and other areas, providing a range of benefits to people and the ecosystem







GLO witness

Black oak

Undefined

Oak Woodland Oak Savann Alkali Mead

Wet Meader

Uve oak Oak



VALLEY OAKS NAPA VALLEY 2009 (ABOVE) AND SAME AREA IN RED, 1940 AND 200.

