

Tanoak Dreamtime



Safeguarding a Native Nut Tree



Tanoak

*Notholithocarpus
densiflorus*

Bowcutt, F. 2011. Tanoak Target,
Environmental History 16: 197-225.

516697



Threats to tanoak

- livestock grazing
- vegetation type conversion
- softwood production practices on timber lands
- fire suppression
- residential and commercial development
- sudden oak death

Why Should We Care About Tanoak?

- climatic relict, only species in the genus
- reduces pest problems on more profitable conifers
- keystone wildlife food plant
- needed for indigenous cultural renewal
- sustainable food production
- most common hardwood in California

Acorn Tree



Legacy Tanoak

note broad canopy

“...dense growth was usually burned each year by the native tribes, making a quick hot fire sufficiently destructive to kill seedlings, although doing little injury to established or even quite young trees.”

Jepson, *Silva of California*, 1910



“...with an increasing control of the annual fires, the forests and woods of this whole region are showing a decidedly aggressive character and are encroaching steadily upon the barren lands. There is today more wooded area in Humboldt County than when the white man came over a half-century since.”

Jepson, *Silva of California*, 1910



Pomo Indians Shucking and Drying Acorns
near Ukiah, California (Merriam 1918)

Mrs. Freddie pouring water on acorns, Northwest California Hupa, 1901.



Photograph by Pliny E. Goddard. Courtesy of UC Berkeley, Hearst (Phoebe A.) Museum of Anthropology
<http://content.cdlib.org/ark:/13030/kt0779n4dt/?order=1>, Identifier: 15-2999.

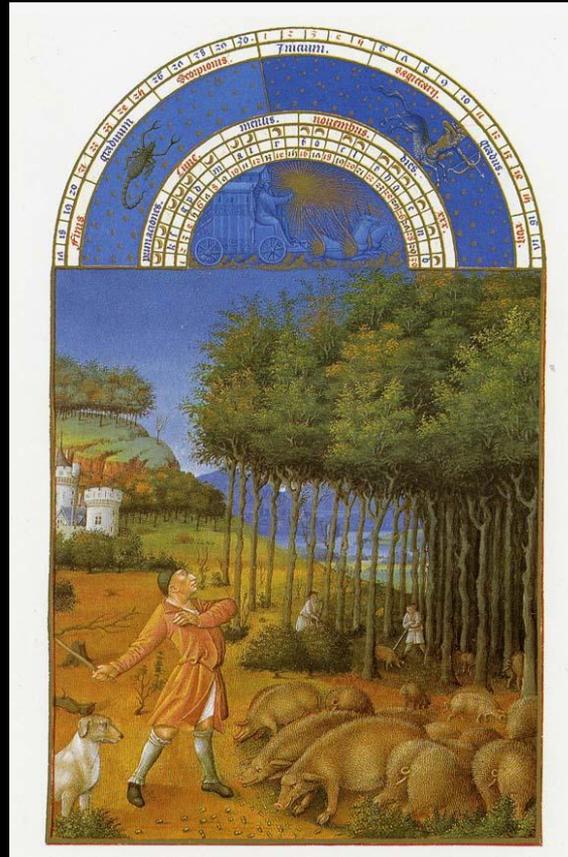
”That a food of such genuine worth should be disregarded by our people is one of many illustrations of the reluctance of the white man to avail himself of sources of subsistence long utilized by the aborigines.”

C. Hart Merriam

Former Chief of the U.S. Biological Survey, 1918

Environmental problems are “rooted in human ideas, values and beliefs.”

William Jordan, III, 1997

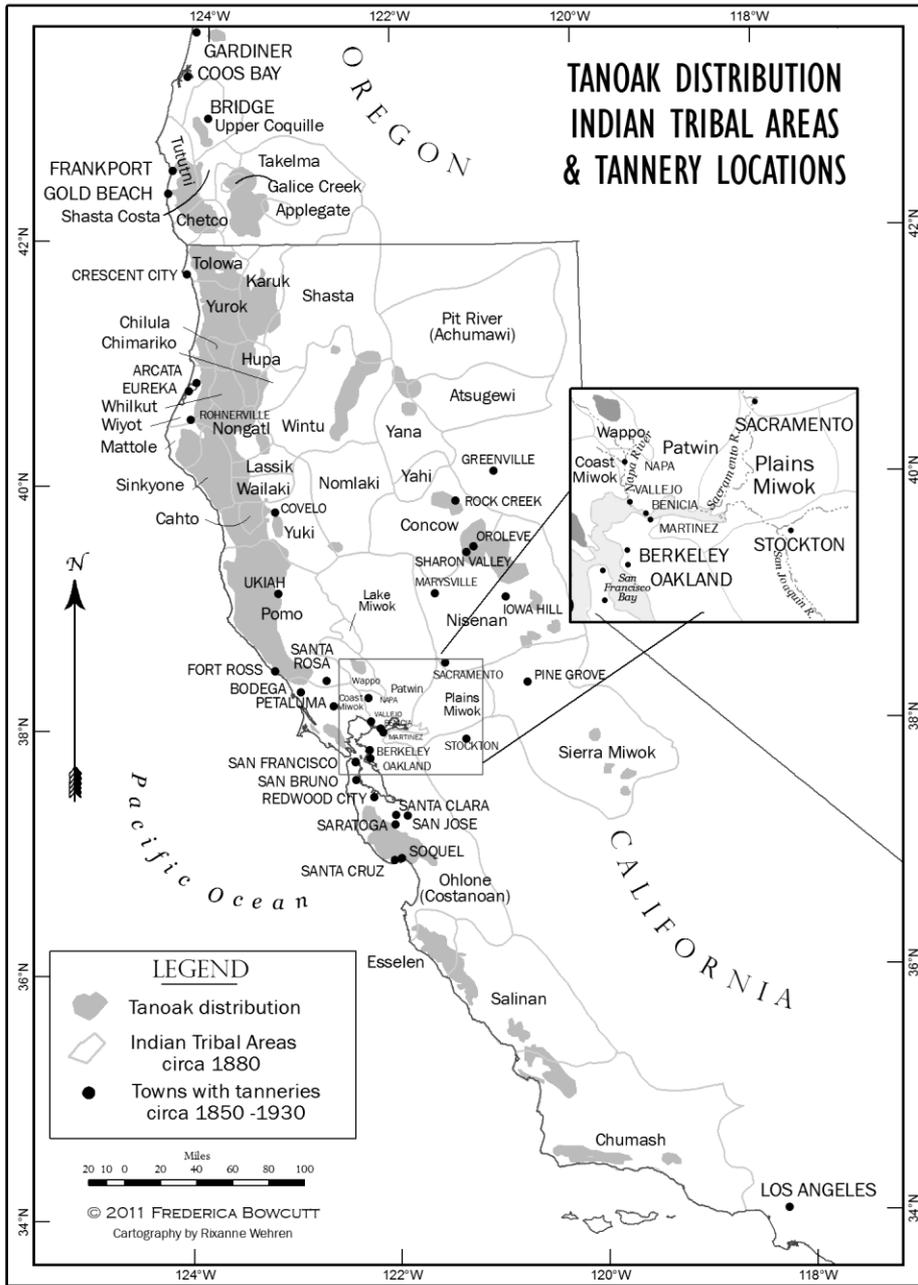


European notions of progress

Tanbark

Tanning Industry

- hides from meat industry
- bark from tanoak
- important industry in developing areas





“100,000 trunks 10 to 100 feet long and 1/2 to 4 feet in diameter are left annually to rot on the ground” with an estimated 5% being “cut into firewood.”

Jepson, *The Trees of California*, 1909.

Photograph courtesy of the University and Jepson Herbaria Archives, University of California, Berkeley.

Liquidated tanbark before clearcutting with Steam Donkey (invented in 1881)



Photograph by Ericson. From the Ericson Collection. Unknown date. Taken in Humboldt County. Courtesy of Humboldt State University Library Special Collections in Arcata, California.



Load of bark on steep hill south of Eureka, California being pulled by a steam donkey. Date unknown.

Photograph by Ray Jerome Baker. From the Swanlund/Baker Collection.

Courtesy of Humboldt State University Library Special Collections in Arcata, California.

Liquidation of the tanbark resource



Loading tanbark on to steam schooner destined for tanneries. Westport, California circa 1900.

Photograph by A. O. Carpenter.

Courtesy of the Mendocino County Historical Society, Ukiah, California.

industrial leather production in the San Francisco Bay Area

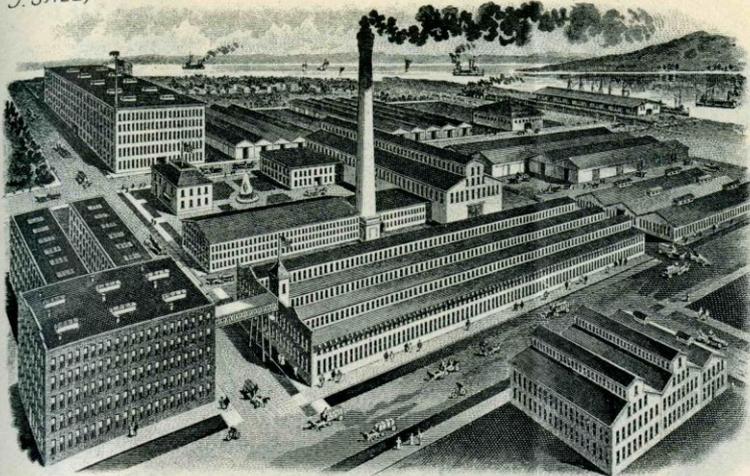
J. SALZ, President.

CHAS. HART, V. Pres't.

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60



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Benicia, Cal.

Chicago, May 2, 1907

Courtesy of the University and Jepson Herbaria Archives, University of California, Berkeley.

Global Competition Undermined Tanoak Conservation

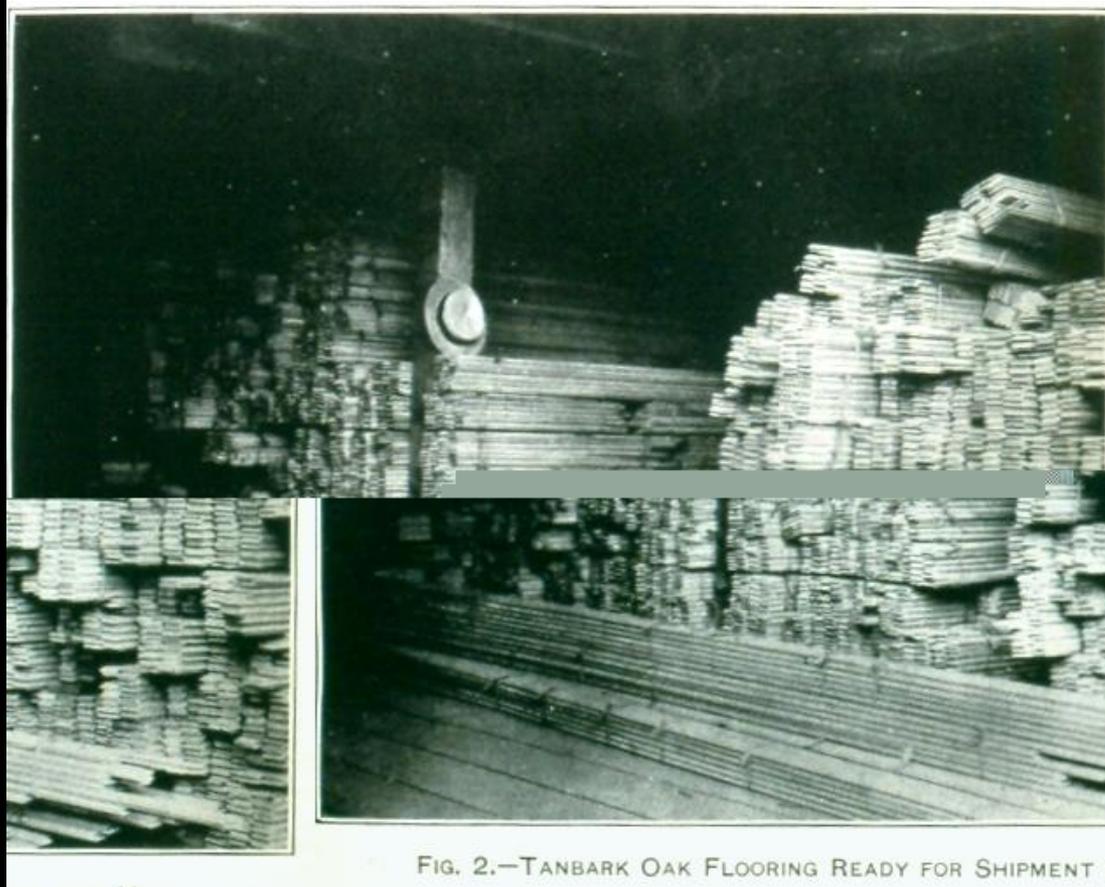


Afrikaners established plantations for tanbark production from imported fast growing black wattle trees from Australia

Wood

Disincentives to Process Hardwood from Tanoak:

- requires more skilled laborers
- smaller profit margins relative to conifers



Tanoak Flooring Produced in Fort Bragg 1911



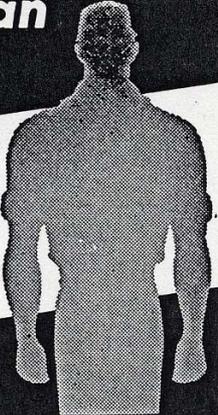
Old growth forests
replaced with even
aged stands of
young conifers





*You don't pay the man
who isn't there*

**Engineered to
Cut Costs . . .**



CORLEY SAWMILL
MACHINERY

CORLEY MANUFACTURING CO. CHATTANOOGA, TENN.

Douglas-fir Plantation



Weed

"Fairly extensive, nearly pure stands of coppice growth [*of tanoak*] appear on cut-over areas" making the land unproductive from a short term economical perspective."

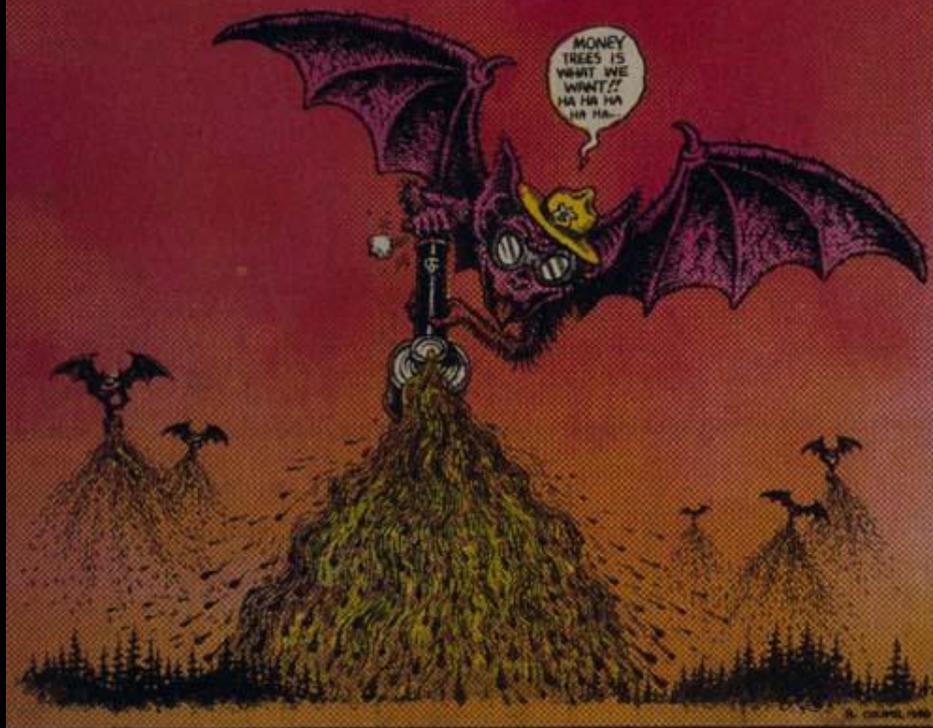
William M. Harlow and Ellwood S. Harrar

Textbook of Dendrology

1958

FOREST SERVICE TO SPRAY
5½ MILLION ACRES WITH

HERBICIDE



Tribal Intervention

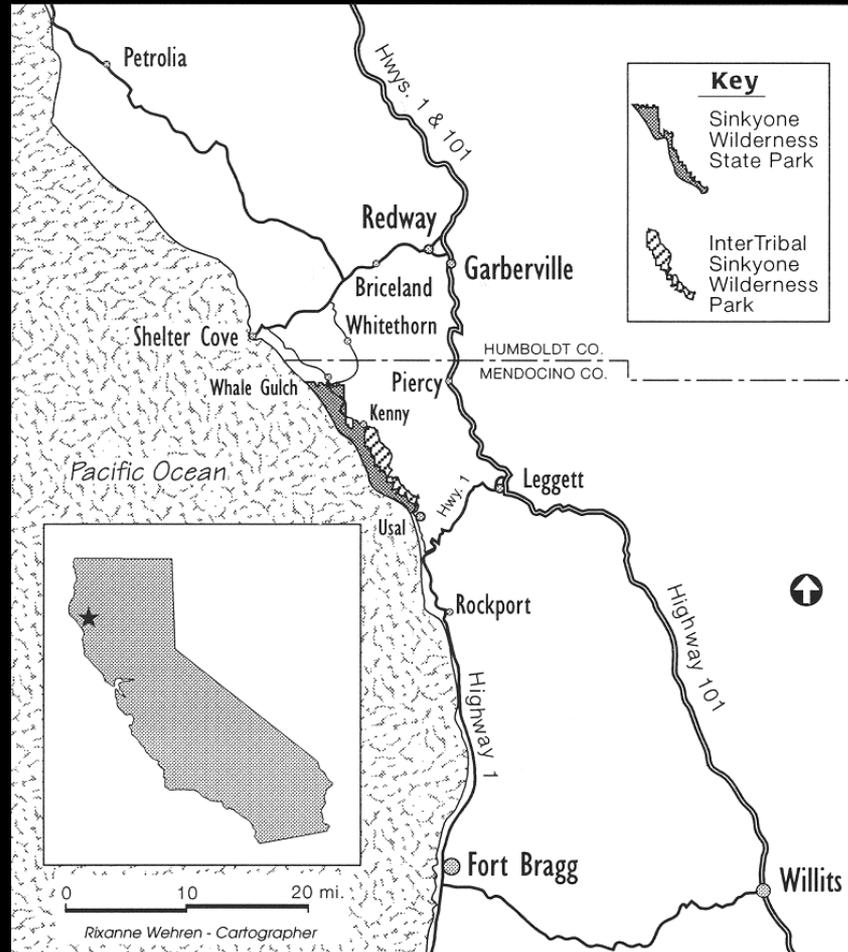
nutritious tanoak nuts are still a traditional indigenous food



Essie Parrish gathering acorns, Kashaya Pomo Indian,
in Sonoma County-North Central California, 1960

Photograph by Josepha Haveman. Courtesy of UC Berkeley, Hearst (Phoebe A.) Museum of Anthropology
<http://content.cdlib.org/ark:/13030/kt1w10027m/?order=1>, Accession Number: 1445, Identifier: 15-19440.

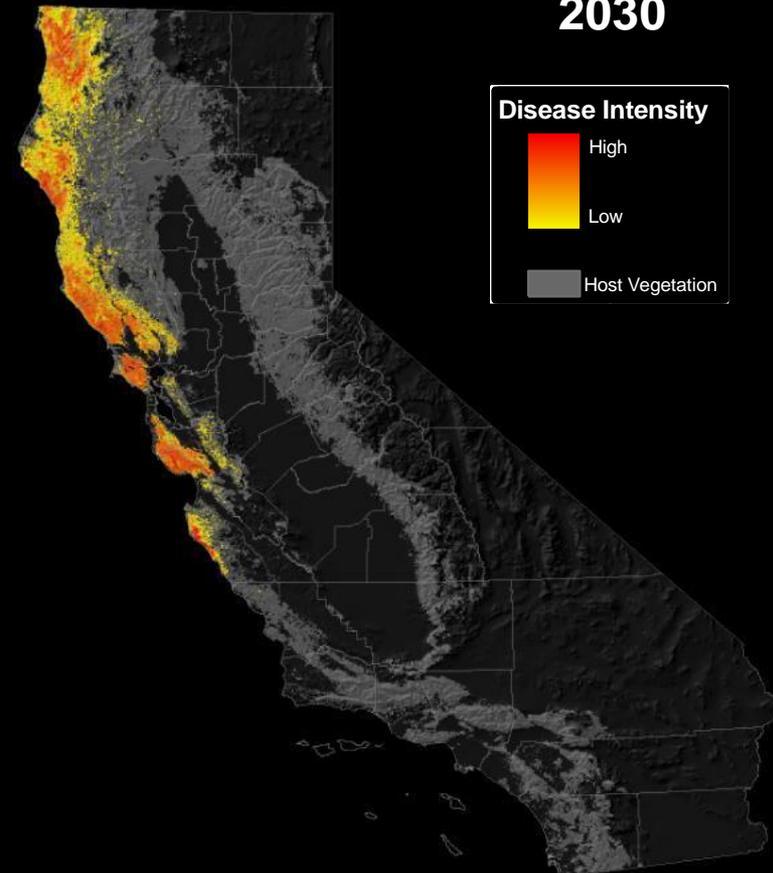
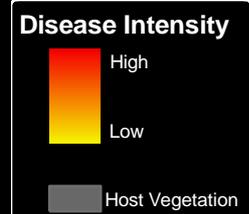
Land Acquisition for Tanoak Restoration



In 1987 ITSWC acquired 3,800 acre tribal park

Model Predictions

2030



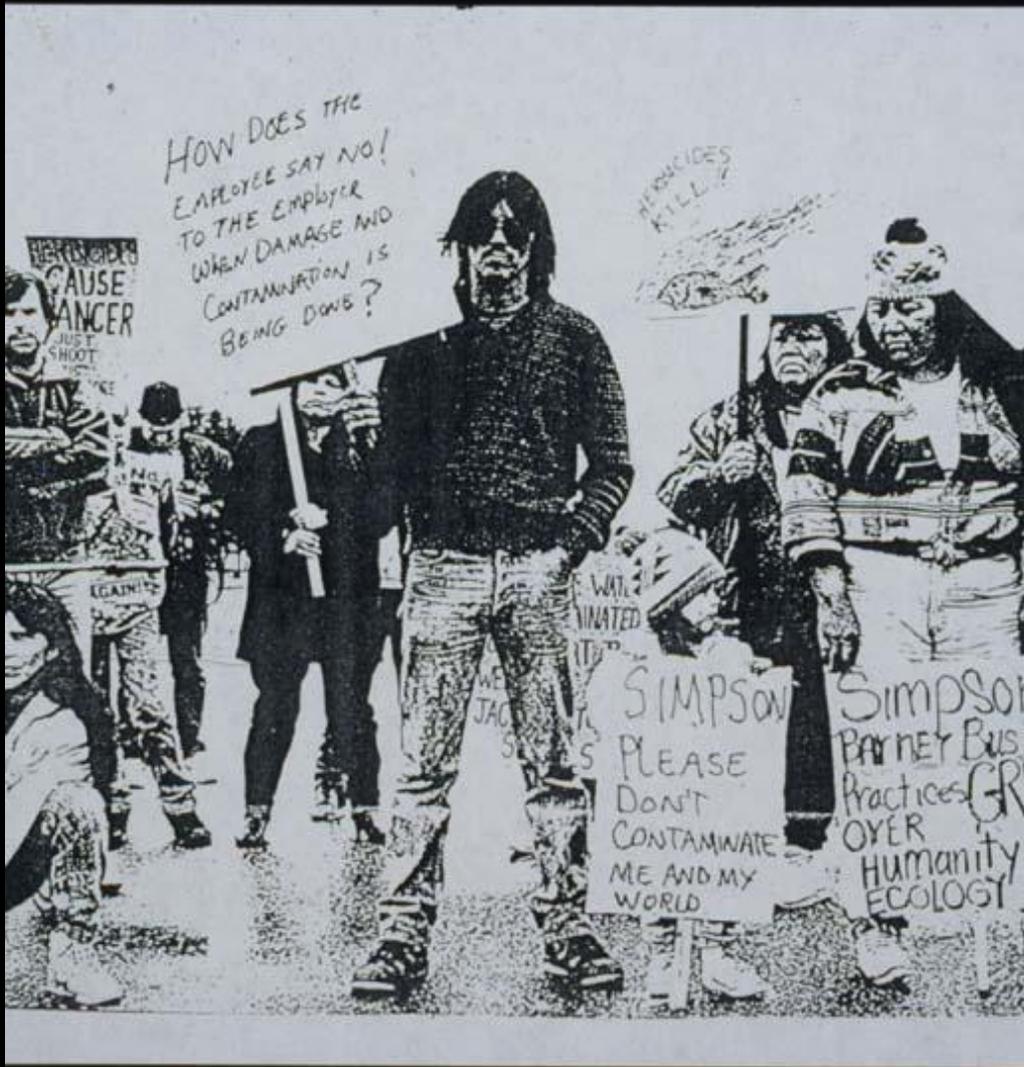
Distribution of Sudden Oak Death as of February 20, 2012



Map produced on 2/20/12 by UCB GIF: <http://oakmapper.org>, <http://gif.berkeley.edu>
 For more information about Sudden Oak Death, please visit the California Oak Mortality Task Force website at <http://www.suddenoakdeath.org/>



The Sudden Oak Death threat to this tanoak refuge is significant and increasing



Tribal Action Against Herbicides



"Now we see tanoaks go down the road, all sizes and ages. The mills are just chipping it. These are acorn trees.... There are not enough for native peoples to maintain their culture."

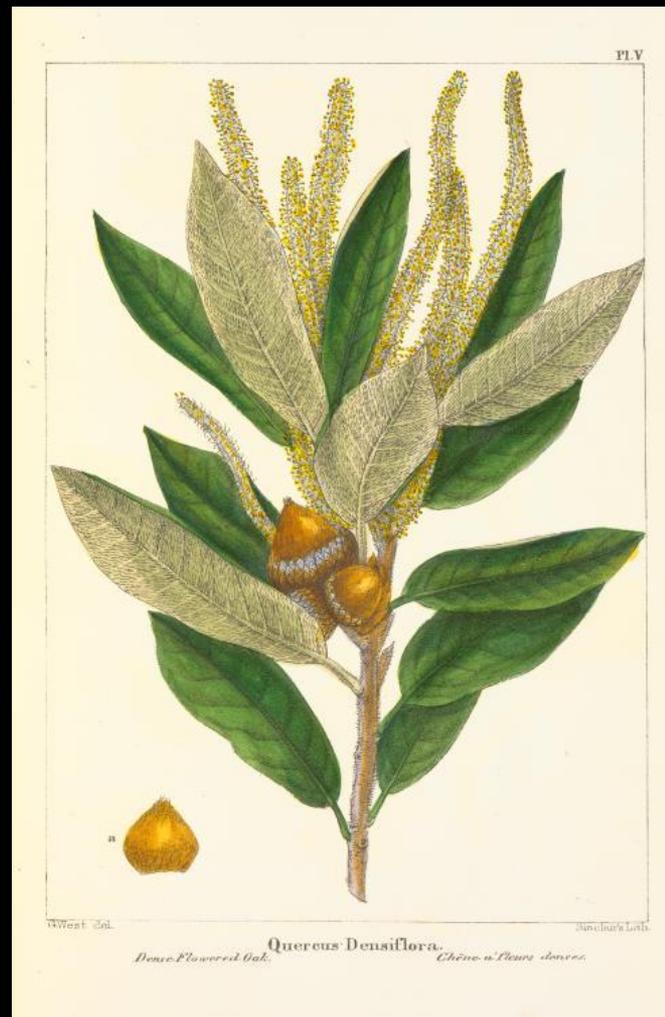
Hawk Rosales
InterTribal Sinkyone Wilderness Council

TRADITIONAL ECOLOGICAL KNOWLEDGE

Might frequent, low intensity fire reduce infection risk?



According to Mamie Offield, a Karok Indian woman, it's best to scorch tanoak each year to control diseases and pests. Offield also said that fire "leaves the ground underneath the trees bare and clean and it is easier to pick up the acorns."



“Ecology’s most profound insights call for far-reaching modifications of long-standing social arrangements.”

Garrett Hardin
Filters Against Folly 1985



Thanks

American Society of Environmental History
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Grace Hudson Museum and Sun House
Humboldt State University Library and Special Collections
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Mendocino County Historical Society
M. Kat Anderson, USDA-NRCS
Susan Frankel, Oak Mortality Task Force & US Forest Service
The Evergreen State College and my Evergreen colleagues & students
University and Jepson Herbaria Archives, University of California, Berkeley
University of California, Davis Library and Special Collections