

California Oak

By Susa M. Black, OBOD Druid



Photo of Oaks in Pleasant Hill, California, by Michael Black, OBOD Bard (Summer, 2002)

*I am the Sentinel Oak
The Wise One of the Druids
And Native Americans,
The guardian of Time, and
The shifting of the Lands.*


*Gnarled, hoary, and arcane, am I,
Who has withstood the centuries, the eons,
The ages of fire and ice.*

*I've scattered my progeny
To the continents of the world,
Nestled deep in sere canyons,
And cool mountain valleys,
Resting in gentle rolling hills,
Dancing deep within forests,
Spreading wide in warm savannahs,
Standing lone on a rocky coastal cliff,
Withstanding the gales of a salty island.*



Home I am to the birds and the squirrels,
 My acorn their nourishing meal,
 My branches their nest, their shade, and
 Their solace on an inclement day.
 The wind, my friend, spreads my catkin-bearing
 Seed to the land beyond my mighty branches,
 And I am renewed again and again.

I've built man's homes and tools and wheels,
 I've fed his belly, fed his fires, and dyed his clothes.
 His children have climbed my branches to
 See their world from above.
 His arboreal mother and father,
 I've shaded and warmed and protected his family
 from want and weather,
 From the beginning of history.
 And now he comes with his saws and his tractor,
 For he needs my ground for his home.
 If man does not remember our ancient pact
 My kind will be no more.

Tree Topography¹	
	<p>Crown: The mass of the tree above the trunk (width and height), including leaves and branches.</p>
	<p>Foliage: The mass of leaves (leaf cluster) produced by the tree. These gather sunlight and absorb carbon dioxide for the tree's process of photosynthesis.</p>
	<p>Twigs: Small branches, where buds develop.</p>
	<p>Branches: Support for twigs, conduit for sap to reach flowering twigs.</p>
	<p>Limbs: Largest branches near the trunk, which support the smaller branches above.</p>
	<p>Trunk: Main support of the tree above ground. Conduit of water and nutrients between roots and branches.</p>
	<p>Roots: Underground support of tree, which also absorbs water, minerals and nutrients from the soil.</p>

¹ Oak Tree, Page 14



History

Oaks (Species: *Quercus*, from the plant family *Fagaceae*, which includes Beech and Chestnut) appeared in California, and the southwestern part of North America, at the beginning of the Eocene Age (50 million years ago). By the Miocene age, (24 million years ago), about twenty species of oak had appeared in California. The earliest known oak fossils come from North America, so some botanists think that North America was the cradle of oak evolution.²

California Oaks thrive and decline in different climates. They generally increase in numbers during times of warmer, dryer weather, and decline during cooler, wetter conditions. Their numbers fluctuated during the various glacial periods, and they have re-established themselves after the last glacial period in California. They were most abundant in California during the “mid-Holocene” age - 6,000 years ago.

Oaks are a *keystone species*, which ecologists recognize as a primary species within a dependant ecological system, without which, the interrelated biological and botanical ecosystem would unravel, and ultimately fail.³

Jays, ancient members of the *Corvid* family (which includes Ravens and Crows) occupy the same temperate zone as Oaks worldwide, and are credited for the wide distribution of Oaks across the Northern Hemisphere. Jays harvest acorns and stash them for the winter.⁴

On Arbor Day, April 27, 2001, the National Arbor Day Foundation announced the results of a nation-wide public vote, making the Oak America’s national tree. They celebrated with a tree planting ceremony on the Capital grounds in Washington D.C.

Etymology

Oaks belong to the genus *Quercus*, which is Latin for Oak. *Quercus* is derived from two Celtic words: *quer*, which means “fine”, and *cuez*, which means “tree.”⁵ The Scots Gaelic word for Oak is *Darach* or *Darag*; the old Irish word is *Daur*, and the Welsh word is *dâr*.

Ac is Old English for Oak, and *corn* or *cern* is Greek for corn or kernel⁶. The Welsh word for acorn is *Mesen*, the Irish is *Dearcán*, the Scottish Gaelic is *Dearc dharaich*.

A *mast* is the old English word for a crop of acorns.⁷

² The Life of an Oak, Page 189-191

³ The Life of an Oak, page 132

⁴ The Life of an Oak, Pages 135-37

⁵ Oaks of California, Page 3

⁶ The Life of an Oak, Page 124

⁷ The Life of an Oak Page 245



Description

There are two general types of oak – *Tree Oaks*, which grow tall, with undivided trunks, and *Shrub Oaks* that grow lower to the ground and are densely branched from their base. Tree Oaks form a broad, rounded canopy, unless they are surrounded by other trees in a dense forest in which case they will grow tall, rather than spreading out. Some Oaks are deciduous and lose their leaves in winter, and others are evergreen. They are one of the most adaptable trees in the world.

The Oak design is successful because the broad canopy creates a shady area, which deters the growth of competitors that need the sunlight to grow. It also cools the soil beneath the tree, which prevents rapid evaporation of much needed water in hotter climates.

The Oak's architecture, with its relative width to height, gives the tree more stability, and a shorter, less vulnerable "water column" from the root to the top. This accounts for its long life compared to other trees that are more susceptible to drought and wind damage. However the large spreading Oak crown inhibits their distribution into subarctic and high mountain climates because it cannot bear the weight of massive snowfall, limiting the Oaks range to temperate zones. Conifers, whose branches angle downwards, are adept at sloughing off snow, which is why they dominate arctic and high mountain terrains.⁸



Photo of Oak in Pleasant Hill, California, by Michael Black, OBOD Bard (Summer, 2002)

California Oak Species⁹

There are at least 300 species of Oak worldwide (some say as many as 500), and about sixty species in the United States. These are the most common varieties in California:

⁸ The Life of an Oak, Page 14

⁹ Oaks of California, pages 10-45, and Introduction to Trees of the San Francisco Bay Region, pages 97-116



Tree Oaks:

- Valley Oak, aka Roble Oak (*Quercus lobata*)
- Black Oak (*Quercus kelloggii*)
- Blue Oak (*Quercus douglasii*)
- Oregon Oak, aka Garry Oak (*Quercus garryana*)
- Engelmann Oak (*Quercus engelmannii*)
- Coast Live Oak (*Quercus agrifolia*)
- Interior Live Oak (*Quercus wislizenii*)
- Canyon Live Oak, aka Goldcup Oak (*Quercus chrysolepis*)
- Island Oak (*Quercus tomentella*)

Shrub Oaks:

- Scrub Oak (*Quercus berberidifolia*)
- Leather Oak (*Quercus durata*)
- Tucker Oak (*Quercus john-tuckeri*)
- Desert Scrub Oak (*Quercus turbinella*)
- Huckleberry Oak (*Quercus vaccinifolia*)
- Island Scrub Oak (*Quercus pacifica*)
- Deer Oak, aka Sadler's Oak (*Quercus sadleriana*)
- Palmer Oak (*Quercus palmeri*)
- Muller Oak (*Quercus Cornelius-mulleri*)
- Coastal Scrub Oak (*Quercus dumosa*)
- Santa Cruz Island Oak (*Quercus parvula*)
- Brewer's Oak (*Quercus garryana var. breweri*)

Hybrid Oaks (cross between different Oak species in overlapping territories):

- Oracle Oak (cross between Interior Live Oak and Black Oak)
- Epling Oak (cross between Blue Oak and Oregon Oak)
- Alvord Oak (cross between Blue Oak and Tucker Oak)
- MacDonald Oak (cross between Scrub Oak and Valley Oak)
- Chase Oak (cross between Black Oak and Coast Live Oak)

Unique Characteristics of Oaks

All Oaks share four characteristics in common. Unless all four characteristics exist, the tree is not a true Oak:

- *Flower* – Oaks produce male and female flowers. The male's flowers hang from long thin stems called "catkins", and produce pollen, which the wind picks up and



distributes. The female flowers grow at the base of the leaves, and capture the pollen from the male trees, which produces the seeds of new oaks – acorns.¹⁰

- *Fruit* – the acorn is a dry fruit produced by the female trees, with a hull similar to the walnut, protecting the seed inside. The acorn contains a rich store of fat, starch and protein, which will provide the sapling with enough nutrients for a good start at growth.¹¹
- *Wood* - a hard, strong, complex and enduring wood with a distinctive pattern, which has been the staple of craftsman and carpenters over the centuries. Oak wood has been used for furniture, paneling, buildings, ship building, fencing, farm tools, railroad ties, bridges, etc.
- *Long Life* – Oaks can live for centuries. There are records of California Oaks living over 600 years old. The average oak lives for 200-300 years, resisting gale strength winds, earthquakes, droughts, floods, fires, hungry animals, insects, fungus, and disease.



Oak Leaf



The shape of the leaf from the different Oaks varies from a narrow blade to a broad oval; a pointed tip to a rounded one. The margin can be flat or curled under. The edges can be smooth and rounded, or sharply toothed, or lobed. Some trees are *deciduous* and shed their leaves every autumn in order to prepare for the harsh conditions of winter, whereas Live Oaks, living in more moderate climates, keep their leaves all year.¹²

Leaf size can vary on different parts of the same tree, depending on its exposure to light. The lobe shaped leaf gives maximum exposure to the leaves below it, so that the tree can maximize the light gathering surface of its total leaf mass for the process of *photosynthesis*.

Oak Diet

The Oak uses the energy gathered by the leaves from the sunlight (*photosynthesis*) to combine carbon dioxide (carbon and oxygen) with water pulled up from the roots in the soil, which also contains minerals.¹³

Oak Defense

Oak saplings and acorns defend themselves against many predators by producing strong tannins which discourage their use to satisfy dietary needs. The acorns,

¹⁰ Oak Tree, Page 4

¹¹ Oak Tree, Page 29

¹² The Life of an Oak, Page 66

¹³ The Life of an Oak, Page 60



however, appeal to other species, which harvest and distribute them. Young Oak leaves also develop bristles and spines that make them inedible.

Location

“Oak communities” are any terrain where oaks predominate. The different species of California Oak live in different ecological communities – forest (Coast Live Oak), chaparral (Scrub Oak), valleys (Valley Oak) foothills (Valley Oak, Blue Oak, Interior Live Oak), woodland and savannah¹⁴ (Blue Oak), offshore islands (Island Oak), mountain canyons (Canyon Oak), mountains (Black Oak).

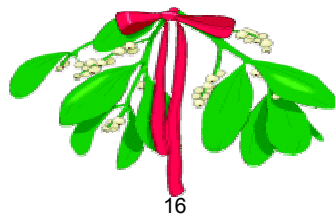
Dependent Species

Oak woodlands offer important habitats for wildlife. They are nesting sites for many species of bird, including the Acorn Woodpecker, Lark Sparrow, Oak Titmouse, and Yellow-billed Magpie. Oak trees provide a myriad of spaces for small animals to seek shelter from predators and the weather, to breed, and to rest.

Oak provides nutritious acorns, leaves, pollen, wood, roots, and sap for a variety of insects, birds and mammals. The mule deer’s diet consists of over 300 acorns a day in the Autumn, helping to create a fatty layer of insulation for the winter.¹⁵ Bears and wild pigs also depend on the acorn crop. Birds, woodrats, squirrels, and other species disperse acorns by caching them in the ground for their winter food supply. Those forgotten and unused acorns buried in the forest floor propagate the new oaks.

Many plant species also depend on or feed from Oaks, including Fungi, Lichens, Mosses, Leafy liverworts, Ferns, and Lycopods. Some pose a danger to Oaks, others live in symbiotic relationships, such as the Lichens, which convert nitrogen containing compounds that the host Oak can easily assimilate. Others help break down dying Oaks, thus recycling the dead body of the tree.

The famous Druid plant, Mistletoe (Family *Loranthaceae*, with 1,200 species worldwide), is a parasite which lives on the body of the tree, high in the canopy, and has produced a sucking organ called the *hausotia*,



which penetrates the bark and absorbs the tree’s own supply of water and minerals. A healthy tree can withstand the parasite, but as the tree ages and weakens, the mistletoe’s invasion hastens the demise of the tree.¹⁷

¹⁴ Savannah is a vast open expanse of grassland with occasional trees. Oaks thrive in this environment.

¹⁵ Oaks of California, Page 76

¹⁶ Graphic available from christmas-graphics.com

¹⁷ The Life of an Oak, Page 56



Native Americans

The *Shasta*, *Miwok*, *Wintu*, and *Luiseño* tribes harvested the acorn for food, making a thick tasty mush or pudding. Indians in the Sacramento valley prepared acorns into bread. John Muir, the famous Scottish naturalist, declared that the hard acorn bread was the most nutritious food he had ever eaten. Others have claimed that the vitality of the Oak, imbedded in the acorn, is responsible for the excellent health and longevity of California natives.¹⁸ Acorns supply fat, protein, carbohydrate, vitamins A and C, and essential amino acids. As well as providing the acorn as a staple for most of the California Indians' diet, Oak woodlands also supported wildlife, which the Indians hunted for food.

Acorn Mush

Cindy Passamaquoddy posted a *Miwok* recipe for *Acorn Mush* on the Native American Technology and Art website: <http://www.nativetech.org/food/acorn.html>

Ingredients: Black Oak acorns (local Native American's favorite acorn), water, cooking basket, fire pit, hot rocks and tongs.



Preparation: Harvest the acorns in the fall and let them dry well. Shell and remove the red skin, which resembles a peanut skin. Use either a traditional acorn pounding rock or a heavy duty bowl. With a large basalt pestle, pound the acorn into a fine grain or powder. Leach the grain in order to remove the bitter tannin. Make a sand mountain with a flat top, surrounded by a rim. Cover this with a piece of cheesecloth or very fine mesh material. Spread a thin layer of acorn grain over the cheesecloth. Carefully pour cold water over the acorn, using a pine needle branch to distribute the water. Leach the acorn several times, tasting for bitterness. Make a fire pit and heat the rocks up. *Make sure they are rocks that can withstand the heat and not explode!* Put the pounded acorn grain into a cooking basket and add water in a ratio of 2 parts water to 1 part acorn. Use a traditional antler, or tongs to fish out a hot rock. Dip it in fresh water to remove the ash, then place it in the cooking basket with the water and acorn, to heat the brew. Trade the cool rocks for hot rocks periodically (about every five minutes) until the acorn mush is cooked. Delicious!

Tribal people also made use of the wood – the branches were used for cooking implements such as stirring sticks and cooking paddles; the logs were used for columns in the ceremonial round houses, and the Oak bark and gall produced rich dyes.

Oak Medicine

Native Americans also harvested Oak products for medicine to treat a multitude of ailments. They extracted tannin from the acorn, bark, and insect gall to treat bladder problems, wounds, irregular bowels, fever, dizziness and other disorders. Acorn mold was used as an antibiotic.

¹⁸ Oaks of California, Page 100



Religious Beliefs

Native Americans believed that trees had spirit, just as the Celts did. Indians revered the sacred Oaks and held elaborate acorn ceremonies. The new year of the *Karok* tribe began in the Autumn and was celebrated by a ten day long ceremony in which the shaman only ate acorn porridge prepared by virgin women. The *Yuki* sang “acorn songs” to girls entering puberty during the “acorn song dance”. If the local spirits were pleased, the tribe was assured of an abundant acorn harvest the next year.



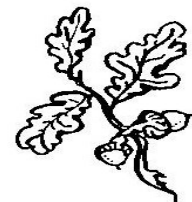
Acorns were solemnly offered during religious ceremonies of the *Miwok*, *Ohlone*, *Salinan*, *Maidu* and *Chumash* tribes.¹⁹ The *Wintu* sent their dead to the spirit world with a basket of acorn meal and water for the soul to eat and drink. The umbilical cords of their male babies were tied to a Live Oak tree to ensure their success.²⁰

To most California tribal people, the Oak represented fertility, strength and oneness with the earth.²¹ Many of the California Oaks host the parasitic plant Mistletoe, just as their counterparts in Europe do. Local Indian tribes believed that the life spirit of the Black Oak (*Quercus kelloggii*), a mountain Oak, retreated to the mistletoe during harsh times.²² Druids in Europe held the same belief, which may be the basis of the Western European custom of bringing the Mistletoe into the home during the harsh winter season, bringing the spirit of the Oak within. This ancient tradition still thrives in California.

When the first Spanish missionaries came to California, they recognized the Coast Live Oaks’ similarity to their old world trees, and built their first missions under the Oaks, just as the European Christians had built their first churches in sanctified Druidic Oak groves. Father Junipero Serra celebrated his mass beneath a Coast Live Oak near the Monterey Bay in 1770.

Sacred Oak

As a Druid, living in California, it is our native Oaks and the similar traditions with the First People of this land that creates a spiritual bond between the old world of Europe and the new world of America. Reverence for the Sacred Oak, and by extension all trees, and all of nature, are a shared tenet of both Native American and Druid spirituality.²³



Californians still celebrate traditional Native American festivals. In September, there is an *Acorn Festival* at the Tuolumne Rancheria. In October, Sacramento hosts an *Acorn*

¹⁹ Oaks of California, Page 97-98

²⁰ Oaks of California, Page 101

²¹ Oaks of California, Page 95

²² Oaks of California, Page 12

²³ California Tribal Indians: *Achumawi, Atsugewi, Chumash, Costanoan, Gabrieleño, Hupa, Ipai, Konkow, Luiseño, Miwok, Modoc, Mojave, Nisenan, Nomlaki, Paiute, Patwin, Pomo, Salinan, Serrano, Shasta, Shoshone, Tubatulabal, Tipai, Wappo, Washoe, Wintu, Yana, Yokuts, Yuki, Yuma, Yurok (to name a few)*



Day, with history, dances, and acorn preparation. For more information, check out the website of the California Academy of Science, Traditional Arts Program: <http://www.calacademy.org/research/anthropology/tap/ethnocal/C-D.htm>

To the Druids, Oak is a solar tree, sacred to *Brighid*, who built her abbey in *Kildare* (Church of the Oaks), Ireland; and the *Dagda*²⁴ – the Father God of the *Tuatha de Danaan*, who owned an oaken harp called *Dur-dá-Bla*, the Oak of Two Blossoms²⁵.

Druids still celebrate their rites under the sacred Oaks in California, and honor the other trees as well. (Modern Druids were thrilled to discover the mighty Redwoods, which form natural groves in California forests.) Magically, Oaks are used for healing, wisdom, protection, prosperity, fertility, strength, and justice. All parts are used, the wood for magical wands and staffs, the leaves and flowers for incense, the acorns for amulets.

My Druid Wand



My Druid wand was made by master woodsmith, Alferian Gwydion MacLir, with *Bardwood Crafts*, website: (<http://www.bardwood.com>). He carved the ogham for oak, O, along with an oak leaf and acorn motif. The “root” of the wand has a smoky quartz for grounding, the tip of the wand has a clear quartz for directing the energy. In this wand, Alferian has created a wonderful mini-Oak tree, which I use in all my Druid rituals.



What is a Druid Wand used for? It is a “magical ally” which can help us focus and direct the energy that we raise in rituals. When I draw a Circle within a Druid Grove, I use bands of light to represent the four elements. Pointing the clear quartz tip outward as I draw the circle of light helps me to visualize the colors. When it comes time to ground the circle, the smoky quartz end takes the light and gives it back to the earth.

²⁴ A Druid's Herbal, Pages 143-144

²⁵ Ogham, the Celtic Oracle of the Trees, Page 88



Urbanization and Agriculture

Continual loss of natural habitat due to human urbanization is responsible for the greatest loss of oak trees in California. Habitat is also lost to overgrazing of domestic animals, uncontrolled fires, and intensive agricultural use. Pollution takes its toll as well, weakening the immune system of the trees, making them more vulnerable to parasites, fungus and disease.

Sudden Oak Death (SOD)

SOD is a fungus-like pathogen, *Phytophthora ramorum*, related to the pathogen that caused the Irish potato famine in the 1800's. First noticed in 1985, SOD had become a full scale epidemic by 1999. It wasn't until the summer of 2000 that the pathogen was identified. Many species of Oak have become infected and quickly died. At this time, there is no cure or prophylactic measures for stopping the spread of this devastating botanical disease.²⁶ It is already beginning to spread to other trees and shrubs, including Rhododendron, Maples, California Bay Laurel, Huckleberry, Buckeye, and Redwood.

Protecting the Oaks

Oak conservation efforts are ongoing in California. Strategies include preservation, habitat restoration, wildland management, urban forestry, and education.²⁷ People are encouraged to plant native oaks, eliminate competing non-native vegetation, limit and control livestock grazing in oak communities, and conduct careful "controlled burns" which help germinate young oaks.



There are many organizations you can join or donate to, which are listed at end of this article, such as the *California Oak Foundation*, which provided much of the information for this article. There are opportunities to volunteer by planting and reforesting Oaks, both on public and private lands, disseminating critical information at public events, etc.

I hope this article has inspired you to help our woodland allies, the Oaks of California.

²⁶ Oakland Woodland Bird Conservation Plan, Page 8

²⁷ Oaks of California, Page 126



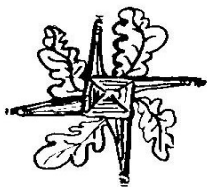
Credits and Resources



Our Oak in Oakland, photo by Susa Black, Spring, 2003

The city I live in, Oakland²⁸, California, is named for the mighty Oaks that once predominated in this area. There is one Coast Live Oak tree on our land, which is over 150 years old. His name is *Seann Daru*²⁹. He's small in size because he lives between two giant redwood trees. This wonderful Druidic sentinel tree guards our homestead, guides our dreams, and teaches us his ancient wisdom.

Doire Bhrighid



dorbred

**The Oak Grove of
BRIGID**

The author is a member of *Doire Bhrighid*³⁰, a Seed Group³¹ with the *Order of Bards, Ovates, and Druids*. We are located in the San Francisco Bay Area and are dedicated to the sacred healing arts of the Celtic Saint and Goddess, Brigid, to whom the Oak was sacred. We are particularly focused on healing the endangered native Oaks in California, which are currently suffering from Sudden Oak Death. Members have participated in community rituals to heal infected Oaks, Oak plantings, and distribute information at local fairs and festivals about the plight of our sacred ally, the Oak.

Doire Bhrighid website: <http://doirebhrighid.net>

OBOD website: <http://druidry.org>

²⁸ *Tir na Daraich* in Scots Gaelic

²⁹ "Old Oak" in Scots Gaelic

³⁰ "Oak Grove of Brigid" in Scots Gaelic

³¹ In OBOD tradition, a *Seed Group* does not become a *Grove* until there are at least two Druid members.



Bibliography



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(This was my primary reference. An incredible resource for Oak lovers of any land!)

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Y Geiriadur Newydd, The New Welsh Dictionary, by H. Meurig Evans and W. O. Thomas, Christopher Davies Publishers, Swansea, 1993

Web Resources



California Oak Foundation: <http://www.californiaoaks.org>

International Oak Society: <http://www.saintmarys.edu/~rjensen/ios.html>

Sudden Oak Death: <http://www.forestdata.com/sod2.htm>



East/West Forestry: <http://www.forestdata.com/index.html>

California Oak Mortality Task Force: <http://kellylab.berkeley.edu>

The Nature Conservancy: <http://nature.org>

Integrated Hardwood Range Management Program: <http://danr.ucop.edu/ihrmp>

National Arbor Day Foundation: <http://www.arborday.org>

Druid Web Resources:

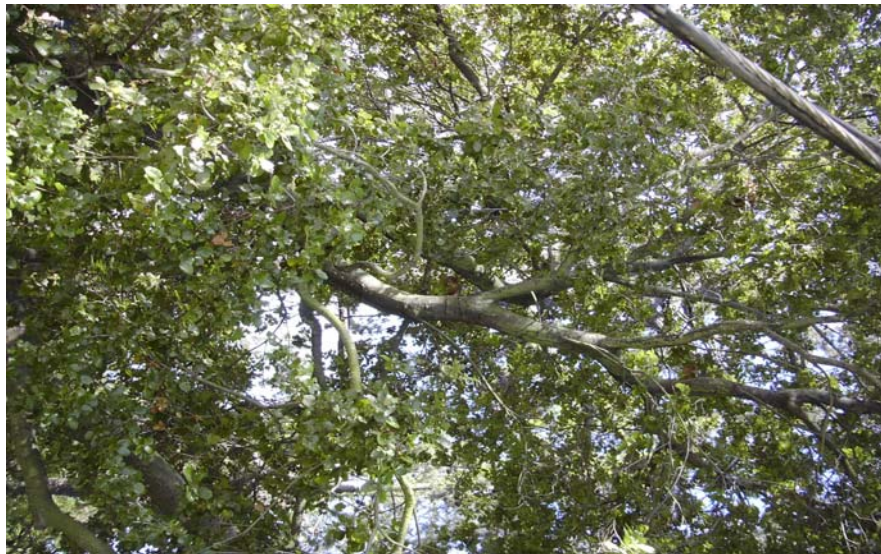
OBOD Sacred Groves Planting Program:
http://members.aol.com/ht_a/OBODSacredGroves

Bardwood Crafts: <http://www.bardwood.com>
(my favorite wand maker, Alferion)

Acknowledgments ♥

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Drawings by Cedar Sposata, (Berkeley, California)



"Seann Daru" Coast Live Oak in Oakland, photo by Susa Black, Spring, 2003

