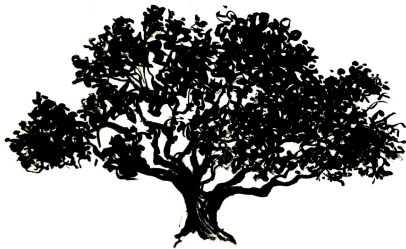


Rotary Nature Center

A Guide to Some Trees at Lake Merritt

Illustrated by John Muir Laws' Nature Journal Club



Often, the trees we see in cities are from different parts of the world, so they can be hard to identify. This guide will introduce you to 10 of the most common trees you'll find around Lake Merritt, Oakland, & other urban areas in California. Some of them are native & some of them are introduced, but all are part of our urban ecosystem.

A giant thank you is due to John Muir Laws and his nature journaling club for creating all the beautiful illustrations! It's our hope that this community-created tree guide will help you learn a little more about what else is "growing on" all around us in Oakland.

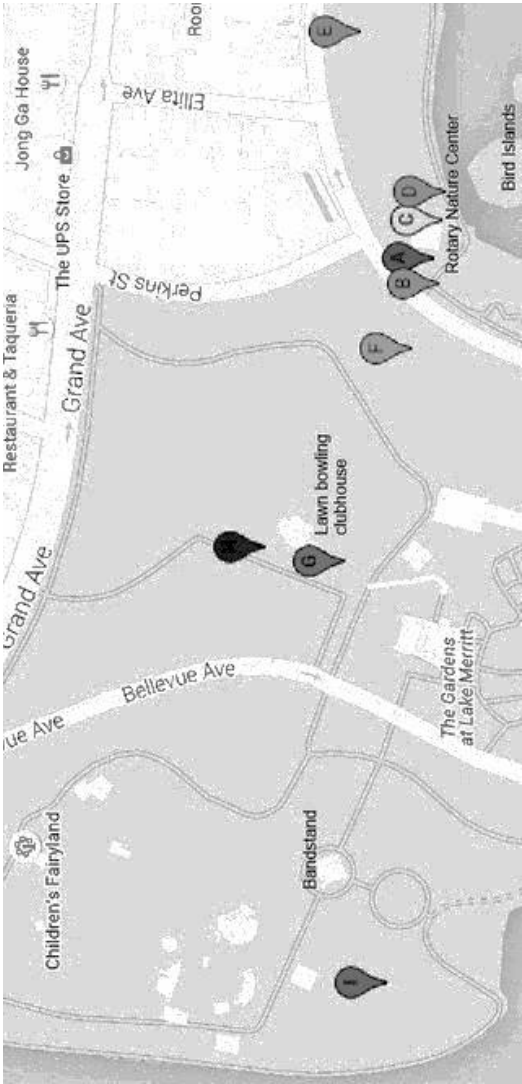
See if you can find all 10 trees outlined. Happy searching, learning, and exploring!



Definitions

- Cultivar: A plant variety that has been produced intentionally through selective breeding.
- Habit: In botany, the form in which a given species of plant grows.

Laurie Wigham (Coast Live Oak habit),
Cathy McAuliffe (Coast Live Oak branch)



Map of where the trees can be found

- A = Giant Sequoia & Coast Redwood
- B = London Plane Tree
- C = Canary Island Pine
- D = Australian Tea Tree
- E = Cork Oak
- F = Strawberry Tree
- G = Blue Atlas Cedar
- H = Cajeput Tree
- I = Coast Live Oak

A. Giant Sequoia (Sequoiadendron giganteum)



If you stand outside and face the Rotary Nature Center, this large tree is to the right of the building. These mountain redwoods grow on western slopes of the Sierra Nevada. Thick, red/orange bark protects them from fires, & toxic tannins prevent insects from attacking the trees. Their evergreen leaves are small, scale-like, and arranged in spirals around the stem. The barrel shaped cones produce thousands of tiny seeds. Giant sequoias grow from these seeds, and do not sprout from their roots like their relative the Coast Redwood.

Michael Helm (habit), Brenda Helm (cone)

A. Coast Redwood (Sequoia sempervirens)



Facing the nature center, this is the large tree to the left of the nature center entrance. The world's tallest-growing tree has surprisingly shallow roots. Native only to northern California and southern Oregon, redwoods inhabit a narrow coastal zone exposed to fog and rain from the Pacific Ocean. Resistant to rot and fire with foot-thick bark, a redwood can surpass 2,000 years in age. Stands of enormous redwoods in the Oakland Hills were logged for the attractive, durable wood; the tallest known trees in Oakland had diameters of around 32 feet and were used as a navigation landmark by ship captains coming into the Bay.

Emily Kaiser Thelin (habit), Joan Helgeson (branch)

B. London Plane Tree (Platanus x acerifolia)



This cultivar has unknown origins, but is thought to be a hybrid between the American sycamore (*Platanus occidentalis*) and Oriental plane tree (*Platanus orientalis*). Around 30-40 feet tall, its resistance to fungal diseases, drought, and root compaction make it one of the most commonly planted urban trees in the world. The leaves are lobed and five-pointed, often mistaken for maple leaves. The seed pods, which form in winter, are fuzzy ball-shaped clusters that hang from the branch. The bark is smooth and unfurrowed, and peels away so the trunk often has a mottled appearance of grey, taupe, and white. The trees that line Bellevue & Grand Avenue are almost all London Plane trees.

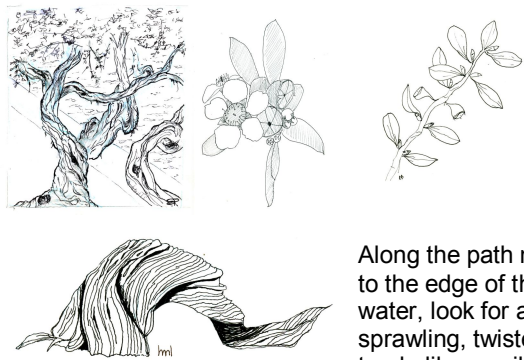
Kristin Meuser (habit), Dru Saren (bark), Margaret Hart (fruit),
Donna Crum (leaf)

C. Canary Island Pine (Pinus canariensis)



The large conifers right behind the nature center are sub-tropical pines native to the Canary Islands in the Atlantic Ocean, & one of the most commonly planted conifers in California. The long, needle-shaped leaves come in bunches of 3 and are some of the longest leaves found among pine tree species! The female cones are around 4-7 in long and 2 in wide, shiny brown with a blunt prickly at the end of each scale. The male cones are much smaller, creating large amounts of yellow pollen that you might see floating in the air. Aikya Param (leaves), Valerie Sauban(branch), Jay Waggoner (habit)

D. Australian Teatree
(*Leptospermum laevigatum*)



Along the path next to the edge of the water, look for a sprawling, twisted trunk, like a coiled rope, that grows near the ground. Delicate white flowers and small, greenish-grey oval leaves contrast with the stark beauty of the trunk and limbs that become more gnarled with age. This hardy, fast-growing shrub was imported from Australia to coastal California in order to stabilize sand. This type of tree is where most tea tree oil comes from. If you crush a leaf between your fingers, you can smell the aromatic oil that's often added to cosmetics, cleaning solutions, and anti-fungal remedies.

Ellen Pompa (habit), Laurie Kozisek (flower)
Bennett Berke (branch), Helen Learn (trunk/bark)

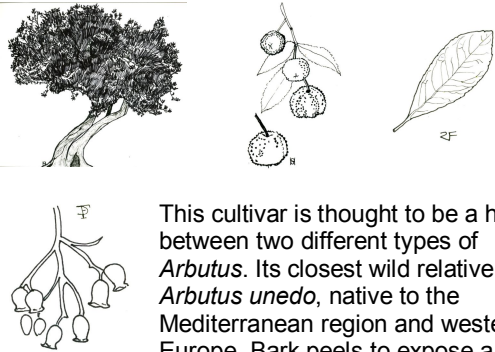
E. Cork Oak (*Quercus suber*)



This evergreen oak is a native to wooded hills in the northern Mediterranean. Its most notable feature is the rugged, spongy gray bark (an adaptation to wildfire) used to make natural wine corks. Thick, oblong leaves hold water and help these introduced oaks survive Oakland's summer droughts. Cork oak grows to be 30-60 feet tall, with a broad, irregular canopy.

Linda Cicarella (bark), Jennifer (leaf)

F. Strawberry tree (*Arbutus* 'Marina')



This cultivar is thought to be a hybrid between two different types of *Arbutus*. Its closest wild relative is *Arbutus unedo*, native to the Mediterranean region and western Europe. Bark peels to expose a smooth, cinnamon-colored layer below, similar to the Pacific madrone (*Arbutus menziesii*). It has dark green leathery leaves about 4-5 inches long, and clusters of urn-shaped pink & white flowers in the fall & winter. Fruit is distinct; yellow to red & the size of a cherry with rough, knobby skin. Fruit is edible, tastes slightly sour, and has a gritty texture. The tree is good for urban wildlife as it provides fruit and nectar for mammals, birds, and insects.

Sylvia Hawley (habit & fruit), Renee Fittinghoff (leaf), Dianne Fristrom (flower)

G. Blue Atlas Cedar (*Cedrus atlantica* "Glauca")



Originally from Morocco, the Atlas Cedar and its cultivated forms are commonly found as ornamental trees in temperate climates. These "true cedars" have 10 or more needle-like leaves clustered together on short shoots, sometimes called 'spurs', off the main branch. The leaves are a pale blue-green color. Large female cones grow erect on the top of the branches & mature in 2-3 years; then they break apart to release winged seeds. Mature trees have a flat top and spreading, slightly drooping branches.

Kate Rutter (habit), Gina Koenig (cones), Judith Coates (cone & branch)

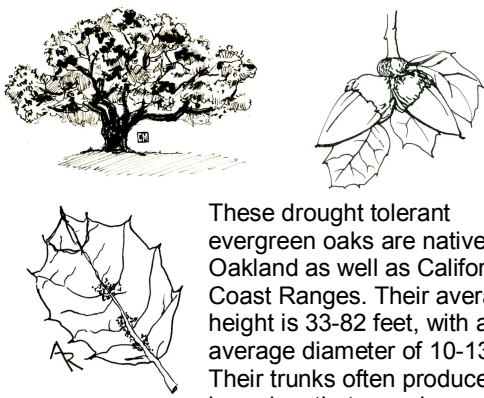
H. Cajeput Tree (*Melaleuca* sp.)



"Cajeput tree" is a common name used for species in the genus *Melaleuca* with distinctive spongy white bark that peels off in flat papery sheets. The cajeput sports bottlebrush-like spikes of white flowers and aromatic leaves from which an antifungal oil can be extracted. Millions of seeds may be stored in a single tree's woody fruit. Tolerant of salty or soggy soils, this Australian and Pacific island native has become an invasive plant in Hawaii and the Florida Everglades.

Tamara Selvig (bark), Marley Peifer (branch & leaves)

I. Coast Live Oak (*Quercus agrifolia*)



These drought tolerant evergreen oaks are native to Oakland as well as California's Coast Ranges. Their average height is 33-82 feet, with an average diameter of 10-13 feet. Their trunks often produce branches that grow in many directions so their leaves can find sunlight. The tough, oval leaves reflect sunlight and hold moisture; their points protect them from browsing animals. The easiest way to tell this oak from others (such as interior live oak or canyon oak) are the "hairy armpits" on the bottom of the leaves- where the lateral veins meet the midrib, there are tiny tufts of golden hairs at each intersection. Squirrels, scrub jays, acorn woodpeckers, and many other animals depend on the acorns of coast live oaks. Native Californians would grind the acorns to make flour.

Cathy McAuliffe (habit), Laurie Wigham (acorn), Arlene Robertson (back of leaf with "hairy armpits")

A Brief History of Lake Merritt and the Trees Planted Here
By Blake Edgar

After thousands of years as a tidal slough & lagoon where several creeks mixed with salty bay waters, Lake Merritt was created by damming the tidal channel on its southeastern end in 1869. The resulting body of water was named for Oakland Mayor and lakeside resident Samuel Merritt. In 1870, Mayor Merritt and Senator Edward Thompson persuaded the California legislature to declare Lake Merritt a state waterfowl refuge, making this America's first wildlife reserve! As the country's largest manmade saltwater tidal lake, it remains an important stop for waterfowl migrating along the Pacific flyway.

In the early twentieth century, Lake Merritt's shoreline became the focus of efforts for a central civic park, and voters approved funding to purchase land and create Lakeside Park. The first Oakland Park Commission determined that residents and visitors might enjoy seeing a wide variety of trees and shrubs. Landscape architect Oscar Prager selected temperate-climate trees from several continents to share space with native oaks, and planting at Lakeside Park began in 1907. Some of these original plantings, such as the Australian Tea Trees lining the water, are still alive today.

Text & Editing Credit:
Constance Taylor, Blake Edgar, Paul Belz, California Center for Natural History

John Muir Laws' nature illustration techniques:
www.johnmuirlaws.com

Further References:

- [A Californian's Guide to the Trees Among Us](#) by Matt Ritter (book)
- California Center for Natural History calnature.org

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