PHOTOGRAPHIC GUIDE TO THE CITY OF LOS ANGELES PROTECTED TREES AND SHRUBS

September 2024

Cover photo: *Quercus agrifolia*

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INTRODUCTION

City of Los Angeles Protected Tree Ordinance

The City of Los Angeles has designated some species of trees as protected within its jurisdiction through the passage of two ordinances. In 2006, the City of Los Angeles adopted Ordinance No. 177,404 that established protections for certain indigenous tree species, now written into City of Los Angeles Municipal Code (LAMC) Sections 12, 17, and 46. In February 2021, Ordinance No. 186,873 was adopted to amend relevant LAMC Sections to include protections for two indigenous shrub species.

The current protected tree and shrub list reads as follows:

Protected Trees

1. **Oak trees** including **valley oak** (*Quercus lobata*) and **California live oak** (*Quercus agrifolia*), or **any other tree of the oak genus** (*Quercus*) indigenous to Southern California, but excluding the **scrub oak** (*Quercus berberidifolia*)
2. **Southern California black walnut** (*Juglans californica*)
3. **Western sycamore** (*Platanus racemosa*)
4. **California bay laurel** (*Umbellularia californica*)

Protected Shrubs

1. **Mexican elderberry** (*Sambucus mexicana*)
2. **Toyon** (*Heteromeles arbutifolia*)

Trees and shrubs of the species listed above are protected if they are at least 4 cumulative inches in trunk diameter when measured at standard height of 4.5 feet from ground level at the base of the tree.

Per Ordinance No. 186,873, **a permit is required** for removal or relocation of a protected tree or shrub, or for potentially destructive activities that may result in death of a protected tree or shrub. In order to obtain a permit, an application must be submitted to the City of Los Angeles Urban Forestry Division (UFD). The application must be accompanied by a report prepared by a "Tree Expert," defined by Ordinance No. 186,873 as a person with one or more of the following certifications, qualifications, or licenses:

1. a Certified Arborist with the International Society of Arboriculture who holds a valid California license as an agricultural pest control advisor; or
2. a Certified Arborist with the International Society of Arboriculture who is a licensed landscape architect; or
3. a Registered Consulting Arborist with the American Society of Consulting Arborists.

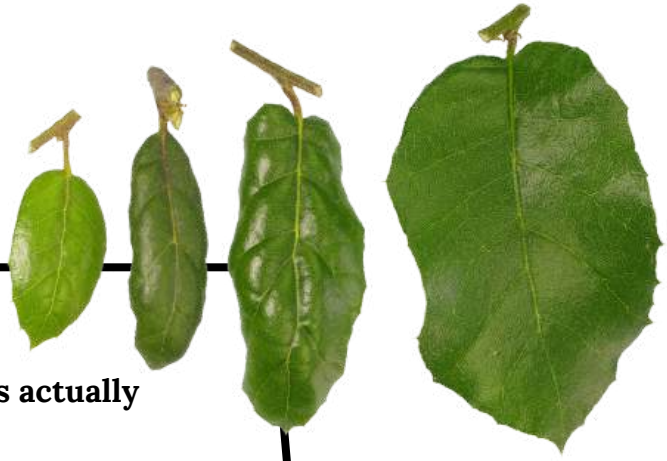
Permitted removals, relocations, or potentially destructive activities for protected trees and shrubs will be conditioned with in-kind replacement planting requirements as determined to be appropriate by UFD.

Purpose of Photographic Guide

This photographic guide is intended for use by Los Angeles residents, property owners, and other interested parties as a tool to familiarize themselves with the key characteristics of the City's protected tree and shrub species.

The guide is a starting place for determining whether a tree or shrub might be protected, but is not a formal identification tool, and does not take the place of an opinion or report from a City-defined Tree Expert.

It is always the responsibility of Los Angeles residents, property owners, and other interested parties to hire a City-defined Tree Expert to identify, measure, and report on tree and shrub species before removing, relocating, or carrying out potentially destructive activities near them.



Tips for Looking at Trees

- **When you examine a plant part, make sure it is actually connected to the tree you wish to identify.**
- **Look at the WHOLE tree, not just one leaf or limb.**
- **Young trees may not have a fully developed form/height/structure and may appear more like a bush.**
- **Trees may not have a typical tree shape when they have been managed by humans.**
- **Trees may have different bark textures depending on age and health.**
- **Trees may have different leaf characteristics depending on site, exposure, age, and vigor.**
- **Flowers or fruit are important for identification, but are not always present on the tree**

Using the Photographic Guide

The following pages contain photographs, information, and key characteristics of each protected tree and shrub species. Species are described in the same order as listed in Ordinance No. 186,873, and **color-coded based on City of Los Angeles Tree Expert reporting requirements**.

Photos are reprinted from SelecTree, with permission from the Urban Forest Ecosystem Institute at Cal Poly State University, San Luis Obispo. The photos are generally representative of each species, but users of this guide should be aware that trees and shrubs can exhibit genetic and regional variations that may differ from the photos.

An information paragraph is provided for each species that briefly discusses their natural history, growth habits, wildlife and pest associations, horticultural uses, or other interesting features. A short list of "Key Characteristics" has been provided for each species to aid identification.

Color-code guide per City of Los Angeles Tree Expert reporting requirements

- **Oak trees** - Yellow
- **Southern California black walnut** - Orange
- **Western sycamore** - Blue
- **California bay laurel** - Green
- **Mexican elderberry** - Pink
- **Toyon** - Brown

VALLEY OAK

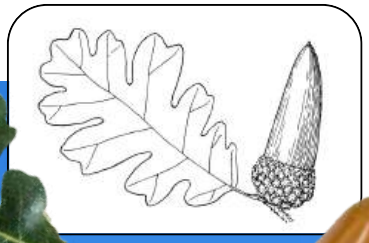
Quercus lobata

This majestic tree is the namesake of many places in Southern California, and its large, rounded canopy with spreading, craggy branches has inspired countless pieces of art. Its indigenous range spans the hot Central Valley down into the northern valleys of Los Angeles, but it can also be found naturally growing or planted in landscapes throughout the City.

Valley oaks are a favorite for wildlife and insects, too. For example, the acorn woodpecker turns valley oaks into “granary trees” by storing acorns in their thick bark, while the California gall wasp creates large tan balls on valley oak twigs that are known as “oak apples.”

VALLEY OAK

Quercus lobata



acorns

Key Characteristics:

- **Deciduous:** loses its leaves in winter
- **Bark:** gray and very thick with a blocky or checkered appearance
- **Leaves:** 6 to 10 deep, rounded lobes
- **Fruit:** large brown acorn with a knobby cap that is smooth and hairless inside

flowers

CALIFORNIA LIVE OAK

Quercus agrifolia

California live oak, often referred to as the coast live oak, is the most prominent and common oak species in the City of Los Angeles, and is widely known for its stateliness and winding branches. It is found throughout the city, from the Pacific Palisades to the San Fernando Valley, and throughout the state. The famous Encino Oak Tree, estimated to be over 1,000 years old, was a coast live oak.

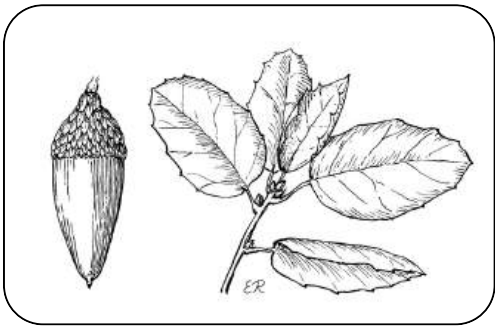
This is the most fire-adapted indigenous oak in Los Angeles, with its relatively smooth bark and thick inner bark layer. These are sometimes the only trees left alive after high intensity fires.

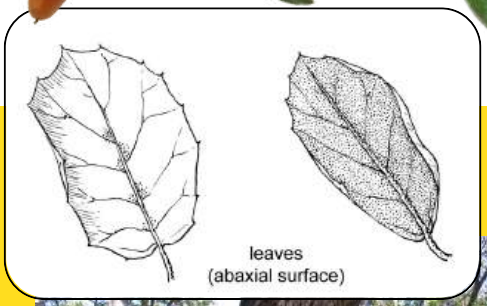
CALIFORNIA LIVE OAK

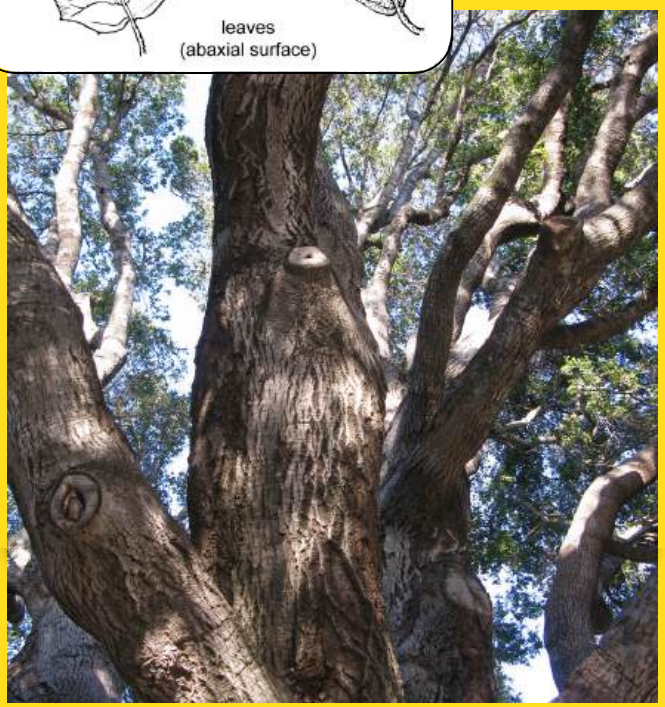
Quercus agrifolia

Key Characteristics:

- **Evergreen:** keeps its leaves year-round
- **Form:** a large tree with winding branches
- **Bark:** smooth to rough, gray, often having orange to reddish-brown striations indicating tree growth
- **Leaves:** dark green, leathery, cupped, and spiky on the margins, with tufts of hair on the undersides where leaf veins branch
- **Fruit:** long and skinny acorns, with a small acorn cap







OTHER OAKS INDIGENOUS TO SOUTHERN CALIFORNIA

Quercus spp.

The City of Los Angeles Protected Tree Ordinance protects all oak species indigenous to southern California, including those listed below but excluding scrub oak (*Quercus berberidifolia*), even if they are not commonly found in Los Angeles. While these species may vary considerably in appearance, they all share one common characteristic: **acorns**. If you see a tree that produces acorns but isn't shown on one of the prior pages of this guide, check with a City-Defined Tree Expert to determine whether it is indigenous to Southern California.

Quercus x acutidens
Quercus x alvordiana
Quercus cedrosinsis
Quercus chrysolepis
Quercus cornelius-mulleri
Quercus douglasii
Quercus dumosa
Quercus dunnii
Quercus durata var gabrielensis
Quercus engelmannii
Quercus garryana
Quercus john-tuckeri
Quercus kelloggii
Quercus x macdonaldii
Quercus x morehus
Quercus pacifica
Quercus palmeri
Quercus peninsularis
Quercus parvula var. parvula
Quercus tomentella
Quercus turbinella
Quercus wislizeni

For more information about these trees, see the following resources:

SelecTree: https://selectree.calpoly.edu/
Jepsen herbarium: https://ucjeps.berkeley.edu/eflora/
Munz, Philip. A Flora of Southern California. University of California Press. Berkeley. 1974.

SOUTHERN CALIFORNIA BLACK WALNUT

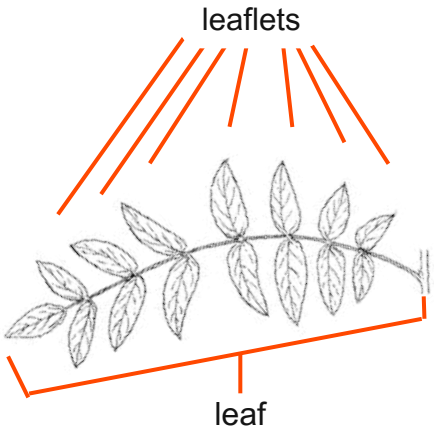
Juglans californica

The Southern California black walnut is a small to medium size tree that is commonly found on north-facing slopes in hilly neighborhoods of Los Angeles. Walnuts are a testament to the hardships of Southern California living - they often have dead branches or trunks from fire damage, drought stress, and insect attacks. But these resilient trees have evolved an ingenious response to damage and stress - they sprout new shoots of foliage from their base and rebuild their canopy whenever needed.

Unfortunately, there is one pressure that even the walnut cannot withstand: urban development. The already-limited habitat range for Southern California black walnut has decreased significantly due to urban development.

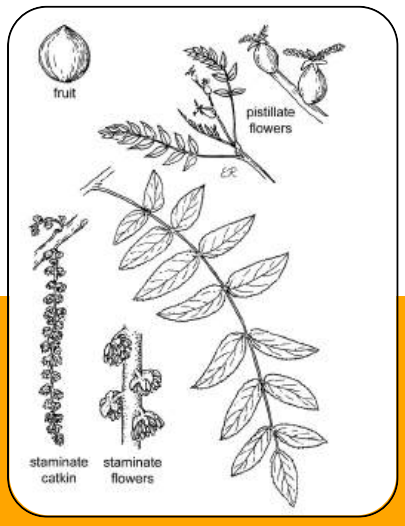
SOUTHERN CALIFORNIA BLACK WALNUT

Juglans californica



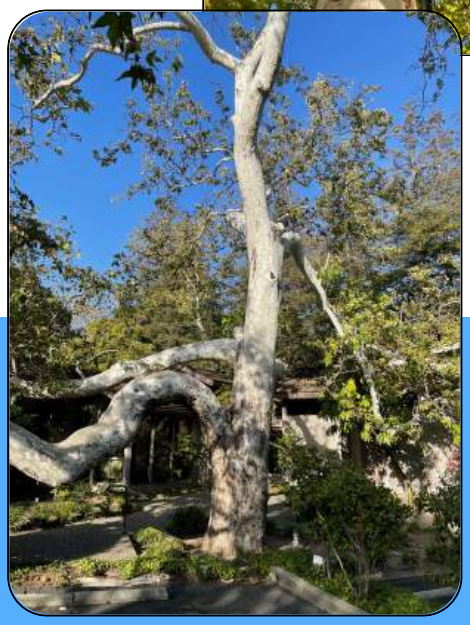
Key Characteristics:

- **Deciduous:** loses its leaves in winter
- **Leaves:** each leaf has an odd number of leaflets, usually between 11 and 15, but sometimes as few as 9 or as many as 17
- **Fruit:** round, about 1-inch diameter in size, aging from green to brown



WESTERN SYCAMORE

Platanus racemosa



The western sycamore, sometimes referred to as the California sycamore, is a large and striking tree. It can be found along wooded streambanks and canyons, in parks and home gardens, and lining the streets of Los Angeles. Although they can have stately, upright trunks, it's more common to see western sycamores with crooked or contorted trunks.

Western sycamore is another wildlife favorite. Its architectural branches are frequently used as perches and nesting sites for birds of prey and woodpeckers. Sometimes the smooth, clean appearance of the sycamore's bark is altered by an indigenous insect called sycamore borer. When this insect is present, bark may appear blackened, rough, blocky and crumbling. Even though sycamore borers affect bark appearance, they do not negatively affect tree health or structure.

The western sycamore readily hybridizes with other sycamore species (*Platanus* spp.). Some individuals have been observed to have attributes of two or more species.

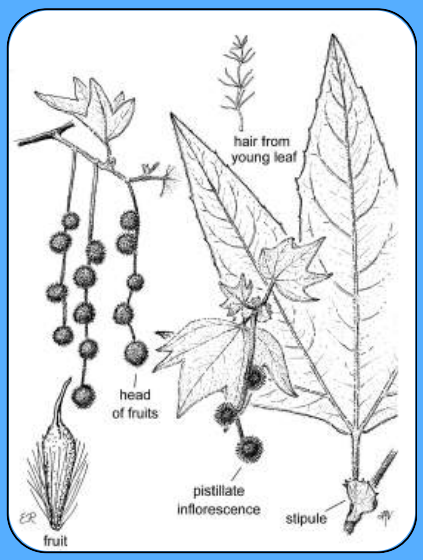
WESTERN SYCAMORE

Platanus racemosa

Key Characteristics:

- **Deciduous:** loses its leaves in winter
- **Bark:** smooth, creamy white bark weathers to mottled shades of gray before shedding in large, thin plates
- **Leaves:** 3-5 pointy lobes that are velvety when young and turn powdery to finely haired when mature; has a persistent stipule, a leaf-like "collar" at the base of each leaf
- **Fruit:** arranged in fuzzy balls that hang in strands of 3-7, often having a zig-zag appearance

common appearance of bark with sycamore-borer activity



CALIFORNIA BAY LAUREL

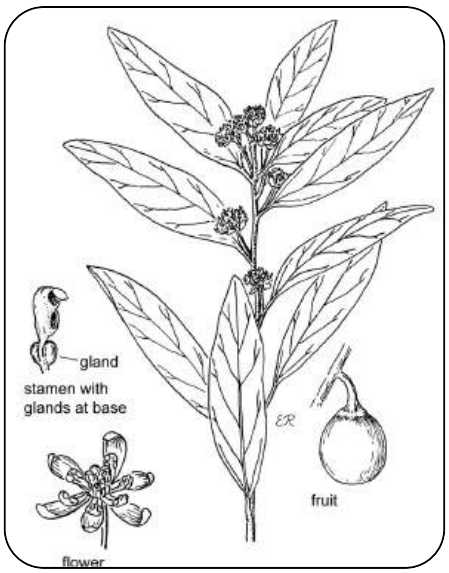
Umbellularia californica

The California bay laurel is usually found in the landscape as a large, multi-trunk plant with foliage touching the ground, but can grow or be trained as a single-trunk specimen. Though it is less-commonly found within the City of Los Angeles, it is occasionally found in the shade of other mixed-species natural forest areas.

The California bay laurel is a subtropical member of the laurel family that includes camphor and cinnamon. Its leaves have been used as treatment for headaches. It is most readily identified by its pungent, spicy scent when its leaves are crushed.

CALIFORNIA BAY LAUREL

Umbellularia californica



Key Characteristics:

- **Scent:** pungent and spicy foliage when crushed
- **Evergreen:** keeps its leaves year-round
- **Leaves:** oval-shaped, distinctly yellow central vein, tapering to a point, and arranged in a spiral pattern around the stem
- **Fruit:** grape-sized fruits forming at the ends of branches, aging from green to black
- **Flowers:** Small, creamy-yellow flowers at the ends of branches

MEXICAN ELDERBERRY

Sambucus mexicana

The Mexican elderberry, or blue elderberry, is the most adaptable plant on the protected tree and shrub list. The elderberry is considered a large shrub, but is also seen growing as a small tree. It grows on dry slopes as well as in wet streambanks, and tolerates sun as well as shade. Elderberry trees are very resilient; trunks that have fallen over will often continue growing on the ground.

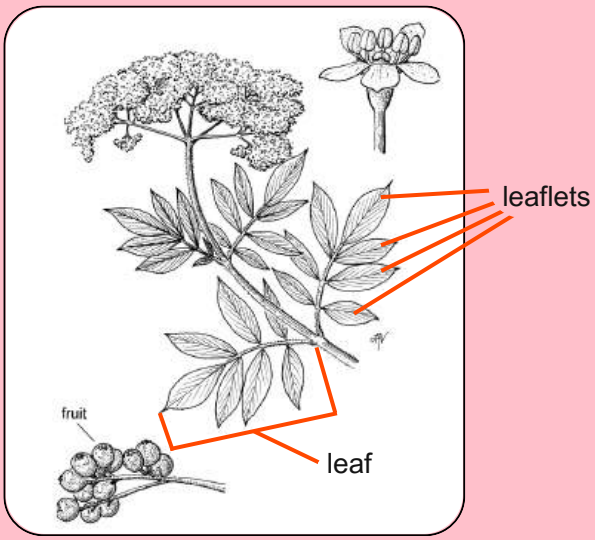
Mexican elderberry also provides important habitat for wildlife. Its plentiful berries are eaten by jays, sparrows, finches, warblers, waxwings, and numerous other birds.

MEXICAN ELDERBERRY

Sambucus mexicana

Key Characteristics:

- **Deciduous:** loses its leaves in winter, and sometimes loses its leaves in summer when drought stressed
- **Bark:** tan or light brown and fissured
- **Leaves:** odd number of leaflets, usually between 3 and 9, but most often 5
- **Flowers:** creamy white and arranged in wide "umbrellas" at the ends of twigs
- **Fruit:** blue berry with a waxy white coating
- **Scent:** leaves have a distinct vegetative odor when crushed, smelling like green bell pepper



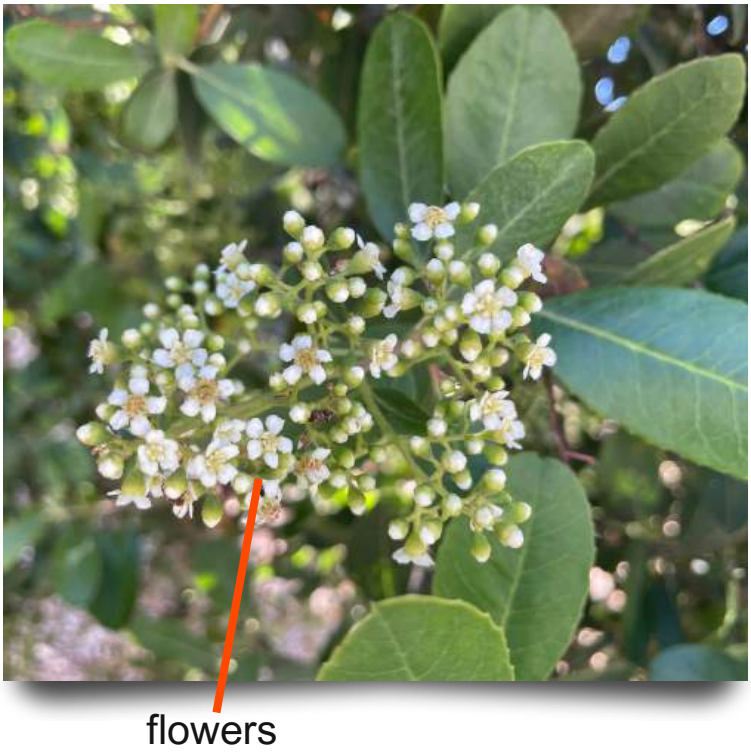
TOYON

Heteromeles arbutifolia

Toyon is also known as Christmasberry and California holly for its small, bright-red fruits and evergreen foliage. It most often grows as a large shrub with branches growing to the ground, although it can be trained into a “tree” form through pruning. This species is tolerant of a wide range of site conditions. It may be found in full sun on the tops of dry, south-facing slopes, or growing in the shade of an oak tree.

TOYON

Heteromeles arbutifolia



Key Characteristics:

- **Evergreen:** keeps its leaves year-round
- **Leaves:** oval-shaped, leathery and thick with regularly serrated edges, tapering to a point
- **Fruit:** bright-red, blueberry-sized
- **Flowers:** cream-colored, arranged in clusters

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PHOTOS

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https://selectree.calpoly.edu/

ILLUSTRATIONS

Reprinted with permission from the Jepson Herbarium, UC Berkeley. B. G. Baldwin, et. al., Editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.

This guide was compiled in 2023-2024


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