

## CITY OF CARMEL BY THE SEA RECOMMENDED TREE SPECIES LIST

An urban forest is an ecosystem that operates as a result of multiple interactions among vegetation, soils, water, insects, wildlife, climate, anthropogenic surfaces, and people. The goal of the Forest and Beach Commission is to manage that operation for the improvement of the urban forest and the quality of life of the City's residents.

Our forest is based on the concept of a two-story canopy consisting of native and indigenous trees and is one that the Commission feels is essential for the continuation of Carmel's forest. Monterey pines (*Pinus radiata*) and cypresses (*Cupressus macrocarpa*) are the primary upper canopy trees of the forest and the planting of these species shall receive the greatest priority in appropriate situations. Coast live oak (*Quercus agrifolia*) is the preferred lower canopy tree. In general, the native indigenous trees (pine, cypress, and oaks) will do well planted at any location throughout the City.

### *Pinus radita* – “Monterey Pine”

An attractive pine that creates the forested character of our village. A fast growing native species, which naturally occurs along the coast of central California, and can rapidly attain 70-100 feet. It is best suited to coastal landscapes where it becomes drought tolerant. Monterey pine has the form of a pyramid, but at maturity develops a rounded or flatish crown. Accepts lots of water, but can get overgrown and die at early ages, therefore, watering should be limited to the first few years after planting. (Native, evergreen, upper canopy tree).

### *Cupressus macrocarpa* – “Monterey Cypress”

Stately and conical when young. At maturity attains heights of 40 feet and more, and as wide. With supplemental water, it produces amazing growth. Planted away from the coast, it is susceptible to canker fungus. Fog and wind conditions will allow proper development and freedom from canker. (Native, evergreen, upper canopy tree).

### *Quercus agrifolia* – “Coast Live Oak”

Evergreen tree, developing a broad round dome from 30-60 feet high, 35-80 feet wide. Fast growing when young, especially with ample water. Supplemental watering of mature trees is not recommended. Native to coast ranges from Mendocino to San Diego counties. Has greedy roots and drops almost all of its old leaves in early spring. It is a magnificent year-round cover for small gardens. (Native, evergreen, lower canopy tree).

A healthy forest requires a variety of tree species to preclude a single disease from causing irreversible damage. Therefore, the following list of tree species, including growth characteristics, is provided for those circumstances where one of the preferred tree species is not appropriate. Native species are favored. The following trees have proved successful in our community given the proper growing conditions.

## Deciduous

### **Aesculus californica – “California Buckeye”**

Small single or multi-trunked tree that will grow to 15 to 20 feet. Native to dry slopes but will grow in a variety of cultural situations. Usually drop their leaves in early summer exposing its silver-gray bark and artistic structure. (Native lower canopy tree).

### **Liquidamber styraciflua – “Sweet Gum”**

Moderate growth rate with cone shape form at maturity. Deciduous trees with brilliant fall foliage. Grows to 40-feet in coastal climate, needs well-drained soil (Lower canopy tree).

### **Robinia pseudoacacia – “Black Locust”**

Deciduous tree. Fast growth to 40-70 feet with rather open, sparse-branching habit. Thorny branchlets and showy flowers form grape-like clusters. A very aggressive tree which tolerates the most adverse conditions. (Lower canopy tree).

### **Platanus acerifolia - “London Plane”**

Fast growing to 40-50 feet. Tolerant of most soils, smog, dust, and reflective heat. Deciduous tree that is fairly insect free, but subject to anthracnose, which causes early, continued leaf fall. Interesting bark texture and color. (Lower canopy tree).

**'Yarwood'** – Preferred variety due to its tolerance of poor environmental conditions and disease resistance. In addition, it exhibits fine ornamental attributes such as uniform pyramidal habit, dark green leaves and early development of attractive exfoliating bark. (Lower canopy tree).

### **Acer macrophyllum – “Big Leaf Maple”**

Deciduous tree, native to stream banks and moist canyons. Broad topped, dense shade tree that grows to 30 feet tall in our coastal area. Golden fall color. Tree produces fruit with twin wings that persist for a long time providing the tree with an interesting decorative feature. (Native lower canopy tree).

### **Ulmus parvifolia – “Chinese Elm ”**

Evergreen or deciduous according to the trees individual heredity. Very fast growth to 40 feet. Older trees have bark that sheds similar to sycamores. Makes a good patio tree, but has an aggressive root system. (Lower canopy tree).

**'Drake'** This Chinese elm variety forms a graceful, spreading, rounded canopy of long, arching, and somewhat weeping branches with two to three-inch-long, shiny, dark green, leathery leaves. The showy, exfoliating bark reveals random, mottled patterns of grey, green, orange, and brown, adding great textural and visual interest. It makes a good shade, specimen, or street tree, provided it is trained and pruned to develop a strong branch structure. (Lower canopy tree).