

# DALY CITY DROUGHT-TOLERANT TREE GUIDE

*Brought to you by:*



**Project Green Space**  
in the City of Daly City





# Project Green Space

in the City of Daly City

The City of Daly City received a \$25,000 grant from Cities of Service for Project Green Space. This exciting program aims to revitalize our urban forest with drought-tolerant species and rain gardens. Green spaces have multiple benefits in urban areas, from mitigating air pollution to reducing flooding during storms.

Project Green Space is powered by volunteers. Sign up to adopt a tree at your home or to volunteer with tree and rain garden planting. To get involved, please email or call Sustainability Coordinator, Stephen Stolte, at [ssolte@dalycity.org](mailto:ssolte@dalycity.org) or (650) 991-8126. Visit our website to learn more about the project and how you can help Daly City prepare for the future: [www.dalycity.org/ProjectGreenSpace](http://www.dalycity.org/ProjectGreenSpace).

*Generously funded by*

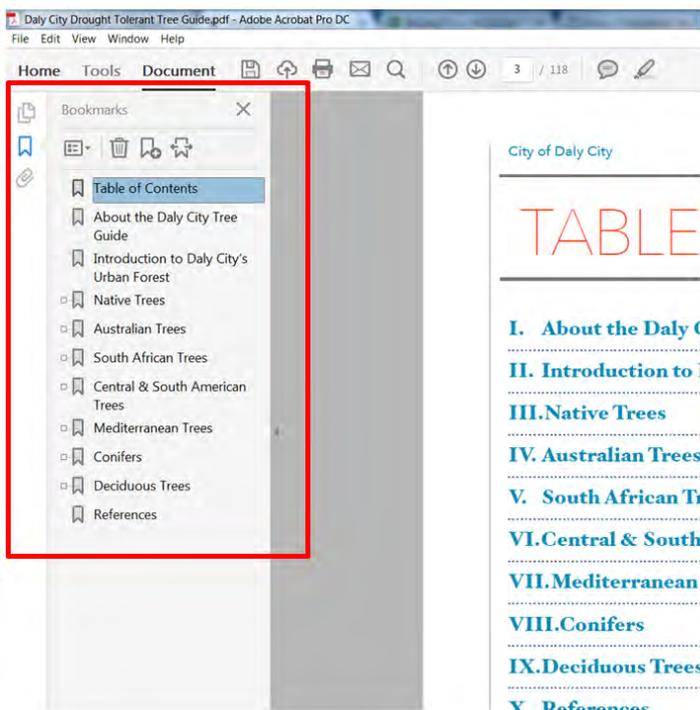


A national nonprofit organization, Cities of Service helps mayors and city leaders tap the knowledge, creativity, and service of citizens to solve public problems and create vibrant cities. We work with cities to build city-led, citizen-powered initiatives that target specific needs, achieve long-term and measurable outcomes, improve the quality of life for residents, and build stronger cities. Started in 2009 by New York City Mayor Michael R. Bloomberg, the Cities of Service coalition is now comprised of over 225 cities in the US and UK, representing nearly 55 million people in 45 states, and more than 10 million people in the UK.

# TABLE OF CONTENTS

<b>I. About the Daly City Tree Guide</b>	<b>2</b>
<b>II. Introduction to Daly City’s Urban Forest</b>	<b>2</b>
<b>III. Native Trees</b>	<b>8</b>
<b>IV. Australian Trees</b>	<b>24</b>
<b>V. South African Trees</b>	<b>86</b>
<b>VI. Central &amp; South American Trees</b>	<b>92</b>
<b>VII. Mediterranean Trees</b>	<b>100</b>
<b>VIII. Conifers</b>	<b>104</b>
<b>IX. Deciduous Trees</b>	<b>112</b>
<b>X. References</b>	<b>115</b>

\*NOTE: Use Bookmarks feature in PDF to quickly jump to different sections.



# About the Daly City Tree Guide

## How to Use This Guide

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In preparing for a changing climate where drought conditions become more prevalent, the City wants to ensure that the tree selections we make in current day will have the best chance for long-term survival. This list contains species that are drought-tolerant once established. All trees require moderate amounts of water, usually weekly, for up to three years to get established in their new location. Long-term, however, these trees should do just fine on our annual precipitation and fog for moisture and will not require watering by you. Once mature, these trees are characterized as low water or very low water users. All of the trees included here are highly adaptable in an urban environment, will perform well in our climate, and are not invasive species.

California gardens are evolving with the changing climate. As you will see in this list, it is still very possible to plant a range of truly beautiful trees that will withstand the effects of climate change.

- **Use the bookmarks in this PDF** to quickly jump to individual species or sections.
- **The title for each tree is hyperlinked** to a profile on that species, usually through Cal Poly's Urban Forest Ecosystems Institute (UFEI) tree database. Often, additional clickable links are provided in the text for more information on the species.
- The tree booklet is **organized by regions and types of trees**.

## We Want to Hear From You!

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Have you had success or challenges with any of these species in Daly City? Noticed any problems with existing specimens? Let us know so we can fine tune this list for our unique, maritime climate.

Do you want to plant something in your yard that is not on this list? That's OK! Let us know what you are thinking and we can help you make the best choice for your microclimate.

There are undoubtedly species that are drought-tolerant and would be fantastic additions to this recommended list of trees for our climate. Please get in touch if you have recommendations!

# Introduction to Daly City's Urban Forest

## Daly City's Climate and Soils

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Daly City resides in Sunset Zone 17, which is heavily influenced by marine conditions. Winters are mild and wet, frost is rare, and summers are cooled by fog and wind. When much of the Bay Area experiences frosts, Daly City and San Francisco usually do not (thank you, Pacific Ocean!). Our

famous marine layer provides a barrier to the sun's intense radiation and creates a cool, humid environment for us at ground level. While heat-loving plants may not grow to their full potential in many places, a variety of microclimates allow gardeners to grow many species from habitats in the tropics to deserts. The fog is also important for plant growth. Many species are evolved to harvest moisture from fog as a way to procure water in an otherwise arid environment. Summer precipitation is rare here, but many plants get along just fine because the marine layer provides necessary moisture. Our coast redwoods are a great example of a fog-dependent species.

To learn more about the sunset climate zones, [click here](#).

The eastern portion of Daly City experiences less fog than the western area that borders the Pacific Ocean. Thus, heat-loving plants may fare better in the eastern part of the City, and in other warmer microclimates. Locations closest to the ocean experience high winds and salt spray, which inhibit some plants from thriving. Seaside tolerance is listed for all species in this guide.

Daly City is also classified as USDA hardiness zone 10a. The USDA hardiness zones are based on winter temperatures and do not account for a variety of other factors. These zone classifications are not as useful here in coastal California because they are not very refined. For example, Tampa, Florida is also in zone 10a, yet our climates are very different.

Daly City resides in one of the world's best horticultural climates. Coastal California is one of five Mediterranean climates in the world, with dry summers and mild, wet winters. Rainfall and temperatures do vary across the world's Mediterranean climates, but seasonal patterns hold. Most of these regions are located near large bodies of water that moderate swings in temperature. Coastal California benefits from the upwelling of cold waters along the Pacific, which prevents our summers from getting very warm. Other Mediterranean climates include south and southwestern Australia, the Western Cape of South Africa, the regions surrounding the Mediterranean Sea, and central Chile. These small regions are home to some of the most diverse plant communities on Earth. The diversity rivals that of the Amazon rainforest! These regions have high rates of endemism and are also very fragile. Many plant species are threatened with extinction due to high human populations and habitat loss.

Most of Daly City sits atop former sand dune habitat, similar to the Outer Sunset neighborhood of San Francisco. Our sandy soils are perfect for drought-tolerant landscaping! Sand provides the necessary quick drainage required by these types of plants and, in general, tends to be more acidic, which is also preferred. Overall, we have great soil! Daly City was once a region with many nurseries supplying the cut flower industry.

## **Urban Trees in a Changing Climate — Creating a Resilient Urban Forest in Daly City**

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As the largest city in San Mateo County and the 6<sup>th</sup> most densely populated in the country, Daly City is truly an impervious, concrete jungle. The urban canopy is estimated to cover less than 5% of land area. Vegetation that does exist is largely introduced ornamentals and invasive species. As the current drought stretches into its 5<sup>th</sup> year, urban trees have steadily declined from disease and damage. This new climate reality destabilizes the landscape and can lead to localized flooding, landslides, and

accelerated cliff erosion, especially during increasingly intense weather events that are projected under climate change. As the “Gateway to the Peninsula”, two major highways spew air pollution into densely developed areas, harming public health. Our shrinking urban forest simply cannot counter these impacts.

Change is on the horizon, though. The City received a \$25,000 grant from Cities of Service for Project Green Space, a new program that empowers volunteers to plant trees and install rain gardens so that we can begin to grow our urban forest. Project Green Space will kick-off what will become decades of work to green urban spaces in our City.

## Benefits of Urban Trees

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Urban trees have tremendous value for public health, neighborhood beautification, and climate change mitigation and adaptation.

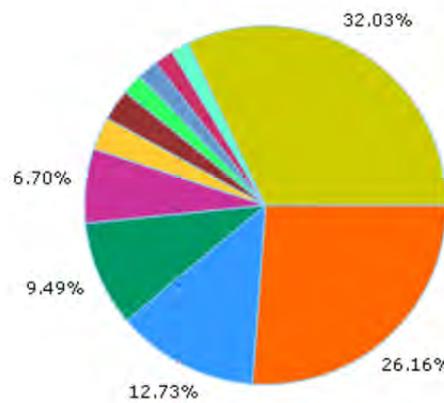
- ◆ Trees filter air pollutants, including particulate matter. This is important because parts of Daly City experience some of the highest pollution burdens in the entire County, mostly due to air pollution from highways.
- ◆ Trees suck up stormwater after heavy rainfall events (which are expected to intensify) and release it slowly, reducing flood risk.
- ◆ Trees stabilize soils prone to erosion.
- ◆ Trees and rain gardens purify water of contaminants and help recharge depleted groundwater resources.
- ◆ Trees capture and store carbon dioxide, the principal greenhouse gas responsible for climate change.
- ◆ Trees are even good for business! People visit and spend more money in business districts that are tree-lined.
- ◆ Green spaces help alleviate many of the stressors in a dense, urban environment.

Essentially, trees act as a form of insurance against the impacts of climate change and pollutants. Without them, we are completely exposed.

Our current urban forest consists of 7,415 individual trees that have a combined estimated value of \$18,802,720! This valuation, however, does not account for all of the myriad of benefits that trees provide.

The chart below depicts the top 10 species in Daly City. As you can see, the top three species account for almost half of all our trees. The most widespread tree, the Monterey Pine, is dying off from a pitch canker disease, which spreads quicker in drought conditions. This species alone, some 2000 individuals, is estimated to be worth \$5,000,000 to the City. Our next two predominant species, Monterey Cypress and Eucalyptus, are each valued between \$3,000,000 and \$4,000,000 each.

### Top 10 Species / Estimated Value



	Botanical	Common	Total	Pct.	Estimated Value
	Pinus radiata	MONTEREY PINE	1,940	26.16%	\$5,373,410.00
	Hesperocyparis macrocarpa	MONTEREY CYPRESS	944	12.73%	\$3,145,650.00
	Eucalyptus spp.	EUCALYPTUS	704	9.49%	\$3,732,360.00
	Tristaniopsis laurina	WATER GUM	497	6.70%	\$820,630.00
	Metrosideros excelsus	NEW ZEALAND CHRISTMAS TREE	220	2.97%	\$387,950.00
	Acacia baileyana	BAILEY ACACIA	210	2.83%	\$331,520.00
	Pinus pinea	ITALIAN STONE PINE	140	1.89%	\$401,400.00
	Myoporum laetum	MYOPORUM	137	1.85%	\$204,840.00
	Sequoia sempervirens	COAST REDWOOD	127	1.71%	\$481,620.00
	Maytenus boaria	MAYTEN TREE	121	1.63%	\$188,980.00
	Other	OTHER	2,375	32.03%	\$3,734,360.00
	<b>Total Trees</b>		<b>7,415</b>	<b>100%</b>	<b>\$18,802,720.00</b>

Overall, we do not have a diverse urban forest and this has much larger implications for long term resilience. Forests that are not diverse succumb to external shocks quickly, like disease, drought, and storms.

### Growing the Urban Forest

To create a resilient urban forest that provides multiple benefits, including carbon sequestration, the following design principles will be prioritized:

- ✦ Plant the species with the largest mature canopy size for the available planting space.
- ✦ Encourage the removal of impervious surfaces, like concrete, to be replaced by drought-tolerant plantings.
- ✦ Encourage planting of a diversity of species, so that no one species is overrepresented.
- ✦ Avoid harsh pruning techniques and allow trees to grow to their fullest potential and mature form.
- ✦ Only plant low and very low-water species from similar climates.

Budget constraints are a major challenge in providing tree care and maintenance. Newly planted trees require the most care during the first three years after planting, when they are getting established and adjusting to harsh conditions outside of the nurseries where they were grown. Over the next decade, the City will leverage grant funding and impact volunteering to grow the urban forest and ensure new trees are given the best start on life.

Daly City will need to find creative ways to restore its urban forest. The City recognizes that it cannot accomplish urban forestry goals alone and that residents and businesses will play a major role.

The City encourages everyone to plant trees on their properties and to contact the Sustainability Coordinator, Stephen Stolte, for tree planting requests in sidewalks and other public right-of-ways. Call (650) 991-8126 or email [sstolte@dalycity.org](mailto:sstolte@dalycity.org).

### *What does drought-tolerant mean?*

Our climate is indeed changing. Many of you have noticed less summertime fog and more sunny days. We have also entered our 5th year of drought. Climate change projections for California show increasingly arid conditions.

To prepare our urban landscapes for new climate trends, it is vital to select tree species that have evolved to withstand drought. As such, this booklet has compiled species from other climates that experience seasonal droughts as well as from more arid locations around the world.

Drought-tolerant does not mean no water! All of these trees, regardless of their ability to withstand drought, will need regular, weekly water for the first few years after planting in order to get established. Water weekly, slowly, and deeply to encourage a deep root system as opposed to more surface level roots that break concrete and invade sewer lines in their search for water.

### *Why aren't there any palms in the tree guide?*

Palms are beautiful and add considerable aesthetic value to a landscape. Many species provide fruit and shelter for wildlife as well. We encourage the planting of palms that are appropriate for our climate.

However, palms provide low potential for carbon sequestration, small mature canopy sizes, and cannot be cut back. Many are not appropriate for growing under utility wires. Project Green Space will only finance trees with large mature canopies in order to have the biggest impact on public health and climate change mitigation. We are simply trying to get the most bang for our buck.

For recommendations on palm species for our region, [click here](#) to visit Flora Grubb's page on "Growing Palms in the Bay Area".

### *How to avoid invasive species?*

Invasive species are non-native plants that have been imported to California and have spread rigorously to wild lands, colonizing new habitat and wreaking havoc along the way. Only a small fraction of non-native plants are considered invasive. Often, invasive plants outcompete and crowd out native vegetation because they are not kept in check by their natural predators or other limiting characteristics of their native habitats. Invasive plants can alter entire ecosystems by changing soil and water chemistry, consuming large amounts of water, and altering fire regimes.

The [California Invasive Pest Council](#) (Cal-IPC) is a great resource for information on invasive plants and what to do about them. [Click here](#) to refer to their helpful “Don’t Plant a Pest!” brochure for a list of trees to avoid in California. If in doubt about a tree that does not appear on that list, refer to the Cal-IPC website or google it. You can also call the City for advice.

# NATIVE TREES

## Natives in the City

Many of our native trees are not well suited for life on the streets, where they face challenges of compacted soils surrounded by concrete. Natives will thrive, however, in larger planting spaces like front yards and larger medians. Daly City's well-drained, sandy soil will also help natives cope better with life in an urban environment.

## Did you know?

Native species have evolved to thrive in California's poor soils and to withstand a lack of rainfall in summer. Native species are true low-water champions. The species in this section also provide valuable food and habitat for wildlife.

## San Bruno Mt State & County Park

San Bruno Mountain is home to 13 rare and endangered plants and three endangered butterflies. Intense urban development surrounds this open space. If you live along the park, consider planting native species to create a buffer zone for wildlife. Visit the [San Bruno Mountain Watch](#) website for more info on their programs and native plant nursery.

The unique Mediterranean climate, heavy marine influence, and frost-free environment of Daly City have allowed gardeners to grow plants from many parts of the world, from the tropics to alpine environments. Native plants, however, have been largely overlooked. Times are changing, though. The popularity of native plants is soaring, due in part to their low water needs amidst California's ongoing drought.

Daly City resides in the [California Floristic Province \(CFP\)](#), which is one of 34 biodiversity hotspots in the world. Over 60% of plant species are endemic, and found no where else. In current day, less than 25% of original vegetation remains intact. It's time to give native plants the attention they deserve. Let's start by planting them in our City!

Want to learn more about native trees? [Click here.](#)

## Recommended Species

### [\*California Buckeye \(Aesculus californica\)\*](#)

A prime example of a tree evolved for local conditions is the California Buckeye, native only to our state. This species is deciduous in summer! The Buckeye loses its leaves to cope with our climate's summer drought. Though trees will retain leaves to some extent when provided some summer irrigation.

The Buckeye bursts into a magnificent spring show with spires of fragrant white or pink-tinged blooms. Native pollinators go crazy for them. Interestingly though, the Buckeye is toxic to nonnative European honeybees, which did not coevolve with it. Best to choose something else if you are a beekeeper with hives at home.

Buckeyes are often multi-trunked with beautifully bright, white bark that really shines when leaves have dropped. They are low-growing, perfect for under power lines, and have a wide canopy.

[Click here for more info.](#)

**Characteristics:**

- ✦ 10-25 ft tall
- ✦ 20-30 ft wide canopy
- ✦ very low water
- ✦ low root damage potential
- ✦ good for planting under utility wires
- ✦ white/pink blooms and white bark
- ✦ good seaside tolerance

***Coast Live Oak (Quercus agrifolia)***

How lucky are we to have a native oak that does not lose its leaves?! That's right, the Coast Live Oak is evergreen and absolutely gorgeous. This is the only native oak that is native along the coast. These trees grow large and often wider than they are tall. Make sure to choose a planting location with plenty of room (4' x 4' basin or larger), some wind protection, and perfectly well-drained soil. Most of the sandy soil in Daly City meets that requirement. Do not water in the drip line (the area underneath the canopy) or provide summer water, except for newly planted trees getting established. Coast Live Oaks have evolved to thrive in our arid climate.

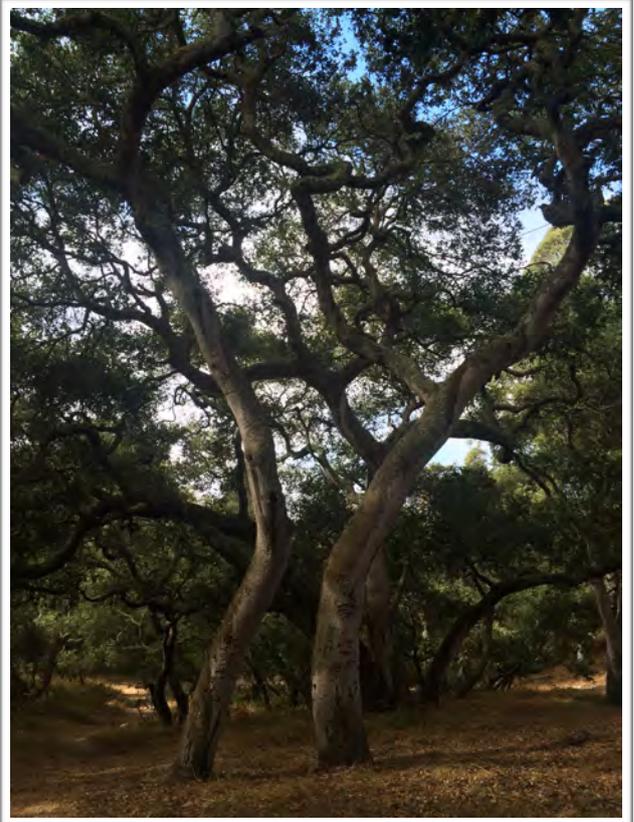
This species is susceptible to Sudden Oak Death, but it's less of a problem in urban areas. Just don't let the roots sit in wet soil to avoid any issues.

Slow growing at about 24 inches a year, but totally worth it. The Coast Live Oak is the venerated king of our native trees and a dominant fixture of much of our native landscape. You are highly encouraged to choose this species if you are planting in a front yard, where you'll have enough space!

**Characteristics:**

- ✦ 20-70 ft tall
- ✦ 20-70 ft wide canopy
- ✦ very low water
- ✦ seaside tolerance is good
- ✦ for large spaces only





^ Grove of Coast Live Oaks in San Francisco's Golden Gate Park

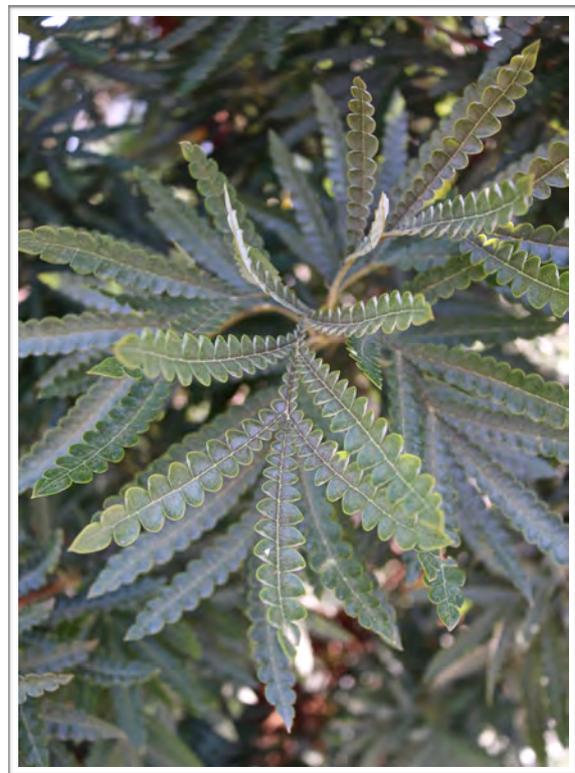
### *Catalina Ironwood (Lyonothamnus floribundus subsp. asplenifolius)*

The Catalina Ironwood is a threatened species native to the Channel Islands, off the coast of Southern California. Serrated, glossy, fern-like leaves create an airy canopy atop long, straight trunks of beautiful, peeling red and gray bark. This tree is not very wide and does not cast heavy shade. Clusters of white flowers appear in late spring and summer and then remain on the tree even after withering and drying out, making identification of this tree very easy. You will be able to spot the older flower clusters and also recognize the fern-like leaves. There are often new sprouts from the base of the trunk, so you can see the leaves up close.

While this species can grow to 60 ft tall in the Channel Islands, most planted in cities are slender trees up to 30 ft. This tree is not uncommon in Daly City and is steadily gaining in popularity. It does very well in coastal areas.

#### **Characteristics:**

- ✦ 20-35 ft tall
- ✦ 15-20 ft wide canopy
- ✦ moderate root damage potential
- ✦ white flowers, showy foliage
- ✦ good seaside tolerance, moderate salinity tolerance



^ fern-like leaves with serrated edges

< this species is known for its gorgeous, peeling bark





^< young tree looking lush

^ as they begin to mature, their long, straight trunks become exposed, revealing beautiful bark; you can also see the dried flowers still hanging in the canopy

< lush, fern-like leaves are slightly fuzzy

### *Fremontia* (*Fremontodendron californicum*)

Also known as Flannel Bush, this native tree features fuzzy, maple-shaped leaves and bright yellow cup-shaped five-pointed starry blooms in late spring and summer. Tree branches almost seem to be self-espaliereed, but in mid air, adding a stunning architectural element to the landscape. This is one of the most interesting and striking California natives. Leaves are coated in irritating hairs, so wear gloves if handling and possibly a face mask if raking leaves and kicking up a lot of dust.

This species is very sensitive to over-watering and does not like any summer water at all. It is best to plant a hybrid cultivar for the best chances of survival in a garden setting. Choose 'California Glory' or 'Pacific Sunset'.

Plant this with one of our blue-blooming native ceanothus and you'll create a perfect combination!

A new hybrid between *Fremontia* and the Devil's Hand Tree (*Chiranthodendron pentadactylon*) is becoming available, since the two species are closely related. The Devil's Hand Tree features red blooms and is a low water tree as well. It's harder to find, so it's been left of this list.

[Click for more info.](#)

#### **Characteristics:**

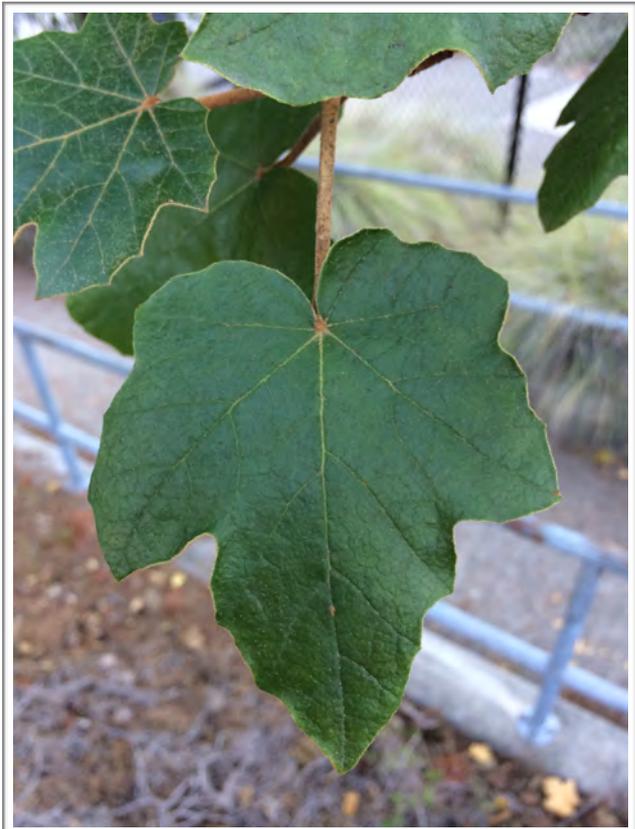
- ✦ 20 ft tall
- ✦ 20 ft wide canopy
- ✦ very low water
- ✦ low root damage potential
- ✦ good for planting under utility wires
- ✦ yellow flowers
- ✦ architectural form
- ✦ good seaside tolerance



^ Fremontia blooms appear in late spring and summer



^ Fremontia performs well as a street tree



^ maple-like leaves are coated in fuzzy hairs



^ bark is gray and smooth

> architectural structure



*Wild Lilac (Ceanothus 'Ray Hartman')*

California is a hotspot of ceanothus diversity, but only one species is used as a street tree: Ceanothus 'Ray Hartman'. This hybrid cultivar is trained to tree form and can grow two to three feet in a season! Blue blooms cover the dark green canopy of leaves in late winter/spring. Ceanothus do not like over-watering or summer water, but this cultivar is more forgiving of garden conditions. Provide summer water for the first summer post-planting, only to get it established. Prefers a location that is protected from strong winds.

Plant with other California natives for a low water, low maintenance garden!

**Characteristics:**

- ✦ 12-20 ft tall
- ✦ 15-20 ft wide canopy
- ✦ low root damage potential
- ✦ very low water
- ✦ good for planting under utility wires
- ✦ good seaside tolerance



^ row of 'Ray Hartman' behind Lincoln Center



< and >  
blue/purple  
blooms  
appear in  
late winter  
and spring



### Madrone (*Arbutus menziesii*)

This stunning native tree features reddish bark that peels away to reveal a layer of what appears to be a tree trunk dipped in liquid gold. Fragrant, pendulous white blooms give way to bright red fruits. This tree certainly leaves an impression on everyone that comes across it in the wild!

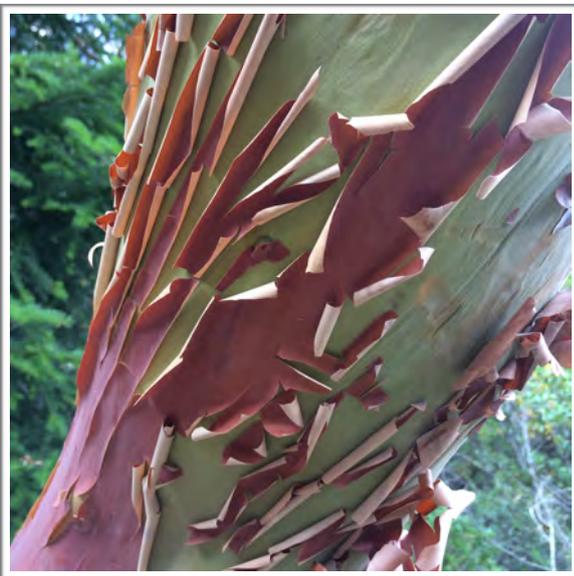
This species typically grows in a shrubby form but some do attain tree status, especially in our region. Prefers the shaded shelter of other native trees when young. This tree is temperamental in the garden setting and there is a good chance it will not survive after planting. But it's beauty makes it worth it!

While this species is not being offered through Project Green Space, you are highly encouraged to experiment with it on your own. It does grow right here in the Bay Area after all - how difficult can it be?! For all you die-hard native fans, this is the tree to master! Prefers acidic, organic soil with perfect drainage. Susceptible to Sudden Oak Death.

A better alternative is the Strawberry Tree (*Arbutus Marina*).

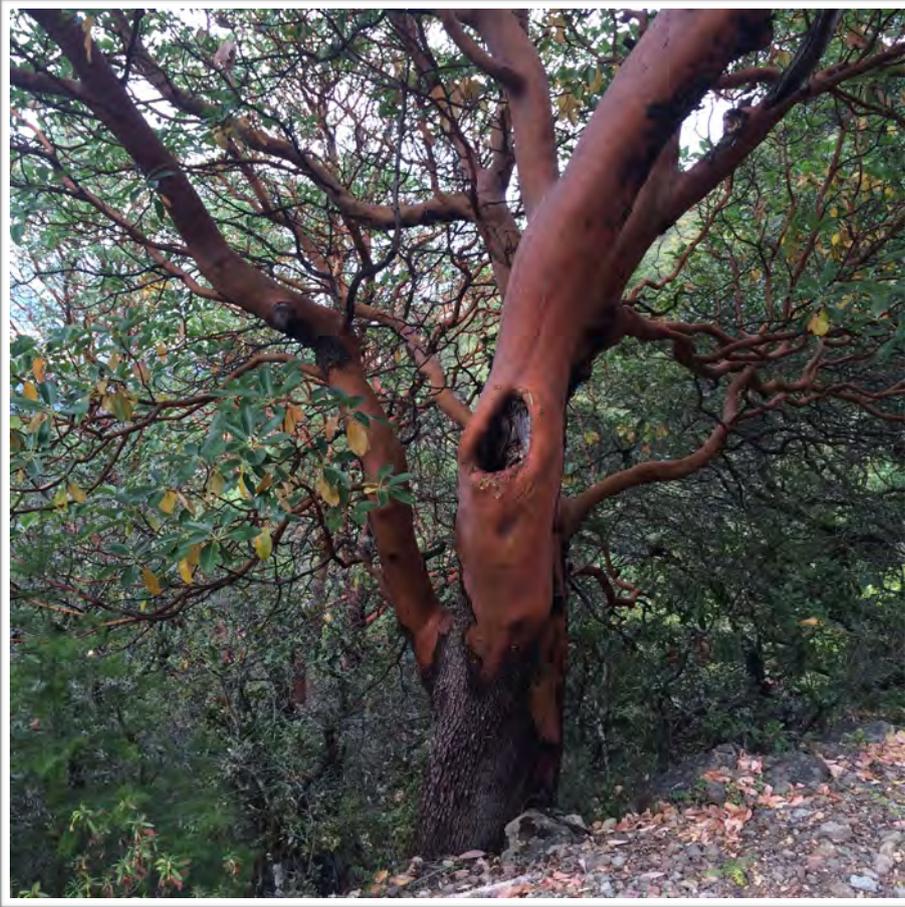
#### **Characteristics:**

- ✦ 50-65 ft tall (though likely much shorter)
- ✦ 50 ft wide canopy (though likely smaller)
- ✦ low root damage potential



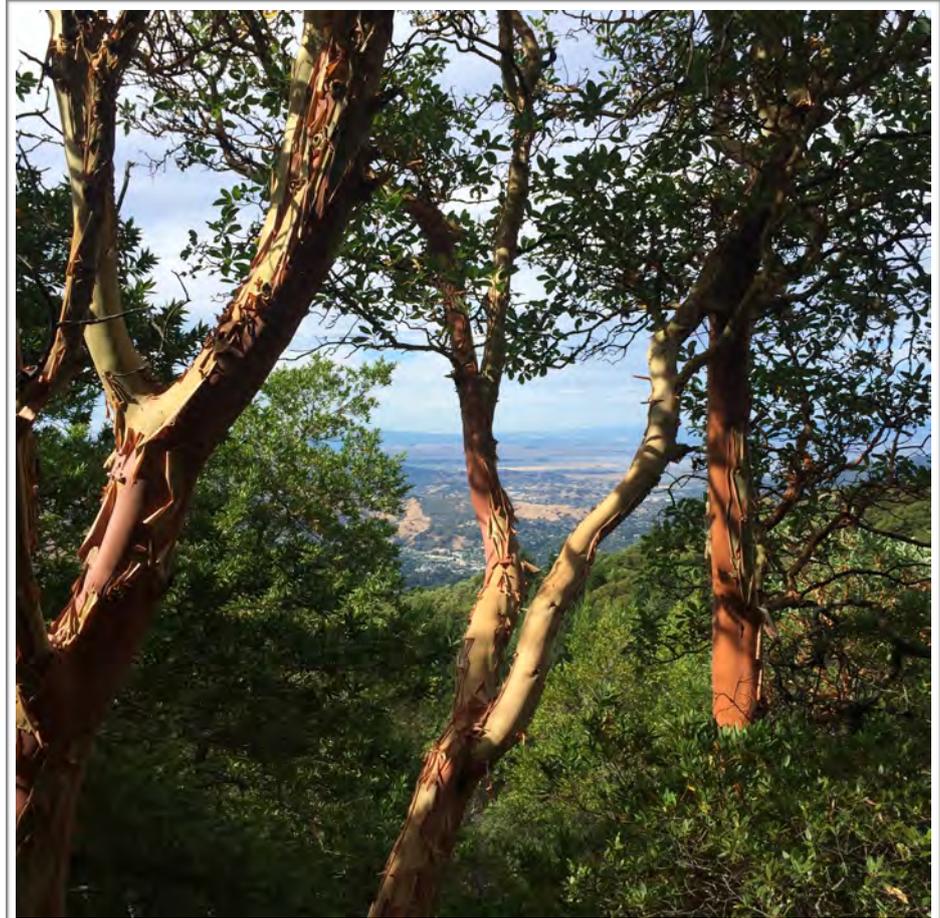
^> the peeling bark of this species is endlessly fascinating

> bright red fruits mature in the fall



< mature trees in the wild can reach large sizes

> observed on Mt. Tamalpais, Marin County



### Strawberry Tree (*Arbutus Marina*)

This tree is a hybrid of unknown parentage. It was introduced to the nursery trade from a specimen in San Francisco and is closely related to California's Madrone (*Arbutus menziesii*), but luckily takes much better to garden conditions. So, it's here on the native list despite having some European genetics.

Red peeling bark, flashy red and yellow fruit, and autumn blooms make this well behaved tree a favorite of many. There are great examples of the Strawberry Tree on Daly City streets, so we know it does exceptionally well in our foggy climate. Good alternative to the temperamental Madrone.

#### **Characteristics:**

- ✦ 40-50 ft tall
- ✦ 40 ft wide canopy
- ✦ low water
- ✦ low root damage potential
- ✦ good for planting under utility wires
- ✦ good seaside tolerance





^ fruits of various shades occur on the same tree

> bell-shaped flowers appear in fall

### Toyon (*Heteromeles arbutifolia*)

This small, native tree produces clusters of white flowers that are followed by loads of vibrant, red berries, hence the common names of California Holly and Christmas Berry. The toyon brings a burst of red color to our native landscapes in the fall and through winter. You can spot them by their red berries as you drive along I-280 or planted around City Hall. Berries provide valuable food for wildlife, particularly birds.

#### **Characteristics:**

- ✦ 15-25 ft tall
- ✦ 8-15 ft wide canopy
- ✦ low root damage potential
- ✦ great for planting under utility wires
- ✦ good seaside tolerance



^ white flowers appear in summer

^> red berries follow in fall and remain through winter

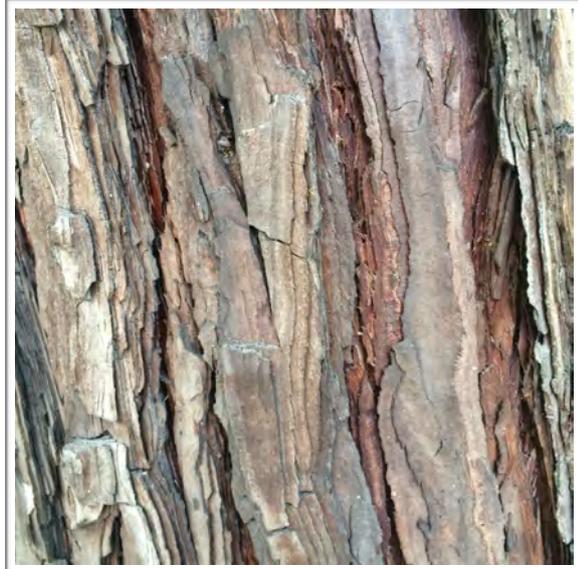


### *Incense Cedar (Calocedrus decurrens)*

This highly adaptable and long-lived conifer is native to much of the West Coast and prefers dry conditions. Incense cedar is a slender tree with fragrant foliage that forms a perfect conical shape. It looks great in both formal and informal garden settings. It is often planted as a wind break or trimmed as a hedge. While slow-growing during establishment, it picks up the pace later on. You will probably see it grow to 30 ft in your lifetime, and generations to come will see it grow to 70-90 feet at maturity. Pencils are made from the wood of this tree! Best to plant this in a location with plenty of room, like a front yard, wide median, or open spaces.

#### **Characteristics:**

- ✦ 70-90 ft tall (but not for a long time)
- ✦ 10-15 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ for large spaces only



> rough bark contains gray and rich red colors





**Albino Mutations in Conifers:**

This cedar is a chimera, displaying both albino and normal tissue on the same tree. Without chlorophyll, the albino leaves cannot photosynthesize. This tree is located on Oxford Street on the UC Berkeley campus. This type of mutation is incredibly rare and is also observed in our native redwoods. Albino redwoods are referred to as "ghost trees" and their locations are often kept secret to offer protection.

Studies of albino and chimera trees have revealed high levels of heavy metals in their foliage. There's clearly a lot more to the story!

[Click here to read more.](#)

^> Unidentified cedar species (maybe incense cedar), such a special specimen!



### *Santa Cruz Cypress (Hesperocyparis abramsiana)*

This species is difficult to find, but if you are lucky enough to get your hands on one, go for it! The Santa Cruz Cypress is an endangered species native to the San Francisco Bay Area. We need alternatives to the heavily planted Monterey Cypress, and it does not get better than this option. While it might not be available for planting through Project Green Space (we'll see!), it's good to keep this species on your radar. Gorgeous, slender, evergreen tree with fragrant foliage.

[Click here for photos and tree profile.](#)

\*There are other cypress species available through Project Green Space, in addition to *Hesperocyparis abramsiana*, which is difficult to find. If you want a cypress, please inquire about your options.

#### **Characteristics:**

- ✦ 50-70 ft tall
- ✦ 20 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside and salinity tolerance
- ✦ endangered species

# AUSTRALIAN TREES

## Australia's climate

Much of the Australian continent is Mediterranean in nature and thus, many species are perfectly suited to life in California. Species from Down Under have had considerably more time than species in California to evolve with drought conditions, and it is clear that they really thrive without much water. After all, Australia is the driest continent, besides Antarctica. Even species from more tropical regions of Australia will do well in arid climates.

## Did you know?

The island continent of Australia evolved in isolation ever since it split from the ancient supercontinent, Gondwana, over 45 million years ago! The incredible diversity of plants is due to this isolation.

## Megadiversity

Australia is one of 17 megadiverse countries on Earth, with a high rate of endemism. South Africa, Mexico, and the United States also make that list (and are home to some of the trees in this booklet). A whopping 92% of vascular plant species in Australia are not found anywhere else!

The South and Southwest regions of Australia are classified as a Mediterranean climate, just like here in California. Thus, many Australian trees perform very well in our area and have become popular choices for the dry garden. You will undoubtedly recognize many of the trees in this section.

Prepare to be amazed by the diversity of Australian species! This section will present some of the major genera of Australian trees with details on individual species, and then highlight some other outstanding choices from the continent.

## Recommended Species: Acacia

There are 1350 species of acacia in the world and 1000 occur only in Australia where they are referred to as “wattle”. Wattles are the largest genus of vascular plants in Australia.

[Click here for more info on acacias.](#)

Some of the more readily available species are highlighted below:

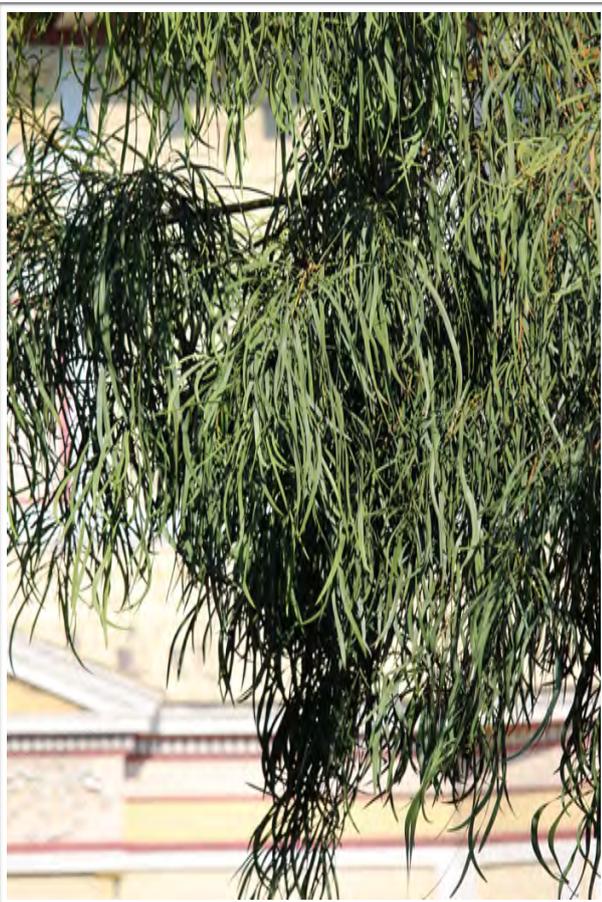
### *Shoestring Acacia (Acacia stenophylla)*

This is simply a fantastic tree, all-round! Very attractive, highly adaptable, fast-growing species with thin, weeping foliage and fragrant white/yellow blooms followed by ornamental seed pods. This is a small to medium sized tree that will not overwhelm a space. And, this tree casts light shade—not a characteristic you come across all that often in trees. If planting in your front yard, you'll be able to plant other drought-tolerant plants underneath this acacia without worrying they won't get enough sunlight. What is most interesting about the Shoestring Acacia is that in the event the tree is damaged or the trunk is snapped, it has the amazing ability to resprout from the base, forming a new, gorgeous, multi-trunked specimen. Life in a concrete jungle can be challenging, but this tree is tough as nails. Highly recommended!

**Characteristics:**

- ◆ 20-30 ft tall
- ◆ 10-20 ft wide canopy
- ◆ low root damage potential
- ◆ good seaside tolerance
- ◆ can resprout from base

> young tree with pleasing form and wispy canopy



^ foliage is long and slender



^ tree miraculously resprouting after being cut back



< this species makes a great street tree, all-around



^ crooked photo, straight trees



^ tree that had been cut back to the ground (due to damage) has respouted as a multi-trunked specimen

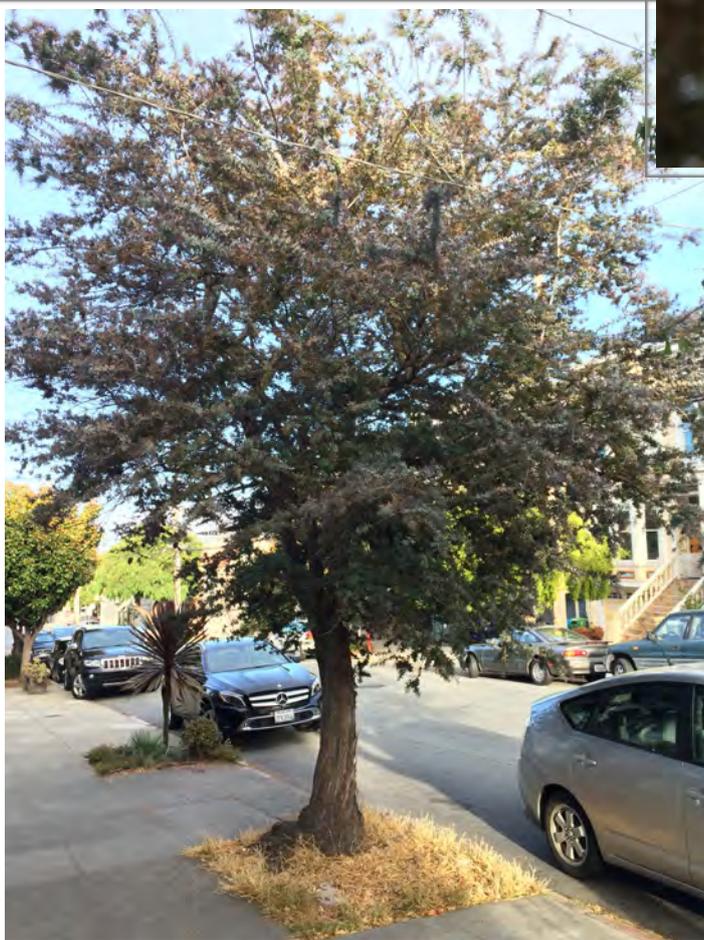
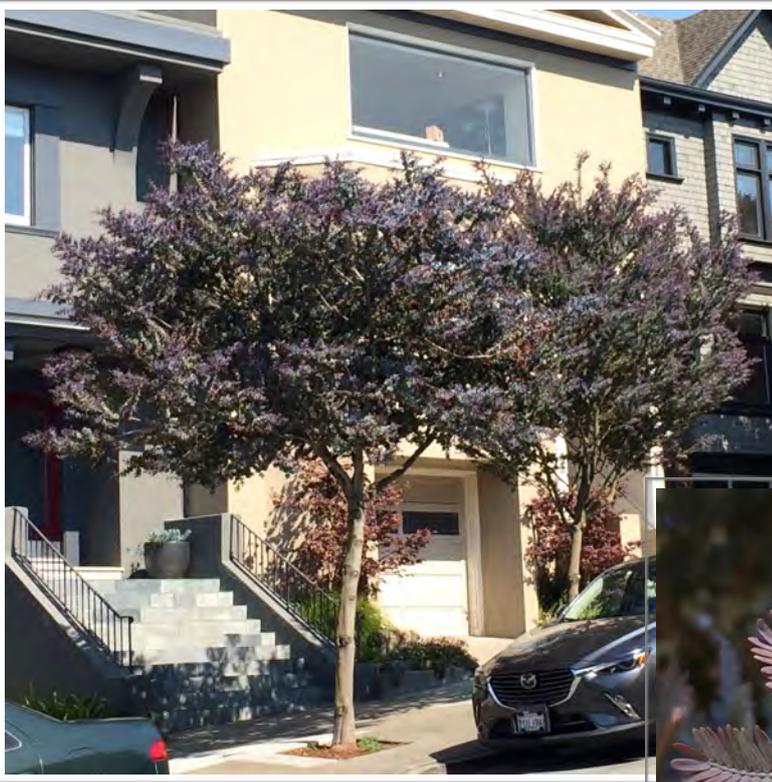
### Purple-leaf Acacia (*Acacia baileyana* 'Purpurea')

This is a purple—yes purple!—variety of Bailey's Acacia. This fast-growing (up to 3 ft in a year!) and highly adaptable tree produces an airy canopy of feathery leaves that emerge purple and mature to a blue-gray color. Massive winter/spring show of little, yellow, pom-pom flowers coat the canopy, followed by ornamental purple seed pods. Everyone always admires this tree when encountered on the street. While roots can be invasive, concrete damage has not been observed in the area, so just make sure to encourage a deep root system early on with slow, deep, weekly watering. This is truly a low-water species once established.

#### **Characteristics:**

- ✦ 20-30 ft tall
- ✦ 20-30 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance





^^ foliage emerges purple

^ bark is usually smooth

< makes a great, and interesting, street tree

### *Pearl Acacia (Acacia podalyriifolia)*

This quick-growing tree is so very beautiful, almost luminescent! It stands out in the landscape very well as an accent tree and is perfect for the dry garden. The blue/gray leaves are covered in white fuzz, and are very fun to pet! You won't be able to resist. This tree bursts with fragrant, yellow, pom-pom flowers in winter to spring. The bright pop of color is a welcome sight on short winter days. New growth stands out in a lighter color than mature leaves and the bark is a silvery blue color!

#### **Characteristics:**

- ✦ 10-20 ft tall
- ✦ 10-15 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires



> yellow blooms and fuzzy silver foliage





< new growth emerges lighter colored



^ and ^> trees feature airy canopies

> foliage is covered in silver hairs

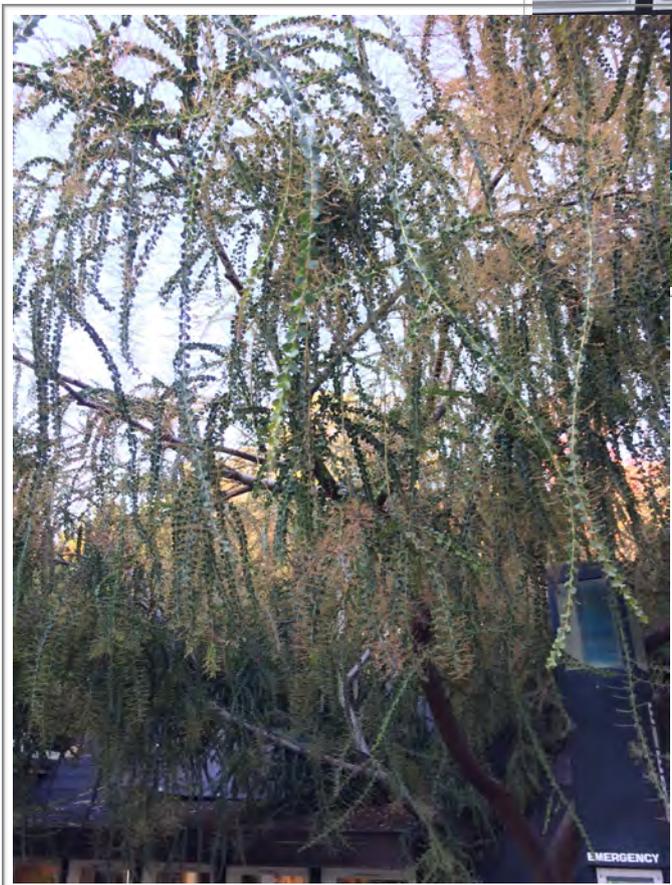
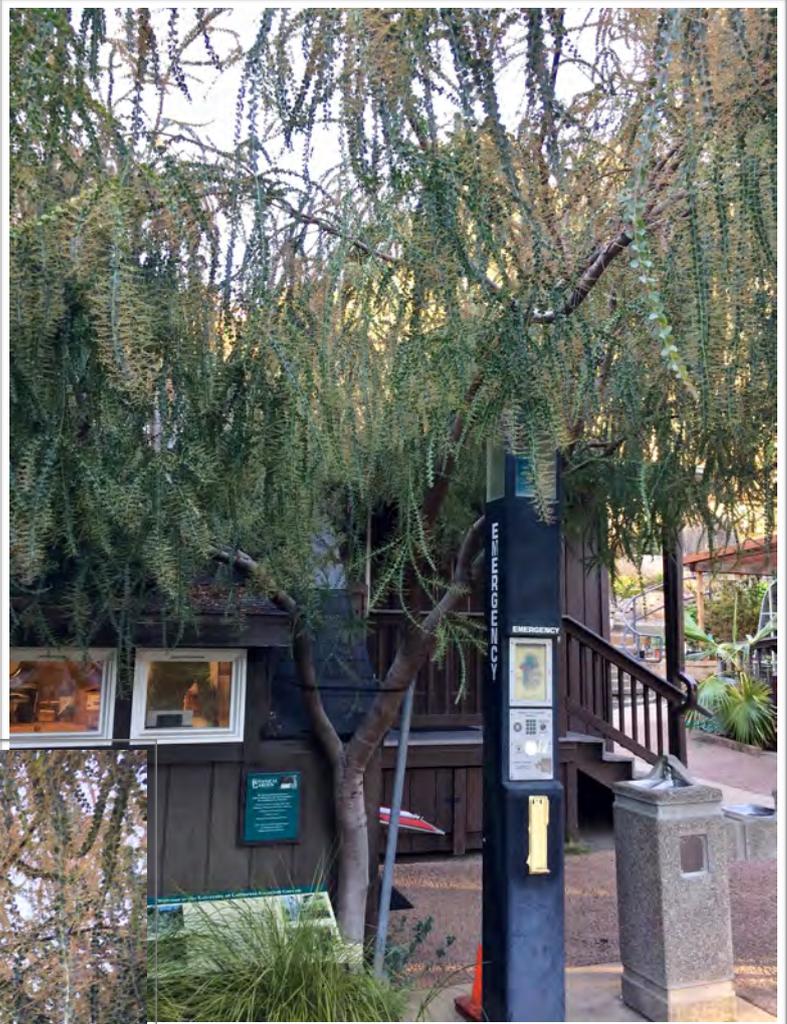


*Owen's Wattle (Acacia pravissima)*

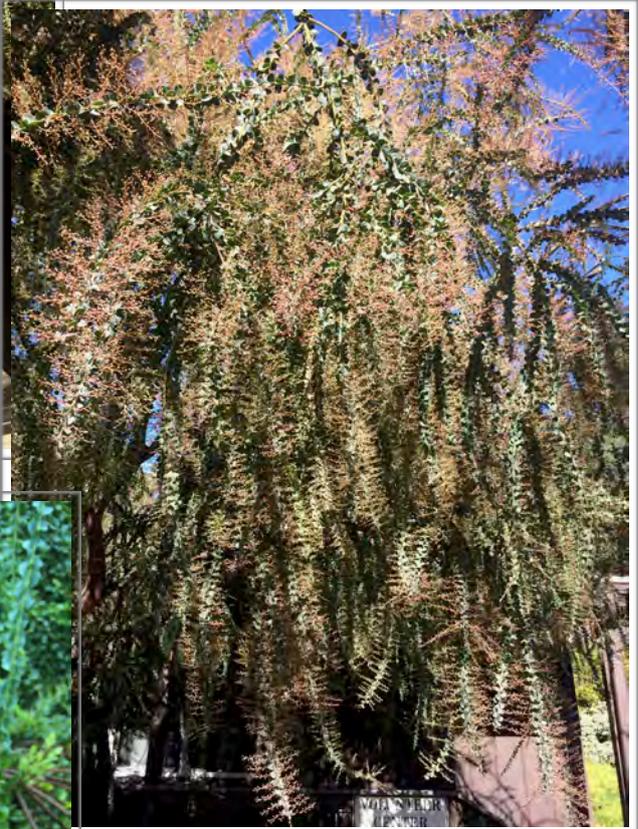
This quick-growing tree takes on a beautiful, weeping form with small, green, triangular-shaped leaves arranged tightly along branches. The leaves are attention-grabbing! Fragrant, yellow, pom-pom flowers emerge in late winter and spring. This tree casts moderate shade and looks fabulous with dry garden plants below it.

**Characteristics:**

- ✦ 12-20 ft tall
- ✦ 5-10 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires



^ airy canopy with dangling branches at the entrance to the UC Berkeley Botanical Gardens



^ tree getting ready to bloom

< leaves looking vibrant during growing season

### Weeping Acacia (*Acacia pendula*)

This moderate-sized tree produces a graceful, weeping canopy of light blue/gray lanceolate leaves. This isn't the quickest grower, but it's worth the wait. Mature trees can become downright phantasmal, with long, drooping branches and silvery foliage. People are quick to marvel at these long-lived specimens. Yellow flowers appear in spring, but it's more about the foliage and form with this species. Trees have an upward, vertical habit while retaining the weeping nature of their branches.

[Click here to learn more about \*Acacia pendula\*.](#)

#### **Characteristics:**

- ✦ 20-30 ft tall
- ✦ 15-20 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires

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### River Wattle (*Acacia cognata*)

This quick-growing acacia features thin, bright green foliage with a weeping form. The cultivar 'Lime Magik' has light green foliage. The branches are somewhat pendulous, but it's really the drooping leaves that give this tree its soft, lush look. The canopy is dense. A smaller cultivar, 'Cousin Itt', is more commonly available as a low-growing shrub, but the tree form is oh so beautiful!

#### **Characteristics:**

- ✦ 20-30 ft tall
- ✦ 20-30 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires

## Recommended Species: Eucalyptus

There are over 700 species of Eucalyptus and only 15 species are found outside of Australia. The genus displays outstanding diversity, having colonized almost every type of habitat in Australia. There are a variety of flower colors, leaf forms, bark textures and colors, and tree sizes and shapes. Many species, and in particular the Blue Gum (*Eucalyptus globulus*), have been heavily planted outside of Australia and provide valuable sources of timber.

[Click here for more info on eucalyptus.](#)

The all-star eucalyptus species featured for our climate is the:

### *Red Flowering Gum (Corymbia ficifolia)*

This highly desirable tree is an all-time favorite of so many people! Clusters of exotic flowers burst into bloom in late summer and also throughout the year, coating trees in show-stopping colors of deep red, pink, bright orange, salmon, or white. Large leaves are fragrant. Red flowering gums are fast growing and thrive in our coastal location, where they don't mind dry conditions, salt spray, or even smog. These are moderately large trees, but they don't overpower a space. They do not shed bark like other eucalyptus species. If you are looking for a tree with an impressive floral display, stop reading here and choose *Corymbia ficifolia*. It is an excellent street tree, all-round. Interestingly, it is native to an extremely restricted range of only one square kilometer in southwestern Australia. How lucky are we to have the perfect climate for this species here in Daly City?! Best to plant in a larger space, 4' x 4' basin or larger. This species will not tolerate turf planted under its canopy. Do not irrigate grass under the drip line (the area under the canopy), better to mulch.

#### Characteristics:

- ✦ 18-45 ft tall
- ✦ 15-60 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance





< blooms peak in summer months, but also reappear throughout the year

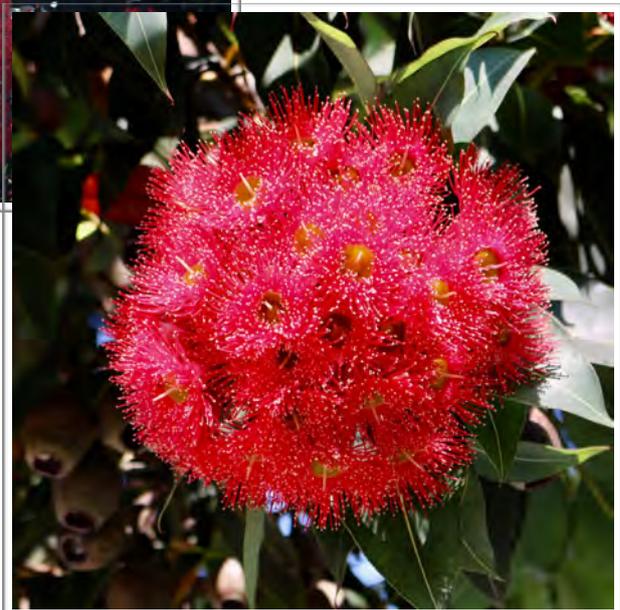
^ non-peeling, attractive bark

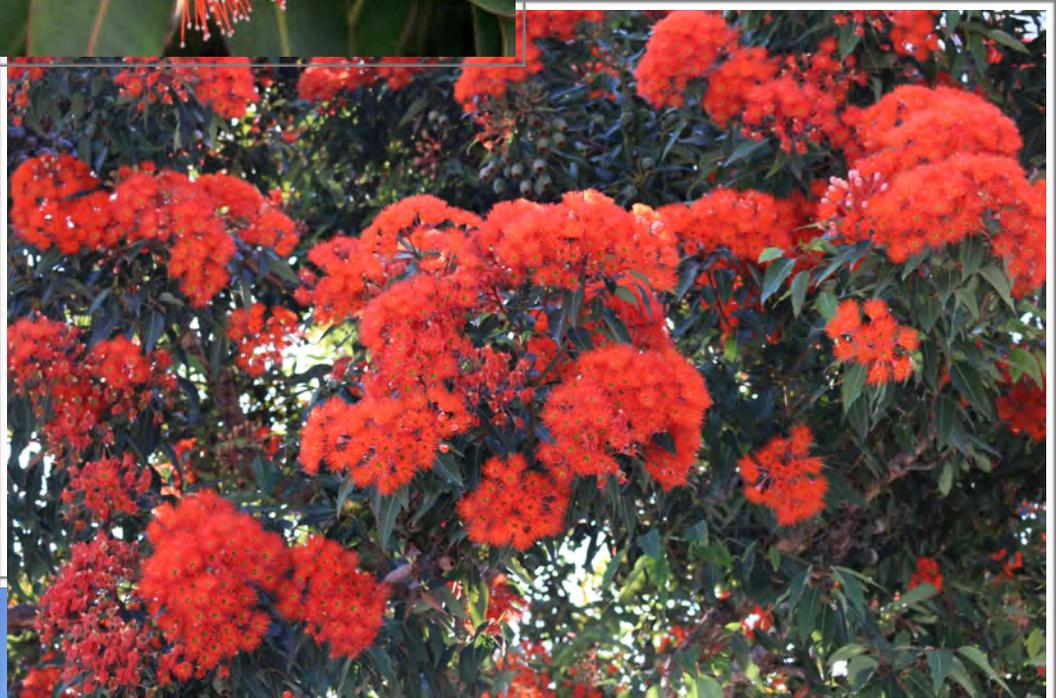


^ flower color can range from orange to red to pink and even white



^ and < red blooms are striking





< range of colors on the same city block in San Francisco

## Eucalyptus with silver/gray/blue foliage:

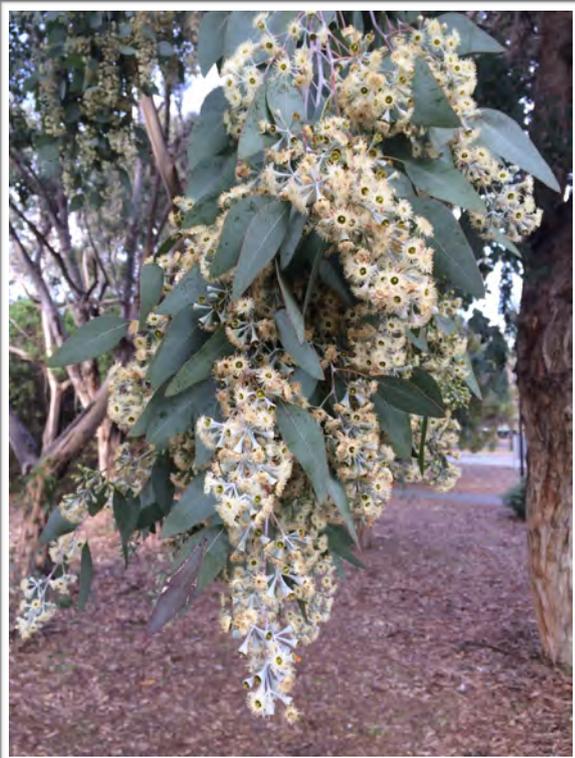
This section includes eucalyptus species that are renowned for their silvery foliage. All of these species are used in the floral industry for their highly ornamental and fragrant leaves. The list starts with the largest trees and ends with the smallest.

### *Silver Dollar Gum (Eucalyptus polyanthemos)*

The Silver Dollar Gum is a fast-growing eucalyptus species that features beautiful, round, blue-gray foliage that hangs down off branches for a weeping effect. The tree creates a very pleasant atmosphere under its oval-shaped, weeping canopy, and is moderately sized. Juvenile foliage is used in the floral industry and is often the type of eucalyptus cuttings you buy at the farmers market or florist that smell and look amazing. This is a popular street tree in much of California, but has not been widely planted in our area. There are some planted along I-380 connecting I-280 to 101. Easily identified by weeping, silver foliage that is round (not lanceolate like other eucalyptus species).

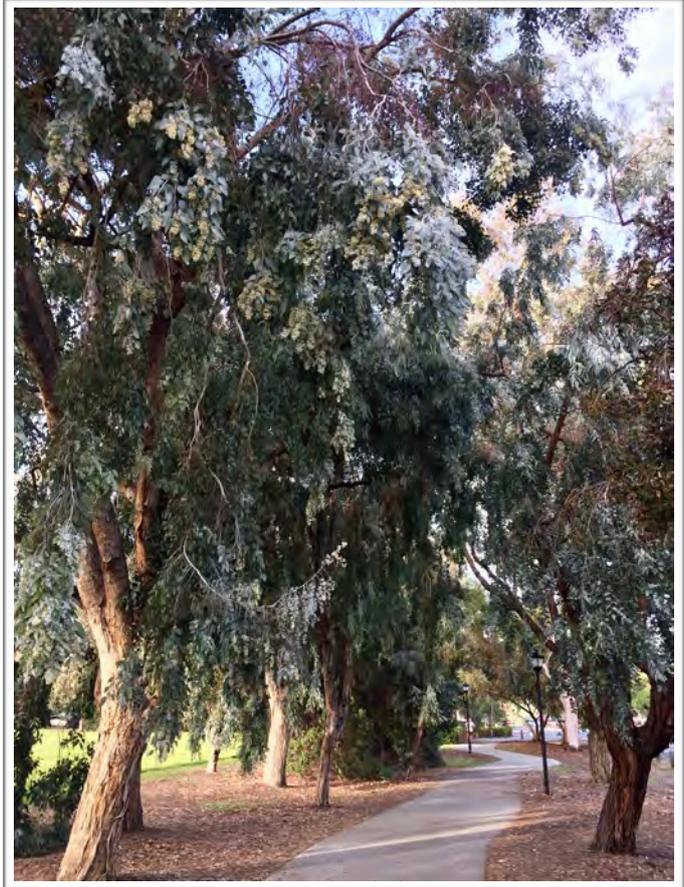
#### Characteristics:

- ✦ 30-75 ft tall
- ✦ 15-45 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance



< white flowers hang en masse in the fall

^ mature tree has a silver glow



^^ bark is rough and non-peeling

^ leaves are round, hence the name Silver

Dollar Tree

^> weeping canopies provide nice effect at

street level

*Argyle Apple or Silver Dollar Tree (Eucalyptus cinerea)*

This is a stunning tree! As with most eucalyptus species, it displays dimorphism in its leaves. Juvenile leaves are often used in the floral industry for their powdery blue/silver coloration and aromatic qualities. While mature leaves in many other species become less showy, the Silver Dollar Tree retains its signature silver color in its lanceolate mature foliage, giving this tree an overall silver look. Bark is a deep red color and contrasts very nicely with the silver leaves. These trees are fast-growing, moderate to large specimens and cast moderate shade. Branches often hang down in a weeping form and are often adorned by small white and pink flowers.

**Characteristics:**

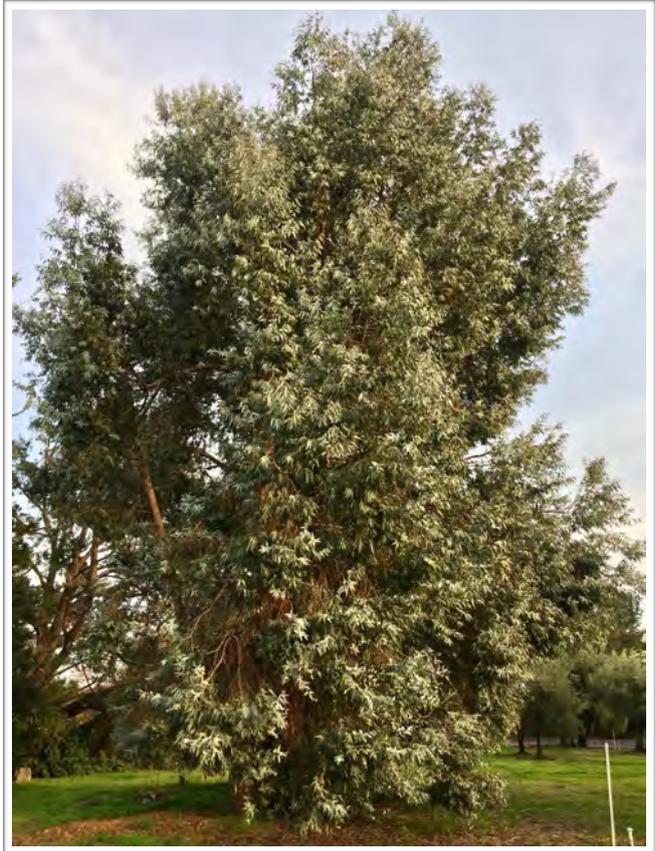
- ✦ 20-55 ft tall
- ✦ 20-45 ft wide canopy
- ✦ seaside tolerance is good
- ✦ moderate potential for root damage



^ pink and cream flowers appear throughout the year



^ trees retain stunning, silver foliage at maturity



^ two types of foliage on the same tree,  
mature leaves are long and thin and juvenile  
leaves are rounded; mature leaves retain silver  
color

^ trees that have not been pruned to expose trunks

### *Silver-Leaved Mountain Gum (Eucalyptus pulverulenta)*

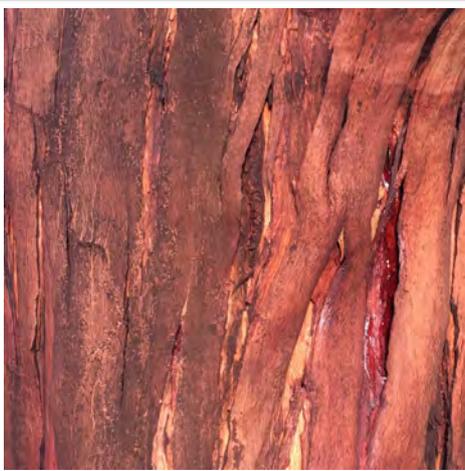
This is the species used most extensively by the floral industry and there's no doubt why. The foliage is a show-stopping, gorgeous, powdery blue. There's really nothing else like it. The other common name for this species is the Powder Gum. This tree does not display dimorphism in its leaves. Instead, it retains its extremely showy juvenile foliage throughout its entire life. Small, round leaves are arranged tightly along branches set against bark that is a showy red color and peels off in strips. White flowers and seed pods form in the tight spaces between leaves. Moderately fast growing. This tree can take a good pruning. In fact, it will stimulate robust, new growth. These trees are grown for cut foliage with multiple cycles of hard pruning throughout the year, after which foliage is bundled and sold. To keep this tree looking fresh, it will need hard pruning. Left to its own devices, the Silver-leaved mountain gum will produce a very airy canopy that blocks almost no sunlight, and may become a bit straggly over time. You can see some of these trees (the 'Baby Blue' cultivar, which grows shorter), at the farmed parcel along Colma Blvd near the Colma Home Depot. Their striking blue/silver color will pop out in the landscape — you can't miss them!

#### **Characteristics:**

- ✦ 15-30 ft tall
- ✦ 6-15 ft wide canopy
- ✦ good for planting under utility wires
- ✦ good seaside tolerance



^ trees have very airy canopies of tightly bound leaves



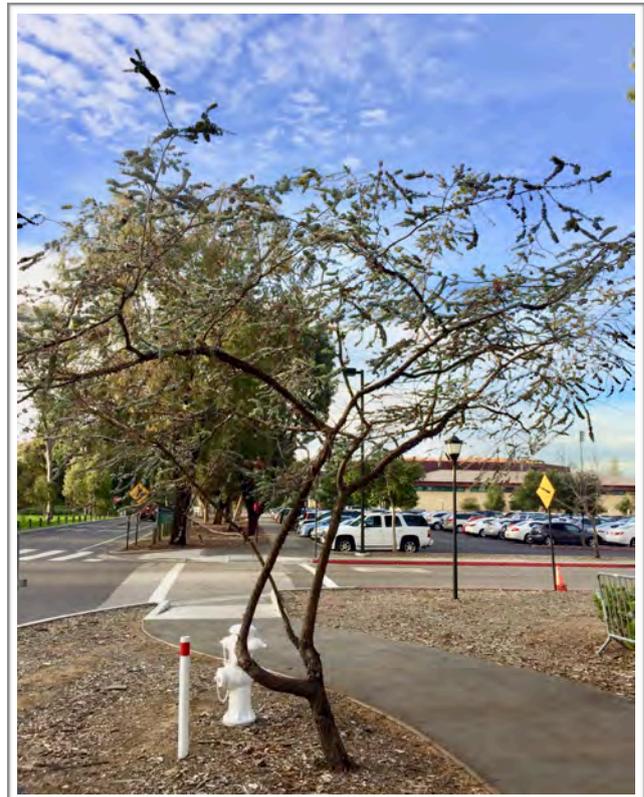
- ^^^ this tree is cut back to ground level three times a year to harvest foliage for the cut flower industry
- ^^ leaves are highly ornamental, seed pods are small
- ^ bark can be a variety of colors, including red

### *Book-leaf mallee (Eucalyptus kruseana)*

This slow-growing species is very similar to *Eucalyptus pulverulenta*, but its harder to find. It is a stunning, small accent tree that features powdery, blue, round leaves that are tightly arranged along branches. It can be distinguished from *Eucalyptus pulverulenta* by it's yellow flowers that form along the branches (as opposed to white flowers) and slightly smaller leaves (although you'd need to compare them side by side to really notice the difference). Without hard pruning, this species will create an airy, open canopy.

#### **Characteristics:**

- ✦ 5-15 ft tall
- ✦ 8-15 ft wide canopy
- ✦ good for planting under utility wires



- ^> trees have extremely airy canopies, especially when not pruned back to refresh growth
- ^ flowers are a creamy yellow
- > leaves are tightly bound and slightly smaller than *Eucalyptus pulverulenta*

### **Are Blue Gums (*Eucalyptus globulus*) an invasive species?**

In short, not really. That might be shocking to many of you! After all, eucalyptus have gained a bad reputation in California due to the widespread planting of the Blue Gum (*Eucalyptus globulus*) in the 1800s. The California Invasive Pest Council (Cal-IPC) recently updated the invasiveness rating for Blue Gums from moderate to limited. To read the Cal-IPC report, [click here](#). This species is really only observed spreading at former planting sites, meaning that trees have, over time, created groves in many of the places where they were originally planted, slowly expanding outward from the initial planting site. Blue Gums are not seen invading wild lands; they were planted in wild lands to begin with! Not all stands of eucalyptus are expanding. Along the CA coast, the Blue Gum does very well because it excels at collecting fog, and expansion of groves is documented. Not so much further inland. Widespread seed dispersal is not occurring and seeds do not have a high germination rate anyway.

It is also important to note that the potential for Blue Gums to increase fire risk is a bit complicated. Dense stands of Blue Gums can indeed hold more fuel load than native habitat, but there is much more to the story than that. The fires in the Oakland and Berkeley hills in 1991 vilified the Blue Gum. Now, management policies for Blue Gums in the East Bay hills are highly contentious. For a good read on the subject in *Bay Nature* magazine, [click here](#).

Regardless of your current feelings on the Blue Gum, it is important to remember that the *Eucalyptus* genus is incredibly diverse, with some 700 species. With this diversity comes a full range of sizes, shapes, colors, and growth rates. There are many well-behaved species that will do well in our area and have very low invasiveness potential.

## **Small to Medium Eucalyptus Trees**

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Not all eucalyptus species grow to huge sizes, like the Blue Gums, and many are well adapted to life in more confined spaces. The eucalyptus on this list do not grow more than 30 ft tall and would make great additions to our City's streets. These species are considered "mallees", meaning they are multi-trunked. For the Pacific Horticulture article, *Small Eucalyptus for Western Gardeners*, [click here](#).

### Red-Flowered Mallee (*Eucalyptus erythronema*)

This quick-growing, multi-trunked eucalyptus features stunning white bark covered in white powder and bright red/pink flowers in summer. Young branches are a bright red color. Leaves are green/gray and lanceolate like many eucalyptus. This species stands out for its nice structure and bark color.

#### **Characteristics:**

- ✦ 12-25 ft tall
- ✦ 10-15 ft wide canopy
- ✦ seaside tolerance is good



- ^ multi-trunked species can be very desirable
- ^< bark is exfoliating, but not messy
- < young stems are bright red and add visual interest

### [Red-Cap Gum](#) (*Eucalyptus erythrocorys*)

This quick-growing species is known for its flowers and overall nice form. Bright red buds open to reveal yellow flowers that are 2-3" in diameter! Leaves are blue/green, lanceolate, and slightly curved. Click the species name to see photos.

**Characteristics:**

- ✦ 12-30 ft tall
- ✦ 9-25 ft wide canopy
- ✦ good seaside tolerance
- ✦ low root damage potential

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### [Bushy Yate](#) (*Eucalyptus conferruminata*)

Often mislabeled as *Eucalyptus lehmannii*, this species is often multi-trunked with a rounded canopy of fragrant, green leaves. Will perform very well along the coast. Click the species name to see photos.

**Characteristics:**

- ✦ 10-25 ft tall
- ✦ 15-30 ft wide canopy
- ✦ good seaside tolerance
- ✦ good salinity tolerance
- ✦ low root damage potential

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There are many other smaller eucalyptus species that would do well in Daly City. They are not prevalent in the Bay Area, so photos have not been included. If you're really into eucalyptus, [click here](#) for a helpful list of smaller species, provided by Pacific Horticulture.

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**Did you know?**

Eucalyptus trees support migratory populations of monarch butterflies! Along the CA coast, monarchs overwinter in groves of eucalyptus and evergreen trees. You can visit nearby groves this winter. The [Xerces Society](#) and the [Monarch Program](#) have great info on where to see monarchs.



## Larger Eucalyptus Trees

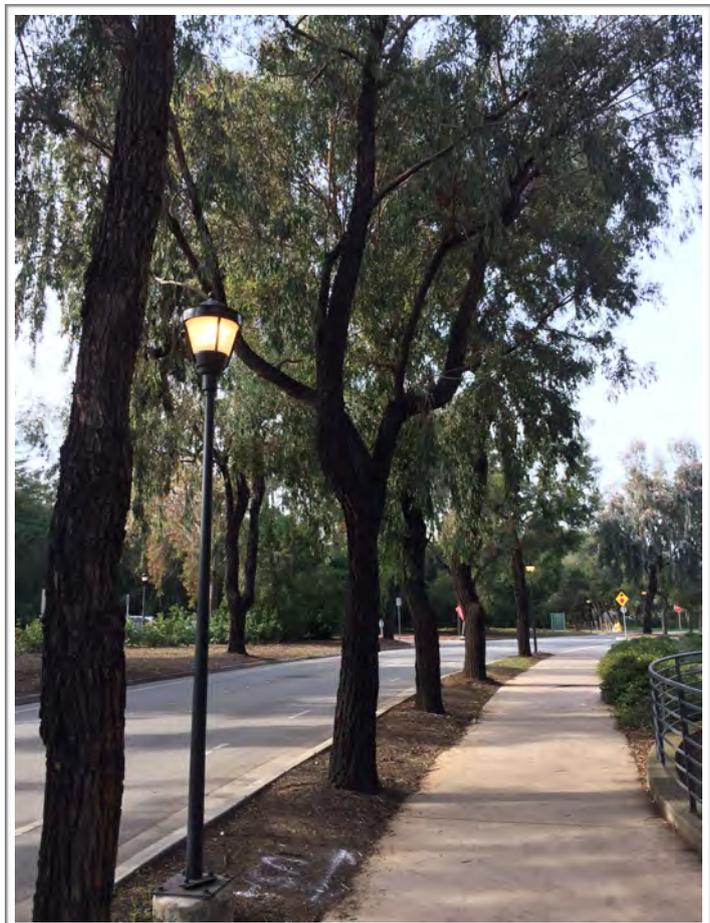
For those of you with space for them (like a front yard), large eucalyptus species command attention in the landscape and really make a statement. Eucalyptus feature colorful blooms, pretty bark, and fragrant foliage.

### Red Ironbark (*Eucalyptus sideroxylon*)

This large tree features a solitary trunk of deeply colored (nearly black!), rough bark that gives way to a high canopy of weeping branches and pendulous green-gray leaves. Fragrant red, pink, or white flowers are produced in spring and leaves are also fragrant. This is one of the larger street trees encountered in our region, but it's slender stature is not overwhelming. Must be planted in a location that allows for its large size.

#### Characteristics:

- ✦ 30-90 ft tall
- ✦ 30-60 ft wide canopy
- ✦ good seaside tolerance
- ✦ high root damage potential
- ✦ for large spaces



^ larger planting spaces can prevent concrete damage

< fragrant, pink flowers are pendulous on weeping branches



- ^^ flowers are fragrant
- ^^ leaves are green with a silver coating
- ^ bark is furrowed and dark in color
- ^ seed pods form after flowering
- < large trees, but not overpowering

### [Nichol's Willowleafed Peppermint \(\*Eucalyptus nicholii\*\)](#)

The leaves of this tree smell like peppermint when crushed! Slender and lanceolate, the leaves provide a weeping effect and give the tree an elegant, refined look. Bark is furrowed and dark in color. Newly formed stems are a beautiful bright red. Click the species name to see photos.

#### **Characteristics:**

- ✦ 40-50 ft tall
- ✦ 15-40 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate root damage potential

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### [Lemon-Scented Gum \(\*Corymbia citriodora\*\)](#)

You have most likely seen this tree before, because it's smooth, white bark and long, straight trunks are attention-grabbing. It also grows quite tall. While it is not exactly common, it is planted around the Bay Area here and there.

These trees feature tall, branchless trunks with high canopies of slightly weeping branches. The canopy is sparse, and allows light to come through. Lanceolate leaves are a gray/green color. When crushed, the leaves smell like citronella! Really stunning specimens, especially compared to the common Blue Gums. Click the species name to see photos.

#### **Characteristics:**

- ✦ 80-160 ft tall
- ✦ 50-100 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate root damage potential

### White Ironbark (*Eucalyptus leucoxylon*)

Gorgeous trees featuring white bark, pink flowers that look very similar to the *Eucalyptus sideroxylon*, the Red Ironbark. This species does not have weeping branches like the Red Ironbark, but instead produces a nice, rounded canopy. Click the species name to see photos.

#### **Characteristics:**

- ✦ 30-90 ft tall
- ✦ 18-60 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate root damage potential

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There are many other eucalyptus species to consider for planting and only a fraction are covered in detail in this tree guide. Other notable species include:

Beautiful Leaf Eucalyptus (*Corymbia calophylla*)

Cider Gum (*Eucalyptus gunnii*)

Lemon-Flowered Gum (*Eucalyptus woodwardii*)

Omeo Gum (*Eucalyptus neglecta*)

Sugar Gum (*Eucalyptus cladocalyx*)

Yate (*Eucalyptus cornuta*)

Karri (*Eucalyptus diversicolor*)

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## Recommended Species: Melaleuca

There are over 200 species of melaleuca and almost all are endemic to Australia. They are often referred to as Paperbarks, Honey Myrtles, or Tea Trees. In fact, the common tea tree essential oil is distilled from the leaves of *Melaleuca alternifolia*. This genus shows an incredible diversity of flowers and forms and is widely used in landscaping. Most melaleucas are very well-behaved trees or shrubs that will thrive in Daly City.

[Click here for more info on melaleuca.](#)

Some of the more readily available species are highlighted below.

### *Flaxleaf Paperbark (Melaleuca linariifolia)*

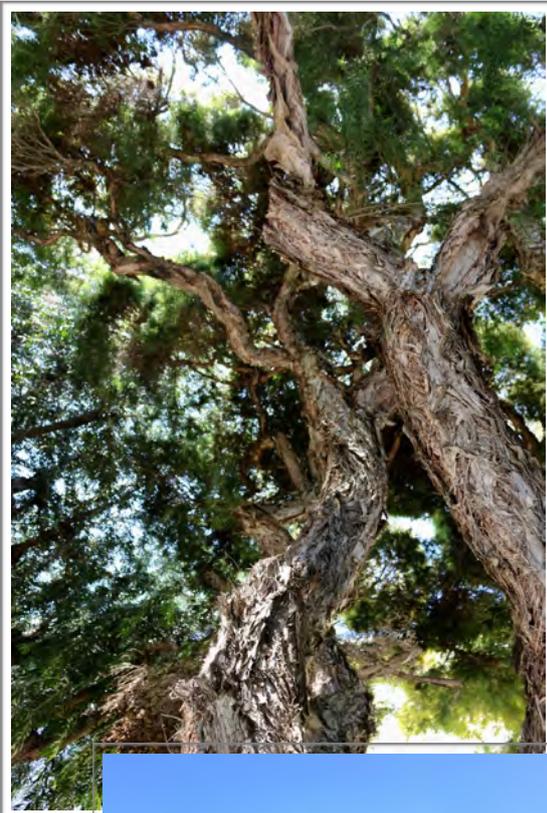
This quick-growing tree is simply stunning and a favorite of many. Each spring through summer, the tree erupts into a blindingly white floral display—it's entire canopy may be coated in fragrant, white blooms! This species also displays spongy, white bark that can be peeled off in layers. Leaves are much thinner and more delicate-looking than *Melaleuca quinquenervia*. This tree is totally unfazed by saline soil, smog, or small tree wells surrounded by concrete. There are a handful of mature specimens in Daly City and many more in the region, all doing fantastically well. If you are trying to choose a melaleuca species, choose this one!

#### Characteristics:

- ✦ 20-30 ft tall
- ✦ 20-25 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good salinity tolerance
- ✦ good for planting under utility wires



^ canopies are coated in white blooms



^ young trees in Junipero Serra Blvd median planting

### Cajeput Tree (*Melaleuca quinquenervia*)

This is a highly adaptable species and an excellent choice for small tree wells surrounded by sidewalk. It's not terribly fussy and will grow in saline soil and windy conditions. This slender tree is quick-growing and features amazing, spongy, white bark that can be peeled off in sheets. If you have never touched the bark of this tree, you need to! It's spongy nature will leave an impression—there's really nothing quite like it. In summer, the tree is adorned by bottlebrush-like, white flowers, although the flowers are much more impressive on *Melaleuca linariifolia*. This tree is planted widely in Daly City and the region. Best not to let it dry out too much while it's getting established. Also, do not disturb the root ball when transplanting!

#### **Characteristics:**

- ✦ 20-40 ft tall
- ✦ 15-25 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good salinity tolerance
- ✦ good for planting under utility wires



^ grove of melaleucas off Junipero Serra Blvd

< bark is spongy, peels in layers, and bright white



- ^ melaleucas feature interesting branch sturcture
- ^> foliage is green with red hints and stems are red
- > young tree on Junipero Serra Blvd



< frequently planted around Daly City

## Recommended Species: *Leptospermum*

Also known as Tea Trees, *Leptospermums* are smaller shrubs that can be trained into tree form by establishing a central leader. You'll often encounter them this way as street trees and small accent trees in home gardens. Overall, *leptospermum* species are very useful for small areas.

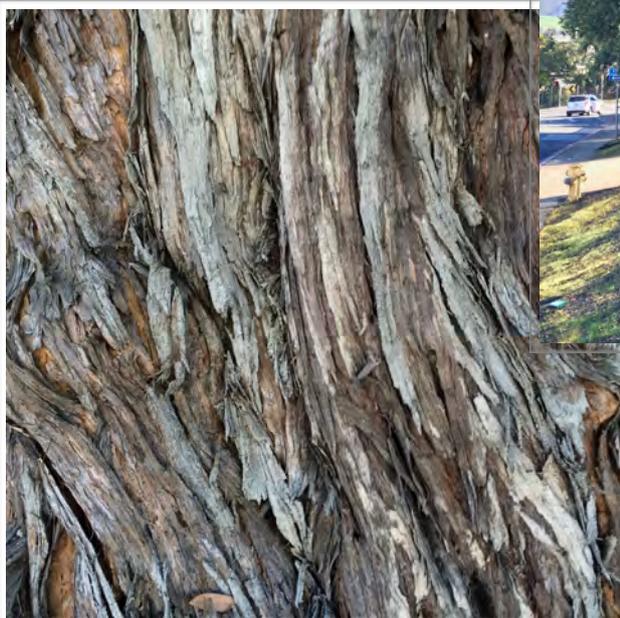
[Click here for more info on \*Leptospermum\*.](#)

### *Australian Tea Tree (Leptospermum laevigatum)*

This small tree is a fantastic choice for areas near the coast, as it does not mind wind or seaside conditions. A twisted, gray-brown trunk gives way to a canopy of small leaves with white flowers in spring. This species is really a shrub, but pruning to tree form is possible. If you have enough space, let it do its own thing and you'll end up with a marvellously gnarled and twisted specimen. You'll encounter Australian Tea Trees frequently in Golden Gate Park in San Francisco. It is reported that this species needs staking for many years as it roots poorly, but there are plenty of mature specimens in the region, so success is possible.

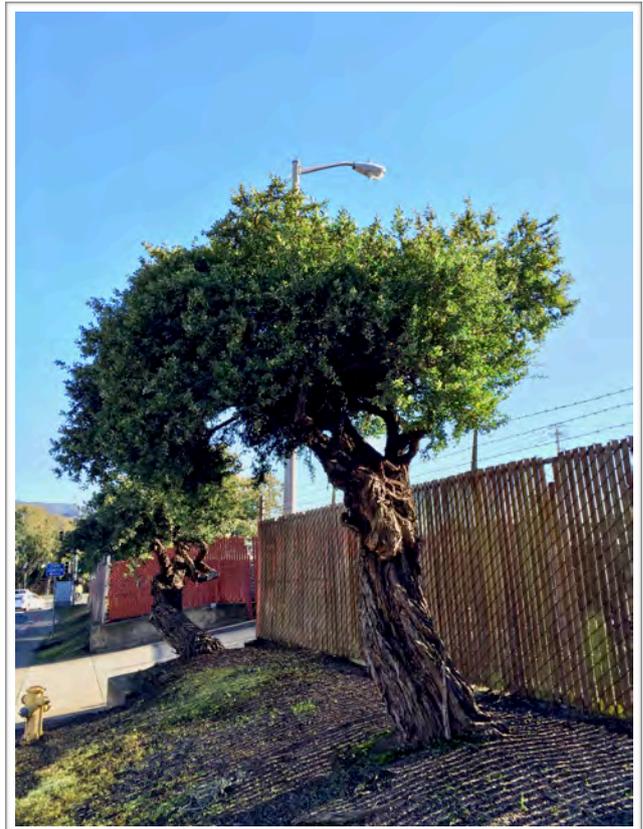
#### Characteristics:

- ◆ 10-30 ft tall (although usually not that tall)
- ◆ 10-30 ft wide canopy
- ◆ good seaside and salinity tolerance
- ◆ low root damage potential
- ◆ good for planting under utility wires





< trees can take on wild forms, like this wide specimen



^ tree pruned to small tree shape

< leaves are rounded and fragrant when crushed



### *Lemon-Scented Tea Tree (Leptospermum petersonii)*

This small tree has fragrant leaves and white flowers in spring and summer and displays many similar qualities to the Australian Tea Tree, but is smaller in stature and does not have the twisted trunk. Good choice for areas along the coast, as it does not mind seaside conditions.

#### **Characteristics:**

- ✦ 10-20 ft tall (although usually not that tall)
- ✦ 6-15 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires

### *New Zealand Tea Tree (Leptospermum scoparium)*

Known as “Manuka” in New Zealand, this species puts on quite the floral display. Cultivars display blooms in deep red, magenta, light pink, and white. These really are shrubs, but can be trained into tree form successfully. To get a sense of what they look like in shrub form, look no further than the planted areas along I-280 in Daly City. The dark brown/gray bushes that almost look like they are leafless are New Zealand Tea Trees. They bloom throughout the year and are often a deep magenta color, which helps easily identify them in the landscape. There are mixed reports on the water requirements for this species, with some listing it as having low water needs and others moderate water needs. Since it grows very well without irrigation along the highway, it’s safe to say this is a good plant for our dry climate.

#### **Characteristics:**

- ✦ 10 ft tall
- ✦ 10 ft wide canopy
- ✦ good seaside and salinity tolerance
- ✦ low root damage potential
- ✦ good for planting under utility wires





# Recommended Species: Pittosporum & Hymenosporum

There are 14 Australian Pittosporum species and many are planted heavily in the Bay Area. They perform very well in our climate and have a variety of features that make them attractive additions to our landscape. The flowers are very fragrant.

## Victorian Box (*Pittosporum undulatum*)

This is a defining species in neighboring San Francisco’s urban forest. The trees burst into super fragrant white blooms in late winter and then repeatedly throughout the year, followed by small orange fruits. The fragrance resembles that of citrus flowers, is capable of filling entire city blocks, and is strongest at night. This species has dark green, glossy leaves and a nice rounded or umbrella-shaped canopy with smooth, gray bark.

**Characteristics:**

- ✦ 30-40 ft tall
- ✦ 30-40 ft wide canopy
- ✦ good seaside tolerance
- ✦ low root damage potential



^ trees display nice form with rounded canopies  
 < don't be deceived by the small flower size, they are incredibly fragrant, filling entire city blocks

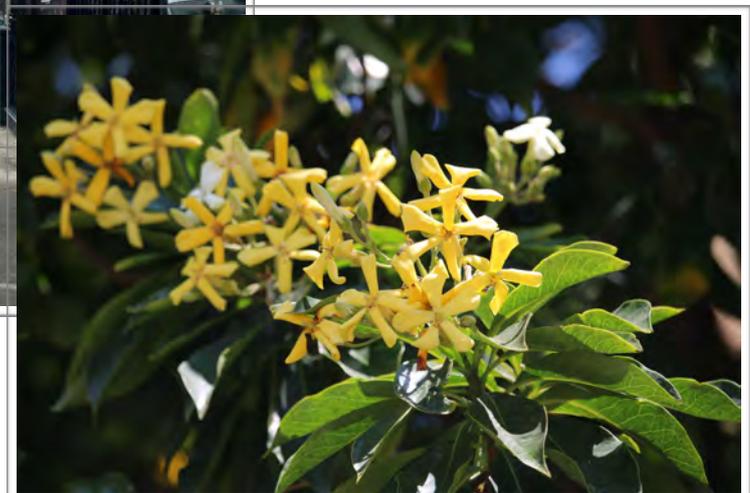
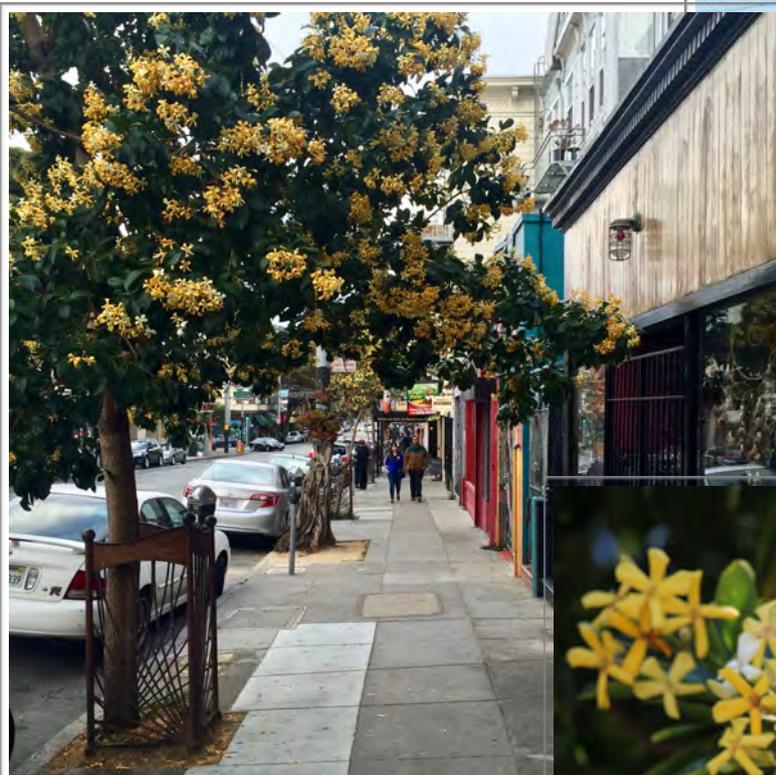


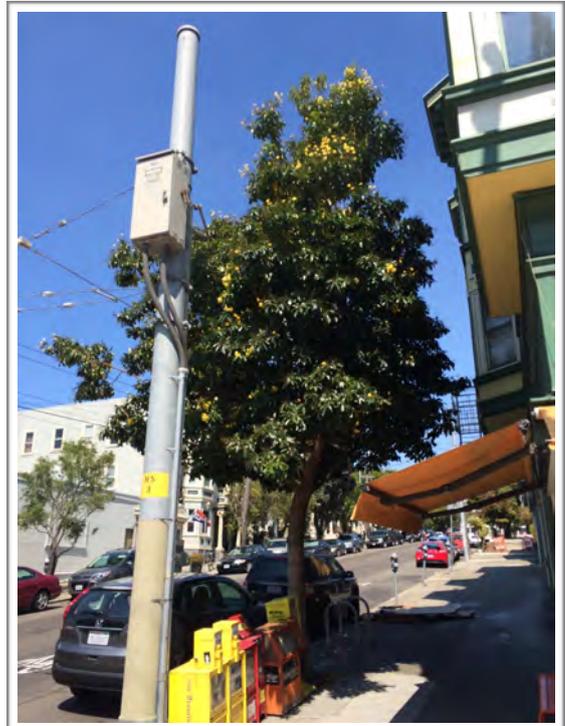
### Sweetshade (*Hymenosporum flavum*)

This species is in the same family, Pittosporaceae, as the Pittosporums listed in this section. It displays a very upright form, perfect for squeezing between buildings or smaller spaces, which would also provide the wind protection it prefers. White and yellow star-shaped flowers emerge in spring and summer and emit the most wonderful fragrance in the evening. This flower show is not to be missed! This species requires low to moderate amounts of water.

#### **Characteristics:**

- ✦ 20-35 ft tall
- ✦ 15-20 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance
- ✦ low root damage potential





^ bark is smooth and light gray

< trees are loaded with super fragrant, yellow blooms

### Lemonwood Tree (*Pittosporum eugenoides*)

This is a slender tree with a compact canopy and fragrant white flowers in spring followed by small green/yellow fruits. The leaves smell like lemon when crushed. All pittosporums will do well in Daly City and can be cultivated like the Victorian Box.

#### **Characteristics:**

- ✦ 15-40 ft tall
- ✦ 6-15 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance
- ✦ low root damage potential

---

### **Other Pittosporum species to choose:**

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#### Queensland Pittosporum (*Pittosporum rhombifolium*)

#### Kobuhu, Black Pittosporum (*Pittosporum tenuifolium*)

---

# Recommended Species: Other Australian Trees

## *Coast Banksia (Banksia integrifolia)*

This is a common street tree in Australia that does very well in our climate. The most interesting feature of this tree is its otherworldly, yellow blooms that spire upward and consist of hundreds of tiny individual flowers. Blooms appear spring to fall. The undersides of the leaves are silver in color and add greatly to this tree's appeal. Coast Banksias grow in an attractive, upright form and are taller than they are wide. A great choice for anywhere in Daly City, especially near the coast.

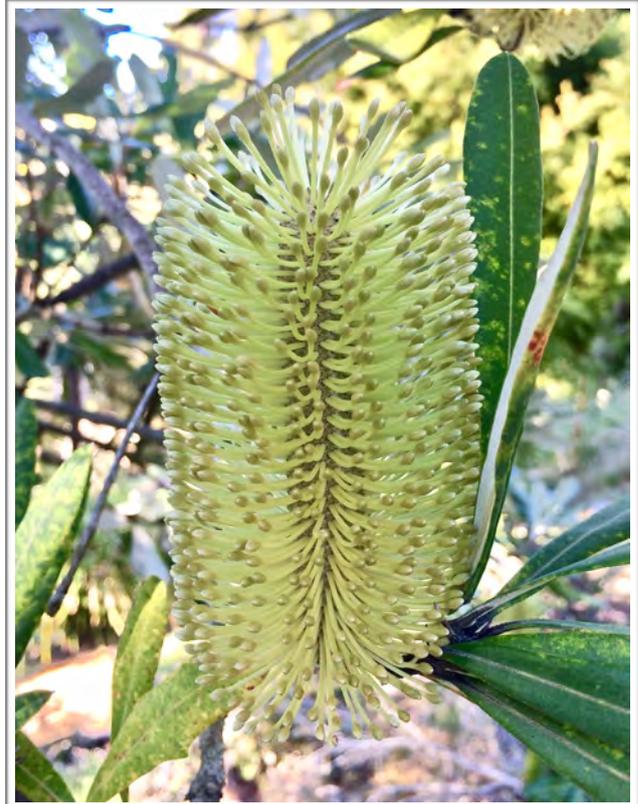
[Click here for more info on Banksias.](#)

### Characteristics:

- ✦ 40' tall but windy conditions limit height
- ✦ good seaside and salinity tolerance
- ✦ low root damage potential
- ✦ very interesting blooms



^ younger tree in a municipal planting in Monterey, CA



^< tall and slender growing

> related species, *Banksia speciosa*, features zig-zag leaves and fuzzy new growth

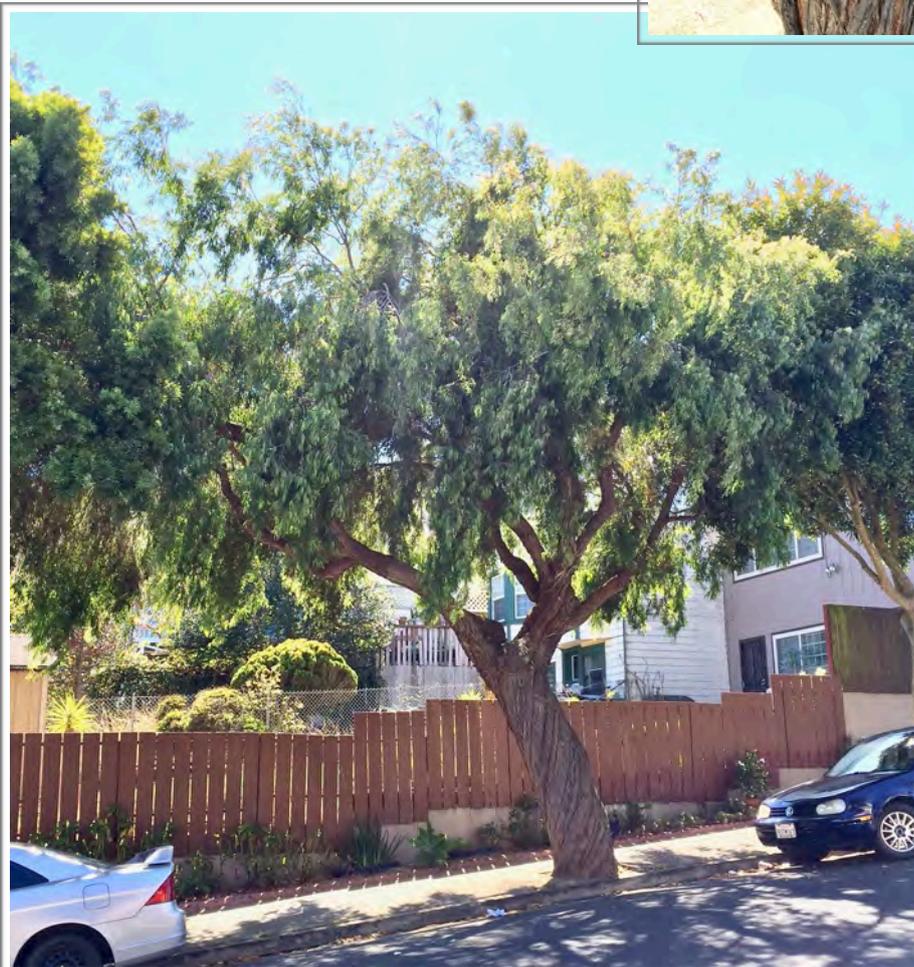


### Peppermint Willow (*Agonis flexuosa*)

This fast-growing tree takes on a wonderfully weeping form with a twisted and sometimes twirled trunk. Windy conditions can contort this tree if no staking is provided. This species creates a great atmosphere on the street for pedestrians that walk under its pendulous branches, which are adorned with white blooms in spring and summer. The thin leaves smell like peppermint when crushed! Mature specimens are seen throughout some Daly City neighborhoods, even planted successfully under overhead utility wires.

#### **Characteristics:**

- ✦ 25-35 ft tall
- ✦ 15-30 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance
- ✦ good for planting under utility wires



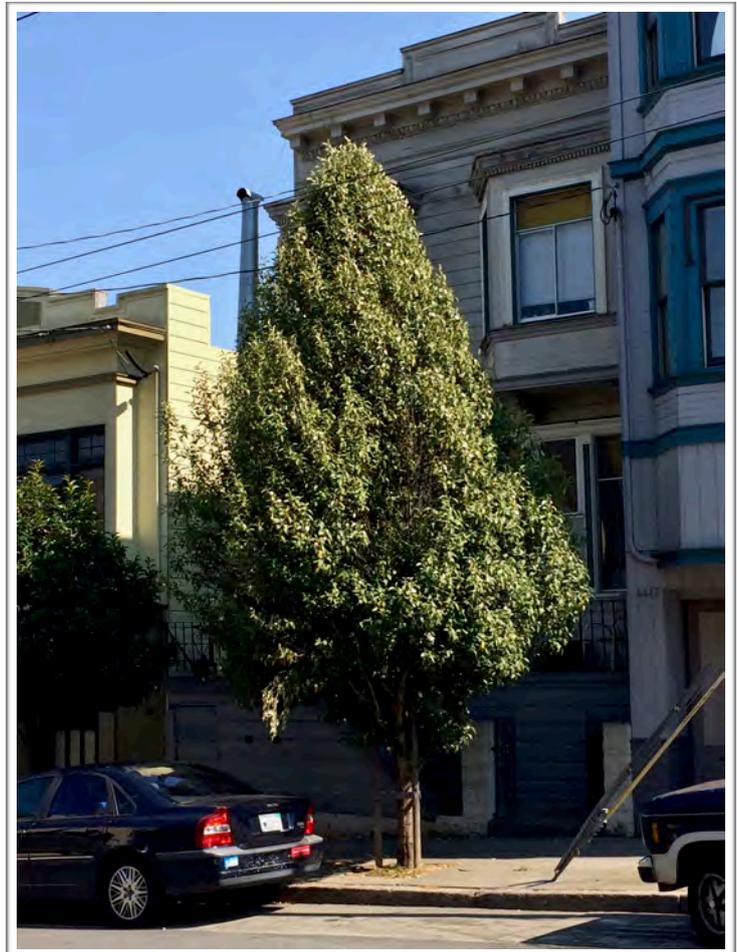


### Primrose Tree (*Lagunaria pattersonii*)

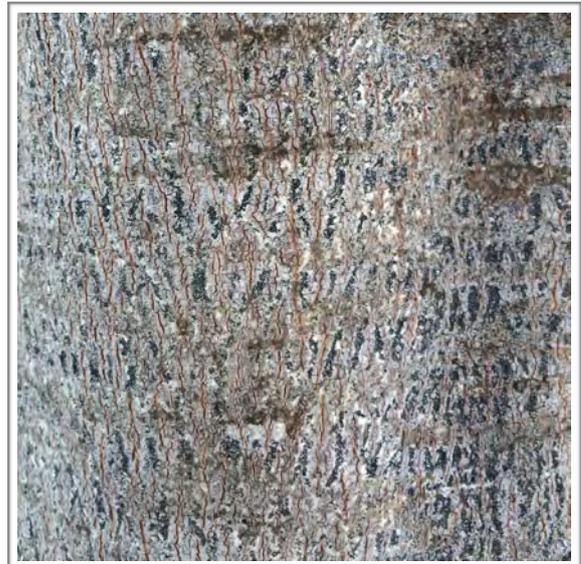
This tree features a tight, erect shape with a tall, dense, and very oval canopy. It's not the type of tree form we commonly see in our region, so it's a welcome addition to city streets. A light gray trunk gives way to large green leaves and star-shaped pink blooms that appear in summer and fall. This species does exceptionally well in coastal conditions. Also known as the Norfolk Island Hibiscus.

#### Characteristics:

- ✦ 30-50 ft tall
- ✦ 20 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance



- ^ trees have a classic tree shape with tight oval canopy
- < flowers coat canopies during peak bloom and range from cream to pink



^ bark is smooth and appealing

< not the best species for planting under utility wires because they disrupt the tight canopy

Silk Oak (*Grevillea robusta*)

These trees are phenomenal! Quick-growing in an upright, conical form with branches held high above in the canopy. Interesting orange/yellow flowers appear in spring amidst fern-like foliage. This species is native to Eastern Australia in tropical and subtropical habitats, but is drought-tolerant and fares well in our climate. These trees were popular 50 years ago, but are harder to find in current day. This is the largest of over 300 species of *Grevillea* (most are shrubs, and all are great choices for the dry garden here in Daly City). These are large trees that require a large planting area.

**Characteristics:**

- ✦ 50-65 ft tall
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ good salinity tolerance



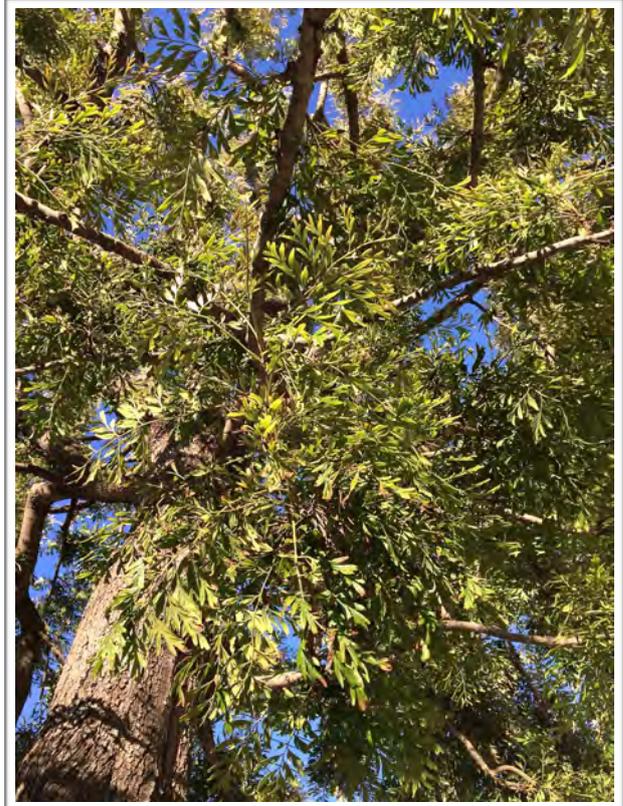
^ silk oak growing at Valencia St and 18th St in San Francisco





^ silk oak that has been pruned

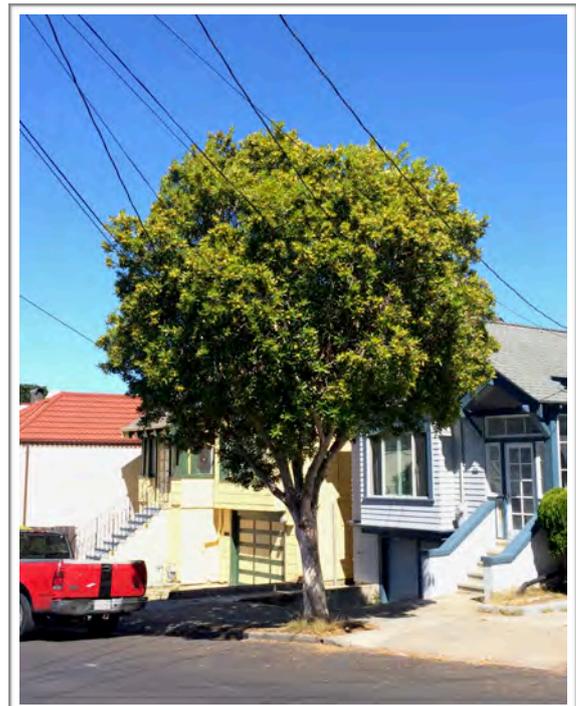
> leaves are fern-like



### *Water Gum (Tristaniopsis laurina)*

This very slow-growing, low maintenance species is a good choice for a street tree, all-round. It features smooth, light gray bark and a dense, rounded canopy of dark green, glossy leaves. Fragrant yellow flowers appear throughout spring and summer and although small, are visible en masse in the canopy. This species is native to eastern Australia where it grows along waterways that flood seasonally. So, it requires ample water to get established and occasional water thereafter, but is drought-tolerant. This tree is heavily planted throughout Daly City and the rest of the Bay Area, so it might be a bit overdone at this point. But it's a really nice species.

The 'Elegant' cultivar features larger leaves and a lusher look.



**Characteristics:**

- ◆ 20-35 ft tall
- ◆ 15-30 ft wide canopy
- ◆ low root damage potential
- ◆ good for planting under utility wires

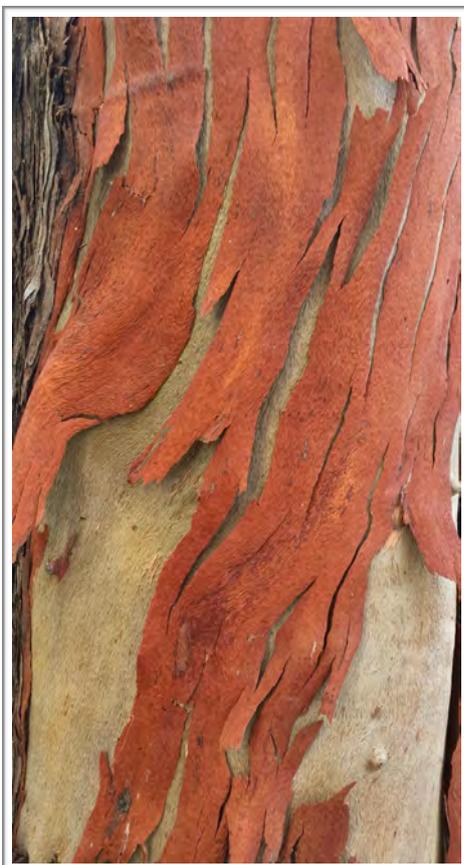


### Brisbane Box (*Lophostemon confertus*)

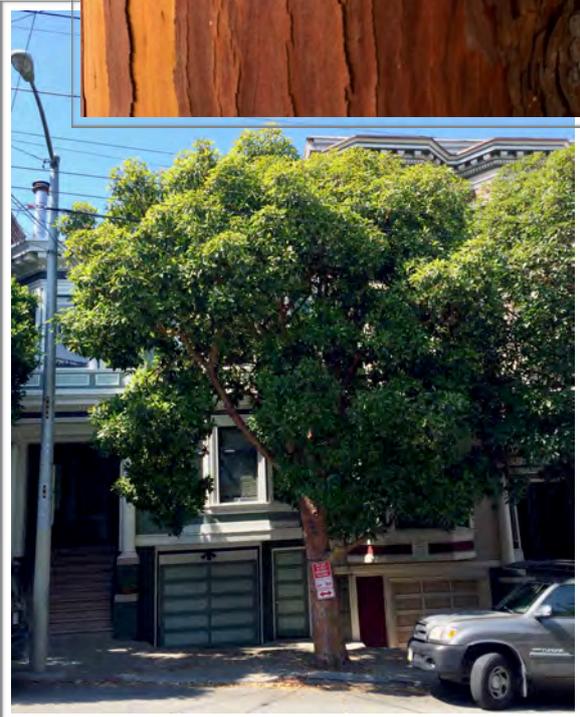
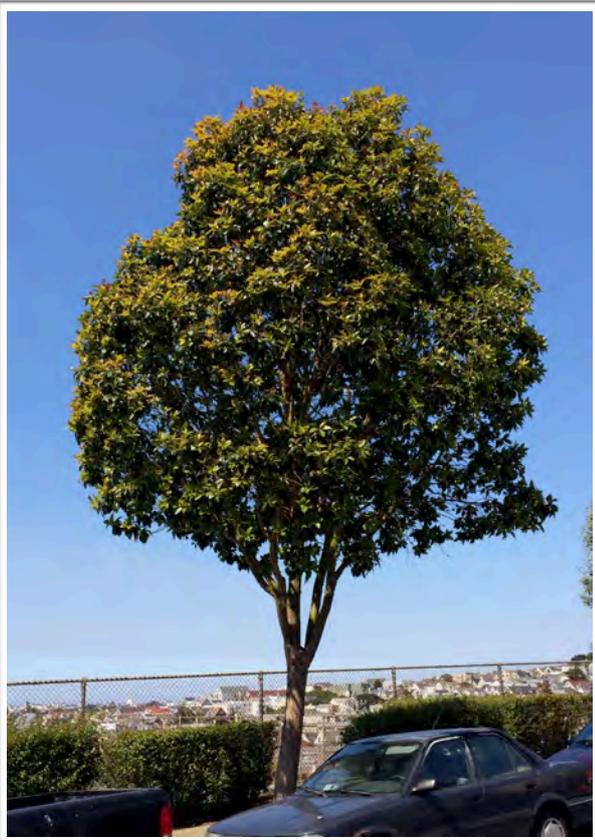
This species has become a very popular street tree in the Bay Area due to its adaptability and tolerance of a range of conditions. It is also widely used in cities in its native Australia. Red and orange bark is visually striking as it exfoliates off the tree, reminding many of our native Madrone. This very upright-growing tree features large, deep green, glossy leaves that form a high, rounded canopy atop long, straight trunks. Interesting white flowers form in spring and throughout the year, but they're often too high up in the canopy to inspect up close. The tree structure is well-suited to sidewalks, as branches are kept high up in the canopy and do not impede pedestrian traffic. The Brisbane Box is native to rainforests and coastal areas of northeastern Australia, but it is surprisingly drought tolerant. It does require ample water, though, to get established. This species performs well in our climate and there are many specimens around Daly City. Look for the characteristic red bark and the large leaves, which provide a welcome change to many of the thin and lanceolate shaped leaves on trees commonly planted here.

#### **Characteristics:**

- ✦ 30-50 ft tall
- ✦ 10-30 ft wide canopy
- ✦ moderate root damage potential
- ✦ good/moderate seaside tolerance



- ^ large, leafy canopies are held atop red, peeling branches
- < exfoliating bark is not all that messy



^^> flowers are showy, but usually high in the canopy

^> bark is continually changing color and texture

*River She-Oak (Casuarina cunninghamiana)*

This quick-growing tree resembles a conifer, with long, needle-like, green-gray leaves and small, brown cones that emerge in spring. The leaves lend a soft appearance to its very attractive, erect form that casts only moderate amounts of shade. Good alternative to conifer trees with dense canopies.

**Characteristics:**

- ✦ 70 ft tall
- ✦ 30 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance



^ and ^> tall, erect branches create an upright form  
> younger tree in Junipero Serra Blvd median planting



*Mountain She-Oak (Allocasuarina verticillata)*

This quick-growing species is very similar to the River She-Oak, but its leaves show a more weeping form and it does not grow as tall. It is also known as the Drooping She-Oak. The tree features an erect structure, with needle-like stems gracefully curving downward along branches, lending a soft and wispy appearance to the tree. It casts moderate shade and provides a good alternative to conifer trees with dense canopies.

**Characteristics:**

- ✦ 20-35 ft tall
- ✦ 20-35 ft wide canopy
- ✦ good seaside tolerance
- ✦ moderate root damage potential



- ^> weeping nature is highly attractive
- ^ young tree in the Junipero Serra Blvd median planting

### *Pinchusion Hakea (Hakea laurina)*

The blooms on this tree are out of this world! Seriously though! Red and yellow pom-poms adorn the tree spring through fall. [Click here for photos.](#) There are 130 described species of Hakea in Australia, and this one is much beloved. A common street tree in its homeland that needs to be planted much more in our region. Native to southwestern Australia, which has a climate that matches ours very well. Small, quick-growing tree with a nice, rounded canopy and lanceolate leaves. Did I mention the flowers?? This species is extremely averse to phosphorus, so don't use fertilizer. This plant is very difficult to find, so swoop it up if you ever come across it!

[Click here for more info on Hakea laurina.](#)

#### **Characteristics:**

- ✦ 10-20 ft tall
- ✦ 6-10 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires

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### *Sweet Hakea (Hakea sawveolens)*

This conifer-like tree features needle-like leaves, smooth bark, and fragrant white flowers in fall and winter. Performs very well along the coast. Leaves have sharp pointed ends, so not so great to plant directly along a pathway, unless you want to create a barrier. Extremely hardy.

#### **Characteristics:**

- ✦ 10-20 ft tall
- ✦ 10-20 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance
- ✦ good for planting under utility wires

## *Bottle Trees (Brachychiton species)*

Brachychiton are known for their swollen trunks that grow larger with age and are used for water storage, making these trees drought-tolerant.

There are two species recommended for our climate. The first is the Flame Tree (*Brachychiton acerifolius*). This species puts on quite the floral display in warmer areas, so best to plant on the east side of Daly City in a wind-sheltered location. The red flowers are extremely showy, but may not be reliable year-to-year. [Click here for photos of trees in full flower.](#) These trees are partially deciduous during flowering, similar to *Ceiba speciosa*.

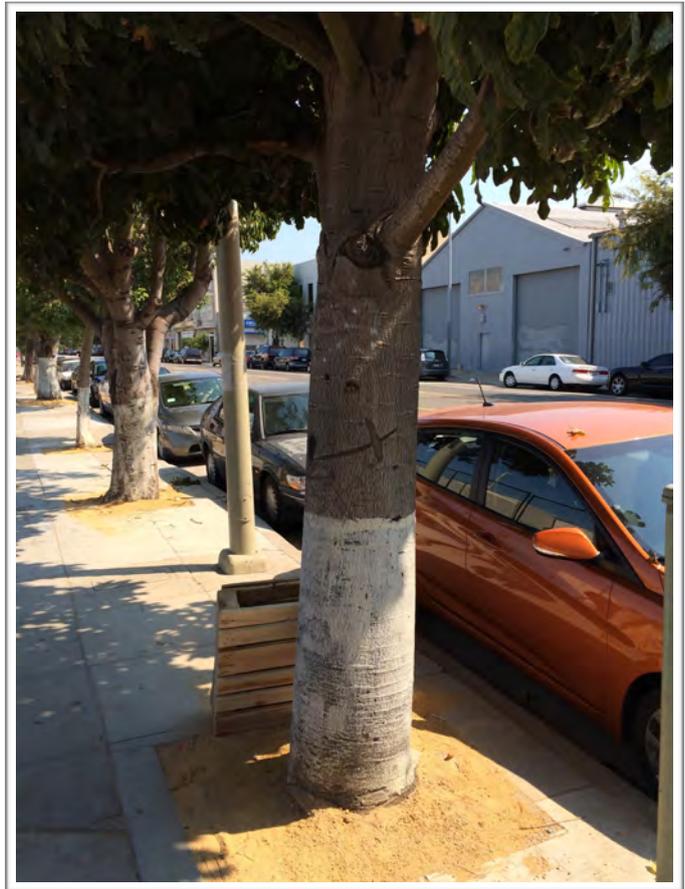
### Characteristics:

- ✦ 40-50 ft tall
- ✦ 20-25 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance



^ stunning when in bloom! only the blooming branches are deciduous while flowers are present

< large, lobed leaves create a nice leafy canopy



^ when not in bloom, canopies are full of leaves

^ trunks swell with age, hence the name Bottle Trees

The other recommended species is the Kurrajong (*Brachychiton populneus*), which also features a swollen trunk. Clusters of white/pink flowers hang on branches in spring and summer.

**Characteristics:**

- ✦ 30-40 ft tall
- ✦ 25 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ moderate salinity tolerance





< young bark is full of chlorophyll, lending a green color; it can actually photosynthesize! helpful for a tree that is semi-deciduous



^ and < young trees planted outside the Phillip Burton Federal Building in San Francisco

The species with the best bottle shape of them all is the Queensland Bottle Tree (*Brachychiton rupestris*). It is undetermined whether this species would thrive in Daly City, but it's worth a try! This tree is attention-grabbing and shows a bottle shape at a young age.



< young tree, Stanford University campus



### [New Zealand Chaste Tree \(\*Vitex lucens\*\)](#)

This is an attractive tree with glossy leaves and pink flowers in spring that has become very popular at the moment. In parts of New Zealand, it is found alongside the New Zealand Christmas Tree (*Metrosideros excelsa*) which absolutely thrives in Daly City. Many seem to grow a wide canopy, so leave enough space for this species to fill out.

[Click here for more info on the NZ Chaste Tree.](#)

#### **Characteristics:**

- ✦ 30-50 ft tall
- ✦ 30-50 ft wide
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ good salinity tolerance

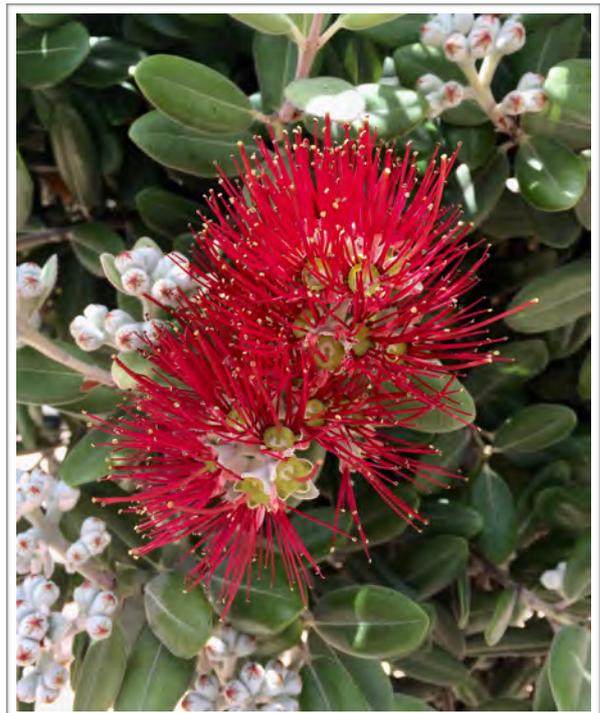
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### [New Zealand Christmas Tree \(\*Metrosideros excelsa\*\)](#)

There's no doubt about it, the NZ Christmas Tree is planted all over the place in these parts. It might be overdone at this point, but it still made the list because it performs very well in our foggy climate. In fact, it prefers it. This species sends out aerial roots from its branches to help collect fog! Beautiful red, bottlebrush-like flowers appear throughout the year and trees in full bloom are a sight to behold. New leaf growth is a beautiful silver color and contrasts nicely with older, deep green foliage. These trees feature dense, rounded canopies that cast heavy shade.

#### **Characteristics:**

- ✦ 30-50 ft tall
- ✦ 30-50 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance
- ✦ good salinity tolerance





# SOUTH AFRICAN TREES

## The Western Cape

The city of Capetown, in South Africa's Western Cape, receives an average of 18.7 inches of rain annually. San Francisco received an average of 20.78 inches of rain annually over that last 30 years. Almost all of the precipitation in both cities occurs in winter months. Capetown is famous for its fog, as is our region. Our climates are nearly perfectly aligned. Lucky us, because the Western Cape is home to an extreme diversity of plant species.

## Did you know?

The Western Cape is the southernmost area of the African continent. In addition to the Mediterranean climate of this region, arid and semi-arid areas further inland, like the Karoo Desert, are also home to plants that will do well in Daly City.

## Fynbos biome

Similar to California's chaparral, the fynbos is a shrubland biome in the Western Cape. The majority of the region's species diversity is found in the fynbos. To learn more about this highly threatened habitat, [visit the WWF website](#). The fynbos is also a UNESCO World Heritage Site.

The Western Cape of South Africa is a stunning Mediterranean climate. It is part of the Cape Floral Kingdom, which is home to 9,600 species of plants of which 70% are endemic (and found nowhere else). This is one of the world's hotspots of biodiversity. In fact, it is home to the highest concentration of plant species on Earth. The Amazon rainforest has only a third of the number of species!

Mediterranean climates are truly special. It's time we started planting more South African species, especially ones that are threatened and endangered in their native habitat.

## Recommended Species

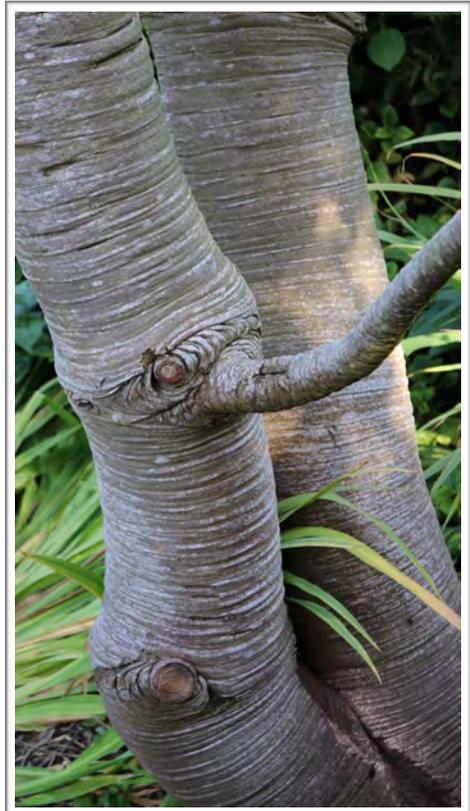
### *Silver Tree (Leucadendron argenteum)*

This is a show-stopper of a tree and leaves everyone wondering what it is and where it came from! This is the most beautiful tree we can grow. The large leaves are covered in silver hairs that produce a metallic, silver, shimmering sight to behold in sunlight. The trees really glow! And, the leaves are very soft to touch, like a dog's ear. You'll find yourself petting your new tree. This species features smooth, light gray bark, a nice slender and upright form, and an interesting branch structure. The best part: Daly City has the perfect soil for this species. Not everyone in the Bay Area can grow this tree successfully, but our sandy soils provide the well-drained conditions it needs to thrive. Silver Trees are rare and endangered in their native habitat, which includes Table Mountain in Capetown. This species is extremely averse to phosphorus in soil, so don't use fertilizer and don't plant in an area that was fertilized in the past (like an old vegetable garden or lawn).

[Click here for more info on Silver Trees.](#) [And for even more info, click here.](#)

**Characteristics:**

- ✦ 25-40 ft tall
- ✦ 15-20 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside and salinity tolerance



### Tree Aloes (*Aloe 'Hercules'*, *Aloe dichotoma*, *Aloe barberae*)

It doesn't get more drought tolerant than the tree aloe! There are three species available, but Aloe 'Hercules', a hybrid of Aloe barberae and Aloe dichotoma, is very popular. These trees have wildly interesting forms. Thick, peeling trunks give way to a branching canopy of very large rosettes of long succulent leaves. This plant looks prehistoric! Adds incredible architectural interest to the landscape. Salmon or yellow blooms emerge in spring and fall that drive hummingbirds and other pollinators nuts. Perfect choice for a water-wise landscape.

[Click here for more info on tree aloes.](#)

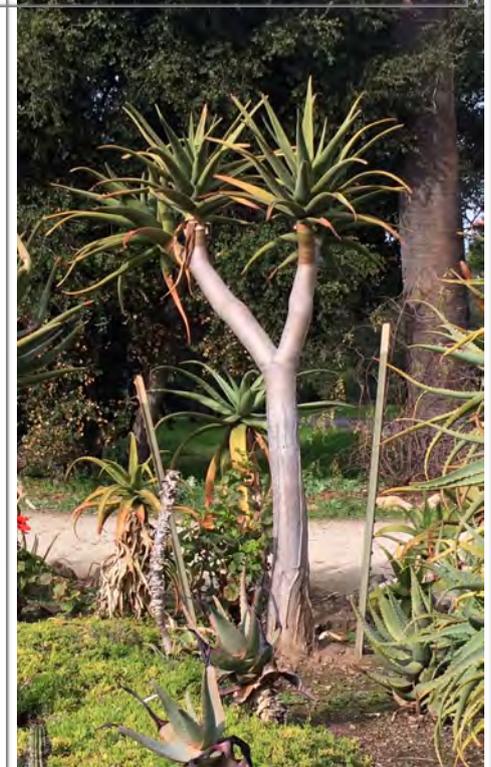
#### Characteristics:

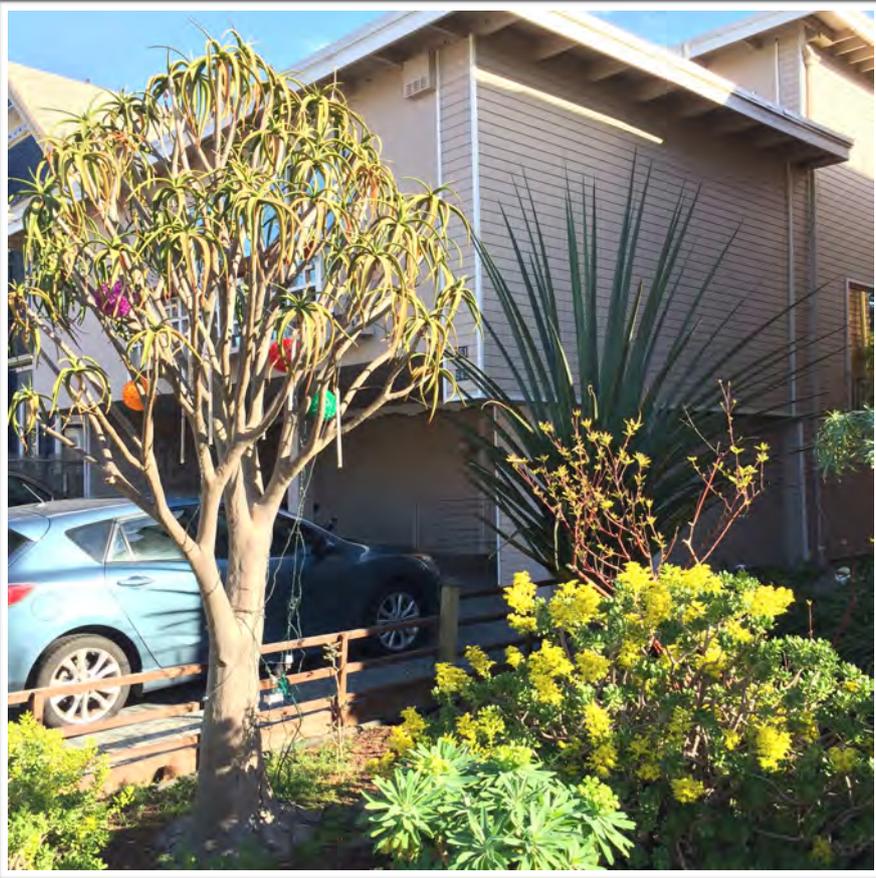
- ✦ 20-40 ft tall
- ✦ 10-20 ft wide canopy
- ✦ low root damage potential
- ✦ very low water



^ and ^> *Aloe barberae* in street plantings

> young tree aloe in garden setting





^ tree aloe in front yard

> young *Aloe dichotoma* with yellow flowers at the Arizona Cactus Garden at Stanford University



### *Fever Tree (Vachellia xanthophloea)*

Bring the Serengeti to your yard! This quick-growing species creates a very attractive, vase-shaped tree with an airy canopy that only casts moderate amounts of shade. You can plant your drought tolerant dream garden right underneath it! Bright green bark is coated with a yellow powder, branches feature thorns, and leaves have a feathery appearance. This tree makes a big statement and needs room to grow, so best to plant in a yard where there is sufficient space. Click the species name for photos because there weren't any in the area (that I know of) to photograph. This tree might not be readily available, but with some determination it will be found!

[Click here for more info on fever trees.](#)

#### **Characteristics:**

- ✦ 60-80 ft tall
- ✦ 40-50 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance

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### *African Fern Pine (Afrocarpus falcatus)*

This is one gorgeous tree and there are many planted in our area that are doing fantastic. The leaves are thin and vivid green. New growth is lighter green, providing a nice contrast to the deeper green mature foliage. A thick, sturdy trunk gives way to a dense, rounded canopy, providing a very pleasing structure. This is one of very few conifers native to the African continent! Although it doesn't much resemble the conifers we know here in the US, since its leaves are not very needle-like. It is native to higher elevation dry forests (no wonder it works so well in the Bay Area) and is a protected tree in South Africa. This species is listed as having medium water needs, but in our coastal area, it should do just fine as a low water species. Fern pines are often seen hacked and hedged and planted in small places—oh the horror! While it does take the hard pruning well, it really shines as a full specimen tree. Does great planted in sidewalks.

[Click here for more info on fern pines.](#)



**Characteristics:**

- ◆ 50-65 ft tall
- ◆ low root damage potential
- ◆ good seaside tolerance



^ fern pines are urban-friendly and often seen as smaller shrubs or pruned heavily to keep size small

# CENTRAL & SOUTH AMERICAN TREES

## Matorral biome

The matorral of Chile is strikingly analogous to California's chaparral habitat. Both feature scrubland of high plant diversity. The matorral is bordered by the Atacama Desert to the north and the Andes Mountains to the east, separating this biome from tropical rainforests in South America.

Unsurprisingly, the matorral is home to the majority of Chile's human population, in and around Santiago. It is also the agricultural powerhouse of Chile, with major growing and grazing operations in the Central Valley. Overall, the matorral is a highly threatened biome.

## Climate diversity

South America often conjures up images of lush Amazonian rainforests, but the continent is also home to large areas of grassland, Mediterranean climates, and deserts. In fact, the driest desert on Earth is Chile's Atacama Desert! In southern Brazil, Uruguay, Paraguay, Argentina and Chile exists a benign, temperate climate that is more arid and much aligned with our climate in California. Plants from these regions will do well in Daly City.

South America is home to one of the world's five Mediterranean climates, located in central Chile. This region is home to upwards of 2,400 plant species and has one of the highest rates of endemism on the continent. This Mediterranean climate region almost perfectly matches our climate here in California. [Click here for more information on the environments in Chile.](#) We can also grow plants from other areas of Central and South America where conditions are more arid. This section will highlight a handful of beautiful trees that will thrive in Daly City.

## Recommended Species

### *Soapbark Tree (Quillaja saponaria)*

This is a beautiful, slow-growing, medium-sized tree native to a variety of habitats in Chile, including the matorral (which is incredibly similar to California's chaparral habitat). The tree features glossy, green leaves on branches that appear to have a slightly weeping form and yellow/white flowers in spring. In Chile, this inner bark of this tree is used to make a soapy foam in a variety of products, from shampoos to beverages. This tree is not widely planted and it's hard to figure out why, since it has been grown in California since the early 1900s.

[Click here for more info on Soapbark Trees.](#)

#### Characteristics:

- ✦ 30-45 ft tall
- ✦ 15-25 ft wide canopy
- ✦ low root damage potential

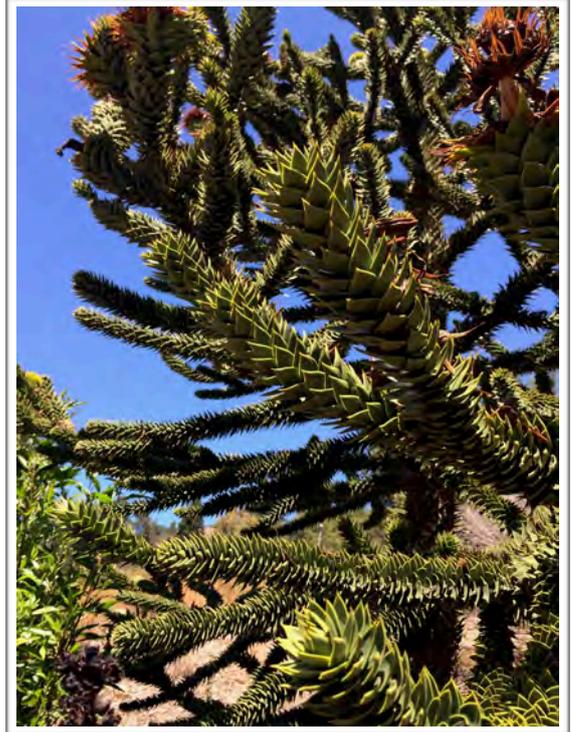
### Monkey Puzzle Tree (*Araucaria araucana*)

This endangered species is absolutely unbelievable! It's straight out of a prehistoric era with an oversized "wow" factor. The Monkey Puzzle is the national tree of Chile and is part of the ancient Araucaria family of plants. These trees actually lived (and survived) with dinosaurs! One glance and touch of its leaves and branches and you'll see how this tree avoided being browsed by the large reptiles. The leaves are very hard with sharp tips. Young trees have an open habitat, with a lot of room among the armored branches. Their form is unmistakable and they are easily identified in the landscape. More mature specimens are conical and eventually take on an umbrella shape with old age. Best to plant in location with sufficient space, as these trees grow large and have a big visual impact.

#### **Characteristics:**

- ✦ 70 ft tall (though likely much shorter in our climate)
- ✦ 25-35 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance





### *Chilean Wine Palm (Jubaea chilensis)*

This is the only palm on our recommended tree list, because it is so very special. And, it's huge! These palms feature incredibly wide trunks at four to six feet in diameter. Native to Chile's Mediterranean climate, *Jubaea chilensis* absolutely thrives in our region, yet it is not widely planted (yet!). This is one of the most magnificent of all the palms. This species is vulnerable to extinction due to over-harvesting for the production of wine (from sugars in its large trunk) and habitat destruction, among other issues. Choose a larger space because the trunk will eventually be massive.

[Click here for more info on chilean wine palms.](#)

#### **Characteristics:**

- ✦ 80 ft tall
- ✦ 25 wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance



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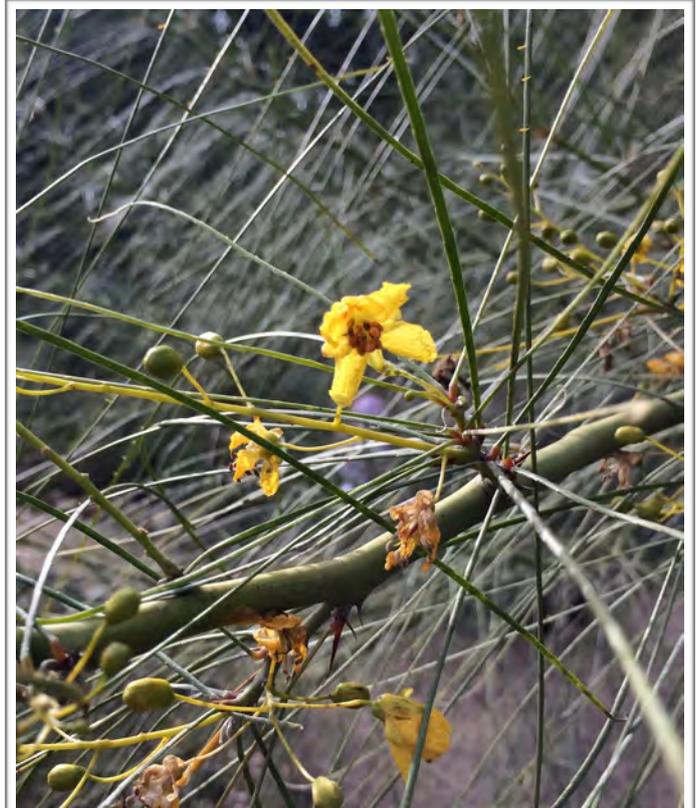
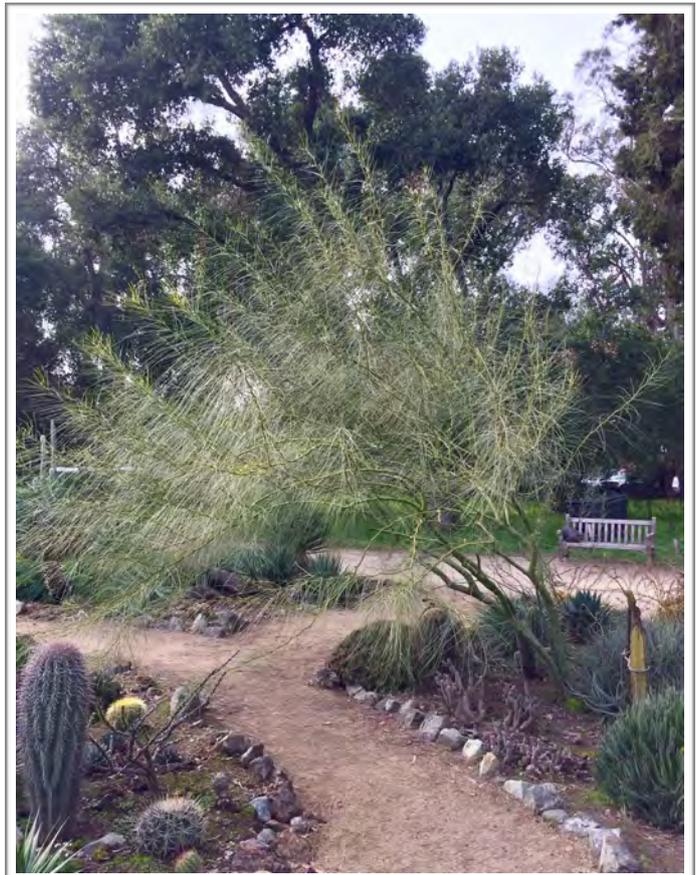
### *Palo Verde (Parkinsonia aculeata)*

The Mexican Palo Verde is a striking, desert-looking tree with an airy canopy of small, feathery leaves and bright green bark. In fact, the bark is capable of photosynthesis! The tree bursts into a fragrant, yellow floral display in spring that is very eye-catching. Palo Verde is deciduous during drought and cold. This species is a quick grower with a branch structure that is architecturally interesting. The tree only casts light shade, so you can plant other drought-tolerant plants below it in a beautiful xeriscape. This species is popular in Southern California, where it often receives no supplemental irrigation. It is truly drought-tolerant. Better to plant this species in warmer areas of Daly City.

[Click here for more info on Mexican Palo Verde trees.](#)

**Characteristics:**

- ✦ 15-20 ft tall
- ✦ 20-25 ft wide canopy
- ✦ low root damage potential
- ✦ good for planting under utility wires
- ✦ good seaside tolerance



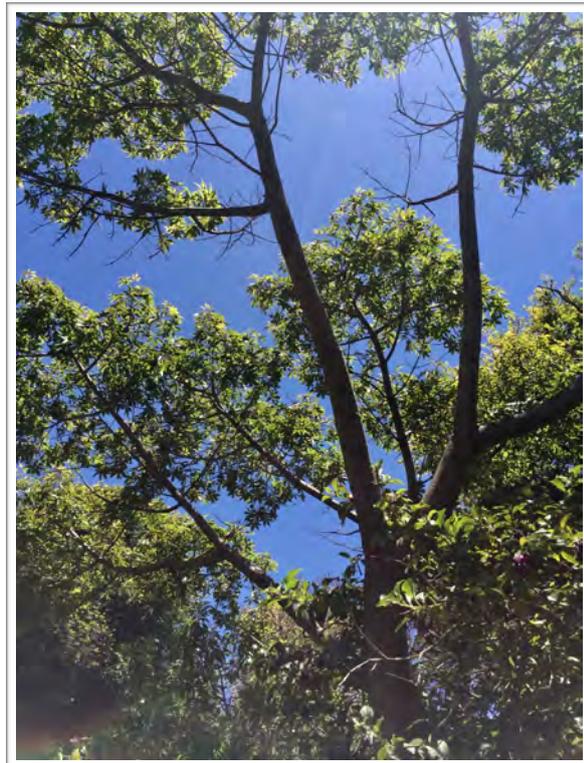
^< bark contains chlorophyll and is capable of photosynthesis, which is helpful for a semi-deciduous species that has tiny leaves; this tree has no leaves at the moment

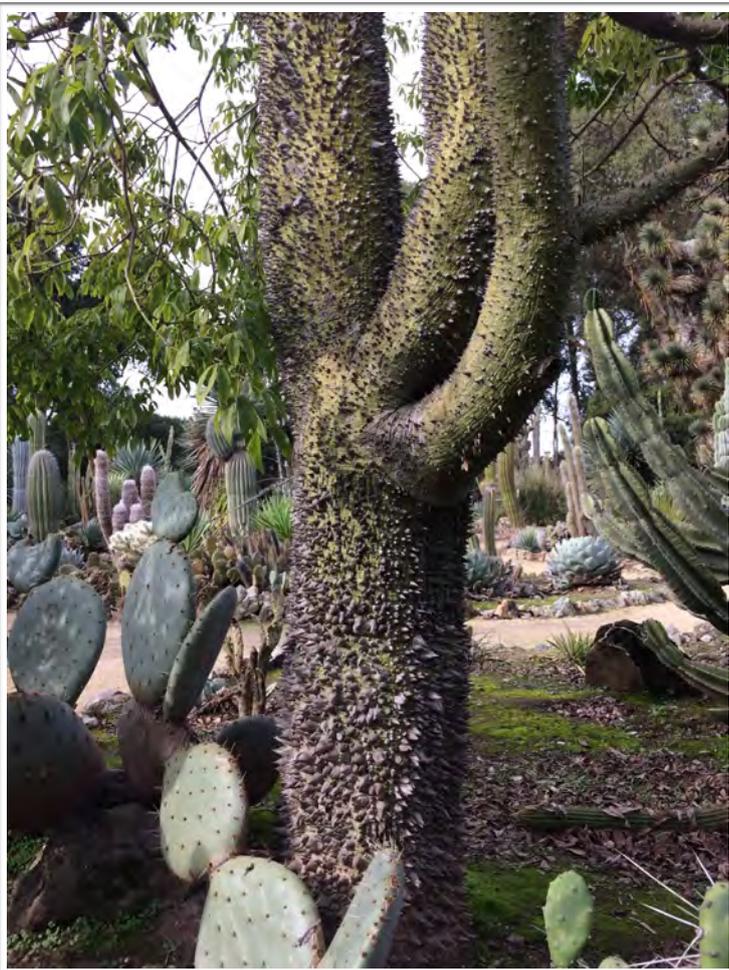
### Floss Silk Tree (*Ceiba speciosa*)

The Floss Silk Tree is native to subtropical areas of southern Brazil, Paraguay, Uruguay, Argentina, and even Bolivia. These are some of the more arid areas of the continent and this tree has special adaptations to drought. With age, its trunk will take on a swollen, bottle shape as it stores water. Young trees feature trunks coated in interesting, fat thorns and are light green in color. The bark is actually capable of photosynthesis, much like the Mexican Palo Verde. The trees are deciduous for only brief periods (if at all) in winter, which is also the bloom season. And what a bloom season it is! Large, five-pointed, deep pink flowers with speckled yellow centers emerge on leafless trees. It may not bloom reliably every year, but when it does, it's magical. Floss Silk Trees cast only moderate shade. Plant in an area that has sufficient space.

#### **Characteristics:**

- ◆ 40-60 ft tall
- ◆ 40-50 ft wide canopy
- ◆ moderate root damage potential
- ◆ good seaside tolerance





^< and < bark is covered in thorns that tend to disappear with age; young bark is green (contains chlorophyll) and is capable of photosynthesis

^ leafy tree at Stanford University

### *Pineapple Guava (Feijoa sellowiana)*

This small tree features a dense canopy of dark green leaves with silvery undersides and fragrant red and white flowers in spring, followed by deliciously edible fruits in fall and winter! Pineapple guava is usually multi-trunked but can be trained to a standard form. This tree hails from the same subtropical, arid areas of South America as *Ceiba speciosa*. Best to plant in warmer areas of Daly City if you want more reliable fruiting.

**Characteristics:**

- ✦ 18-25 ft tall
- ✦ 18-25 ft wide canopy
- ✦ low root damage potential
- ✦ good for planting under utility wires
- ✦ good seaside tolerance

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### *Palo Blanco (Acacia willardiana)*

This tree really invokes a desert vibe with its bright white, peeling bark and airy/thin canopy of long, wispy leaves. Cream-colored catkin flowers appear in spring. It really lends itself to an underplanting of drought-tolerant plants, as the sun will not be blocked from reaching them. Native to the Sonoran Desert of Mexico.

**Characteristics:**

- ✦ 10-20 ft tall
- ✦ 12-15 ft wide canopy
- ✦ low root damage potential
- ✦ good for planting under utility wires

# MEDITERRANEAN TREES

## What is a Mediterranean climate?

The world's five Mediterranean climates are found on the western side of continents between 30° to 40° latitude and include areas surrounding the Mediterranean Sea, coastal California, the Western Cape of South Africa, South and Southwestern Australia, and central Chile. All feature mild, wet winters and summer droughts. Plants from these regions do very well in Daly City.

## Did you know?

The areas surrounding the Mediterranean Sea only receive between 10 and 20 inches of rain annually. This low-water climate is very similar to our own.

## Maquis biome

Similar to California's chaparral, the maquis biome in the Mediterranean Basin is a shrubland habitat. It has been colonized for thousands of years by humans and has been altered by extensive livestock grazing and agriculture.

We can't forget about the Mediterranean Basin, now can we? This is the region that surrounds the Mediterranean Sea and extends through Southern Europe, parts of central Asia, Northern Africa, and the islands of Atlantic Macronesia. There are only two trees to feature here and both are crowd-pleasers.

## Recommended Species

### Dragon Tree (*Dracaena draco*)

This species is outstanding!! And oh so interesting! Dragon Trees are native to the Canary Islands, Madeira, Porto Santo, Cape Verde, and they are also planted in the Azores. These islands are collectively known as Atlantic Macronesia. Dragon Trees are in serious decline, with only a few hundred trees still in existence in the wild. Another subpopulation exists in the Atlas Mountains of Morocco but it may be a variant of the species. Interestingly, there is another Dragon Tree species (*Dracaena cinnabari*) native to the island of Socotra in the Arabian Sea. All of these islands display a wondrous diversity of drought-tolerant plants and people come from all over the world to see them.

Dragon Trees are slow growing, medium-sized trees that feature a stunning architectural form. At first, young trees grow with one, light gray, smooth trunk topped with a rosette of long, pointed, green leaves. After blooming occurs every 10-15 years, they branch and begin to form the tight umbrella-like canopy that makes this species iconic. Age of trees is estimated by branching since there are no growth rings. This species is vulnerable to extinction and is no longer present in much of its former range. The largest and oldest specimen of the entire species, the Drago Milenario, is estimated at 800-1,000 years old and is located in a park in Icod de los Vinos, Tenerife.

**Characteristics:**

- ◆ 10-30 ft tall in your lifetime, (50+ ft over many more decades)
- ◆ 6-25 ft wide canopy
- ◆ low root damage potential
- ◆ good seaside tolerance
- ◆ slow growing
- ◆ good for planting under utility wires

> Drago Milenario, the oldest of its entire species, estimated at 800-1000 yrs old, is growing in Parque del Drago, Tenerife, in the Canary Islands



< and ^ other dragon trees growing in their native Tenerife, the largest of the Canary Islands



^ young dragon tree planted in the City's new drought-tolerant garden on Mission St at Bepler St in Top of the Hill

< dragon tree at a residence in Tenerife, Canary Island, probably over 75 years old



< dragon tree in Lower Haight, San Francisco



### Olive (*Olea europea* 'Majestic Beauty', 'Fruitless', or 'Swan Hill')

Everyone loves olive trees, and for good reason. The light gray bark, the green leaves with silvery undersides, the gnarled and interesting form the tree takes with age, and of course, the edible fruits, all make this tree a favorite of many. Olives also make great street trees, where they don't mind wind, fog, drought, or being confined to small squares surrounding by sidewalk. Fruitless varieties are now available, so there are no worries about the mess of fruit drop. *Note:* Do not plant Russian Olive Trees (*Elaeagnus angustifolia*), as they are invasive in California. Do not plant *Olea europea* trees that produce fruit, as they have been observed invading wild lands as reported by the [Cal-IPC](#).

#### **Characteristics:**

- ◆ 25-30 ft tall
- ◆ 25-30 ft wide canopy
- ◆ low root damage potential
- ◆ good seaside tolerance
- ◆ moderate salinity tolerance



# CONIFERS

## Monterey Pines under attack

The Monterey Pine (*Pinus radiata*) is native to the central coast of CA, but is heavily planted around the world as an important timber species. There are close to 2,000 of these pines in Daly City's urban forest, making them the most prevalent species, by far. The ongoing drought has created perfect conditions for disease and bark beetle infestations that are now wreaking havoc on this species. A pitch canker disease caused by the fungus, *Fusarium circinatum*, presents as lesions and can cause extensive damage to the pines, even outright killing them, especially in plantings along the coast. Bark beetles are also damaging pines and can be fatal to trees that are drought-stressed and unable to mount a proper defense. The beetles also transmit pitch canker disease. The City has seen many of its Monterey Pines die in recent years, as have many other cities across the State.

The Monterey Cypress (*Cupressus macrocarpa*), native only to the Monterey Peninsula, is also susceptible to a cypress canker disease caused by the *Seiridium cardinale* fungus. Drought stress and beetles are also killing this species.

Coniferous trees provide a dramatic statement in the landscape. Their deep green, needle-like leaves and grand stature command attention and remind us of an ancient world. This section will highlight conifers from around the globe that grow very large. Best to choose a location where these trees can reach their full potential, unobstructed.

## Recommended Species: Araucarias

Araucaria is an ancient family of plants that once enjoyed widespread distribution in the Jurassic Period. Now, remaining species are confined to the Southern Hemisphere in South America, Australia, New Zealand, Malaysia, and New Caledonia. These trees existed during the time of dinosaurs and are considered to be living fossils. The Monkey Puzzle Tree (*Araucaria araucana*) was already described in the previous section on Central and South American Trees. There are other famous Araucarias that include the Bunya-bunya (*Araucaria bidwillii*) and the Brazilian Paraná Pine (*Araucaria angustifolia*), but they are not readily available at nurseries.

[Click here to learn more about the Araucaria family.](#)

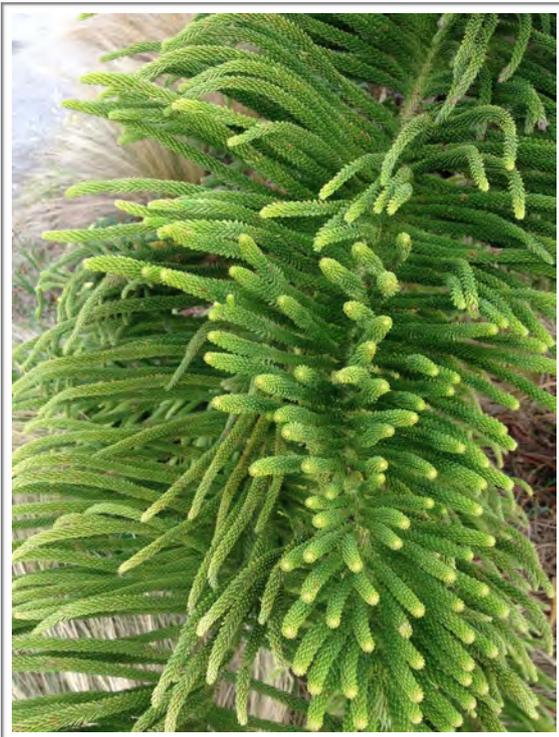
### *Norfolk Island Pine (Araucaria heterophylla)*

You have definitely seen this species planted around town because it is very prevalent in the Bay Area. This tree is native to Norfolk Island off the coast of Australia in the South Pacific Ocean. It features a very distinct structure, with symmetrical branches whorled around at intervals along a very straight trunk. This tree grows straight up in the air despite winds. Often referred to as Star Pine due to the shape its branches create. Sold most often as a juvenile tree around the holidays for use as a living Christmas Tree. When they begin to mature, the foliage changes and become more upright. Trees tend to look less symmetrical with age. Needs ample growing space. These trees can be "topped", an aggressive

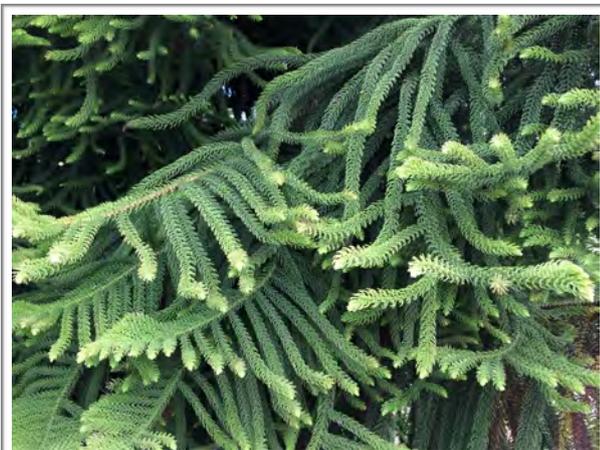
pruning technique that removes the top portion of the tree, and then resprout multiple new trunks!  
Other conifers cannot resprout.

**Characteristics:**

- ✦ 100 ft tall
- ✦ 60 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance



^> symmetrical branching pattern creates a five-pointed star shape, which is more evident in young trees



### Cook Island Pine (*Araucaria columnaris*)

Nearly indistinguishable from the Norfolk Island Pine, the Cook Island Pine features a more columnar structure. These trees were planted heavily in Hawaii, where they have naturalized and can be seen today. They are also common in Southern California. This species tends to lean a bit in comparison to *Araucaria heterophylla*. Good option for a planting location that cannot take as wide a tree.

#### **Characteristics:**

- ✦ 100-160 ft tall (although shorter in cultivation)
- ✦ 10-20 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance

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## Recommended Species: Cedars

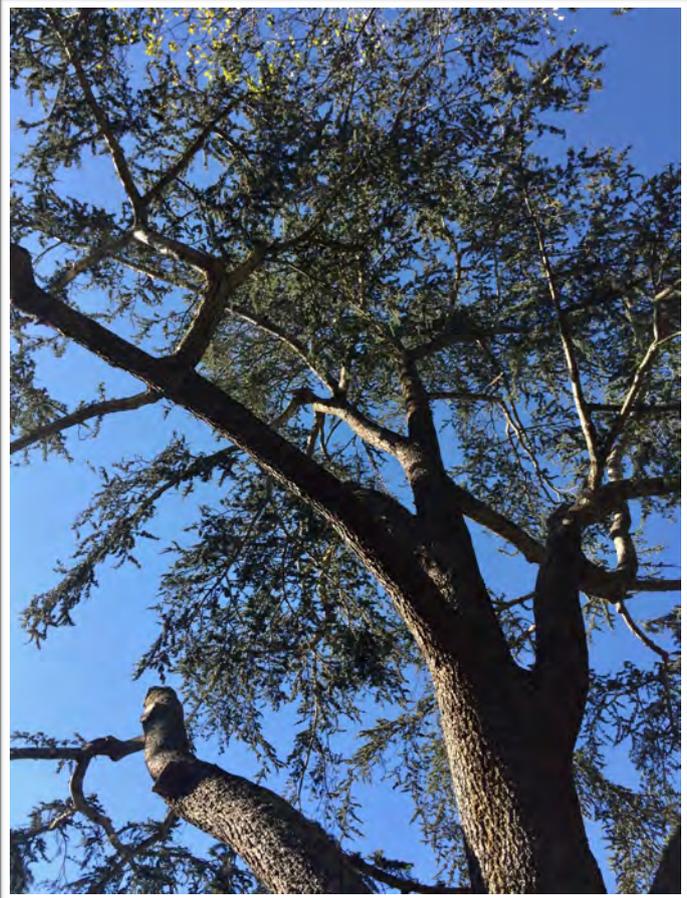
### Blue Atlas Cedar (*Cedrus atlantica* 'Glauca')

This slow-growing tree hails from the Atlas Mountains of Morocco and Algeria and features fragrant bark and leaves of a silver-blue color (in the 'Glauca' variety). The blue color of its needles really glows! The cones are highly ornamental as well. Commonly planted around our region. Some sources say this tree has medium water needs, but it will do fine with low water in our coastal location. Must be planted in an area with lots of space, as this species will have a large presence at maturity.

#### **Characteristics:**

- ✦ 40-60 ft tall
- ✦ 25-40 ft wide canopy
- ✦ moderate root damage potential
- ✦ seaside tolerance is good
- ✦ salinity tolerance is moderate





### *Deodar Cedar (Cedrus deodara)*

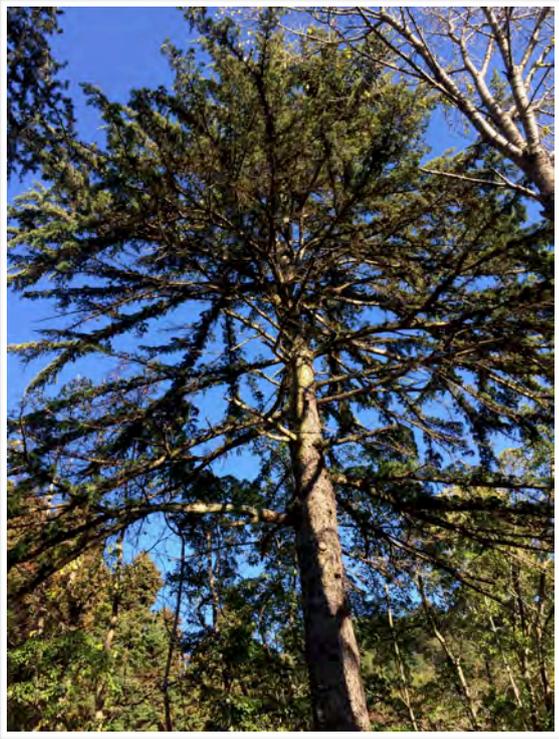
This cedar is native to the Himalayas of Eastern Afghanistan, Northern Pakistan, and North-central India. It displays soft, light green foliage that hangs off branches in a spreading and/or weeping form, creates a conical canopy shape, and overall is a highly attractive tree. It's bark and leaves are both fragrant. Best planted in an area with lots of space.

#### **Characteristics:**

- ✦ 40-60 ft tall
- ✦ 20-30 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance

> mature trees have slightly weeping branches





## Recommended Species: Cypress

Monterey Cypress (*Cupressus macrocarpa*) is heavily planted in Daly City, so much so that it accounts for 13% of all trees in our urban forest. You are more than welcome to plant that species, but it will not be included in the Project Green Space grant program. There are plenty of other cypress species that will do well here.

### Guadalupe Cypress (*Hesperocyparis guadalupensis*)

This endangered tree is only found on Guadalupe Island, off the coast of Baja California in Mexico. There are only about one hundred left. The island experiences frequent fog, just like Daly City. In fact, the island is considered a fog desert, which is a very rare habitat. This is a great option for anyone that wants to help conserve an endangered species! The tree has an irregular, spreading canopy with small green/gray leaves that are fragrant. Not the easiest species to find, but there are sources.

#### Characteristics:

- ✦ 35-60 ft tall
- ✦ moderate root damage potential
- ✦ good seaside tolerance

> young tree for sale at the UC Berkeley Botanical Garden



## Recommended Species: Pine

### Canary Island Pine (*Pinus canariensis*)

This is one of the most beautiful pines in the world! Exceptionally long needles create a soft appearance on branches along a tall, columnar trunk. This species is native to the Canary Islands. On the largest of the islands, Tenerife, it can be found in high numbers in the fog belt that encircles Teide, the third tallest volcano in the world. Its long needles help capture atmospheric moisture, but it also thrives in much drier locations on the islands. No wonder it does so well in the Bay Area. This is a large tree and is often planted in large medians and other larger areas like yards. You can find some younger specimens surrounding the parking lot at City Hall. Resistant to pitch canker disease.

#### Characteristics:

- ✦ 50-80 ft tall
- ✦ 20-35 ft wide canopy
- ✦ moderate root damage potential
- ✦ good seaside tolerance



< Canary Island Pines in their foggy habitat in Tenerife, Canary Islands

# DECIDUOUS TREES

## The fall color fail

The hardwood trees that put on big, autumn color shows in the rest of the country are a bit confused in our climate. Some hold their leaves well into winter, some turn from green to brown, skipping any color display at all, and some of the more moisture-loving species, like maples, inconsistently show fall color. Why? It comes down to our climate of course! Fall color is induced when trees begin preparing for winter as the length of night increases in fall. Here in Daly City, the color change is impeded by temperature, fog, wind, and arid conditions. [Click here to learn more.](#)

## Deciduous vs. evergreen trees

Evergreen trees do not lose their leaves and provide year-round greenery and pollution abatement. These are preferred for our area. Deciduous trees, however, do have some benefits. They may be less likely to suffer from winter storm damage, as winds do not have as much plant material to impact. They also may provide opportunity for winter sunshine to reach the ground or house, as their open, leafless canopies allow light to pass through unobstructed.

There are not many *drought-tolerant*, deciduous trees available for our climate. It's also important to remember that we will *not* get the vivid, autumn foliage display that is seen in areas where deciduous tree species are common. Our mild, foggy climate prevents it from happening, but drive a matter of miles down the peninsula and away from the coast, and you'll see some trees producing nice fall color. Our fall foliage trees tend to change from green to yellow to brown very quickly, skipping the more vibrant colors.

Due to extreme maritime-influence, we wind up with deciduous trees that look tattered and out of place. The London Plane Tree (*Platanus x acerifolia*) is a chief example. It is plagued by fungal infections (anthracnose and powdery mildew) due to foggy and windy conditions, and looks its worst all summer long. The large leaves are beat up by our strong winds. They stand out as glaringly poor choices for much of the year.

The simple fact is that trees native to our coastal area are not deciduous (with the exception of California Buckeye that loses leaves in response to summer drought, not winter). Even our native oak, the Coast Live Oak (*Quercus agrifolia*), holds its leaves all year. Deciduous trees planted here often hang onto their leaves well into December and then lose them through February, when our spring season begins. Our climate does not match their natural rhythm.

Read on for information on a few deciduous tree species.

### California Ash (*Fraxinus dipetala*)

This quick-growing native tree is often multi-trunked with a large, leafy canopy and brown bark. This is the only *Fraxinus* species that has low water requirements and unsurprisingly, it's native to California. The rest, including the popular Flame Ash (*Fraxinus angustifolia* 'Flame'), have moderate water needs. 'Flame' is known for its fall color, but again, they don't put on a big show in our climate.

**Characteristics:**

- ✦ 20-25 ft tall
- ✦ 15-20 ft wide canopy
- ✦ low root damage potential
- ✦ good seaside tolerance

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### *California Native Oaks*

While these species are not native to our locality, they do hail from other parts of our state. They are also becoming more available in the nursery industry. Better to plant a Coast Live Oak, but for those of you that want a deciduous tree, native oaks are great choices. [Click here to learn more about the native oak species.](#)

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### *American Sweetgum (Liquidambar styraciflua)*

This listing is for information only. This tree will not be offered through Project Green Space but it is asked about frequently. Plant with CAUTION! Liquidambar creates large, leafy green canopies of attractive five-pointed maple-like leaves set over smooth, gray bark. The large canopies, however, are supported by very large root systems that have made these trees notorious concrete breakers. Overall, poor tree structure can also cause problems. Spiny seed pods are a nuisance. I cringe every time I see this species planted as a street tree. Plant only in very large spaces, like a backyard. This species has moderate water requirements and is not exactly drought-tolerant, although specimens in Daly City are not observed to have suffered all that much from the drought. I wavered back-and-forth over including this tree, and ultimately I couldn't decide, so it's here for you to make your own decision. This is one of the few species that will give us red fall color, but it comes with a range of challenges.

In the proper climate (like its native habitat in the Eastern US) this tree turns a spectacular bright red in autumn. Here, you can choose a cultivar that has been selected specifically for its ability to provide fall color in warmer climates. While Daly City is not exactly a warm climate, this tree will produce some red colors, but not nearly as bright as it would elsewhere. Nevertheless, this species does provide that wonderful canopy of green leaves during the growing season. Photos below show fall color in our climate.

**Characteristics:**

- ✦ 80 ft tall
- ✦ 40 ft wide canopy
- ✦ *high* root damage potential
- ✦ good seaside tolerance



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*\*Special thanks to Igor Lacan, Urban Forestry Advisor at the UC Cooperative Extension San Mateo-San Francisco Counties Horticulture program, Mei Ling Hui, Urban Forest and Agriculture Coordinator at the San Francisco Department of the Environment, and Clarke de Mornay of Flora Grubb Gardens for all of their valuable advice on tree species!*

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*profiles of 64 tree species planted in San Francisco as well as suggested tree walks in various neighborhoods of the city*

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*website by the above author*

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