

## MONTEREY CYPRESS

Family	Genus	Species
Cupressaceae	<i>Cupressus</i>	<i>macrocarpa</i>



<b>Range:</b>	Native to Monterey County (Point Lobos & Cypress Point)
<b>Habitat:</b>	Coastal headlands
<b>Type:</b>	tree
<b>Uses:</b>	Timber tree, provides windblock from ocean winds
<b>Bed Location:</b>	Throughout zoo

**Characteristics:** Monterey Cypress usually has a flat crown with a trunk that leans away from ocean winds, both features of this coastal tree. It will grow up to 70 feet. Trees planted farther from the coast tend to be straighter and have a more conical crown. Fogs that bathe the Monterey forests and cool the air are essential to their well being. These trees provide a windbreak and help establish a kinder ecosystem for more delicate plants. They are salt and wind tolerant and prefer well-drained soil.

The foliage consists of small, dense, dark green scale-like leaves that overlap, The bark is fibrous and stringy, and the 1 ¼" cones globular and smooth, changing from green to brown as they mature. On a hot day you can hear the cones clicking open to release the seeds.

The Monterey Cypress is the tallest tree in the zoo.



## MONTEREY PINE

Family	Genus	Species
Pinaceae	<i>Pinus</i>	<i>radiata</i>



<b>Range:</b>	Native to Central Coast of California; Santa Cruz to San Luis Obispo Counties.
<b>Habitat:</b>	Sandy areas in coastal plain fog belt
<b>Type:</b>	Tree
<b>Uses:</b>	lumber & pulp
<b>Bed Location:</b>	Throughout zoo

**Characteristics:** Monterey Pine grow up to 60'. Needles are 5" long and are shiny and flexible. They are in bundles of three. 5" Cones are ovoid. Bark is reddish brown and scaly with furrows.

It is the most widely planted pine in the world, valued for rapid growth and desirable lumber and pulp qualities.

Monterey Pine is a species adapted to cope with stand-killing fire disturbance. Its cones are serotinous, i.e. they remain closed until opened by the heat of a forest fire; the abundant seeds are then discharged to regenerate on the burned forest floor. The cones may also burst open in hot weather.

## CALIFORNIA FAN PALM

Family	Genus	Species
Arecaceae	<i>Washingtonia</i>	<i>filifera</i>



<b>Range:</b>	Southeastern California, Southwestern Arizona, Northern Baja California
<b>Habitat:</b>	Desert riparian at spring fed oases
<b>Type:</b>	tree
<b>Uses:</b>	Natives used for food and flour, sandals, roofs and baskets
<b>Bed Location:</b>	Savannah

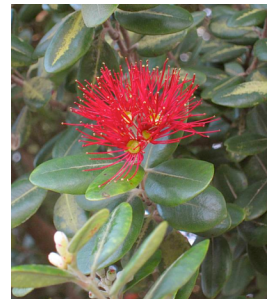
**Characteristics:** Only palm tree native to the Western United States. Leaf fronds can be up to 6' long. These fan-shaped leaves spread from around the top of the tree and when the fronds die they remain attached and drop down against the trunk. This shelter creates a microhabitat for many small birds and invertebrates.

White, funnel-shaped flowers, hang down from leaf bases in the spring. The California Fan Palm does not produce dates, but has elliptical black "berries".



## NEW ZEALAND CHRISTMAS TREE

Family	Genus	Species
Myrtaceae	<i>Metrosideros</i>	<i>excelsa</i>



<b>Range:</b>	North Island of New Zealand
<b>Habitat:</b>	Coastal rocky habitats, lake edges
<b>Type:</b>	Evergreen tree
<b>Uses:</b>	ornamental
<b>Bed Location:</b>	Front entry courtyard Gorilla World

**Characteristics:** The New Zealand Christmas tree (Pōhutukawa in Māori) is known for its vibrant red flowers and its ability to survive on perched on rocky, precarious cliffs. This tree is part of the Myrtle family and grows and as a multi-trunk tree to 82 feet. The bright red inflorescence is made up of many smaller flowers with protruding red stamens, tipped yellow with pollen. Frequented by birds and insects for the abundant nectar. Seeds are enclosed in capsules. Red tipped aerial roots grown downward from branches and root in the soil below buttressing the tree.

Blooms in New Zealand at Christmas time.

### NORFOLK ISLAND PINE

Family	Genus	Species
Araucariaceae	<i>Araucaria</i>	<i>heterophylla</i>



<b>Range:</b>	Norfolk Island in the South Pacific
<b>Habitat:</b>	coastal
<b>Type:</b>	Conifer tree
<b>Uses:</b>	ornamental
<b>Bed Location:</b>	Old South Exit

**Characteristics:** Norfolk pines have distinctively flat branches and short soft needles. It is not a true pine. The trees grow to a height of 200 feet, with straight vertical trunks and symmetrical branches, even in the face of incessant onshore winds that can contort most other species.



### MONKEY HAND TREE

Family	Genus	Species
Malvaceae	<i>Chiranthodendron</i>	<i>pentadactylon</i>



<b>Range:</b>	Guatamala and S Mexico
<b>Habitat:</b>	Mountain cloud forests
<b>Type:</b>	Evergreen tree
<b>Uses:</b>	ornamental
<b>Bed Location:</b>	Grizzly bear exhibit

**Characteristics:** Monkey hand trees can grow from 35 - 90 feet. Flower appears in late spring or early summer and their shape resembles an open, clawed hand. There are no petals but instead 5 stamens that branch out like fingers with yellow pollen. The large drooping heart-shaped leaves have fuzzy brown wool-like hairs on the underside. Fruits are 5 inch long brown fuzzy, woody, and deeply fluted that split into 5 lobes when dry. Water collects in the upward-facing blooms and birds like to sit and drink the nectar. Flowers are bat or perching bird pollinated.

## BLUE GUM EUCALYPTUS

Family	Genus	Species
Myrtaceae	<i>Eucalyptus</i>	<i>globulus</i>

<b>Range:</b>	Southeast Australia, Tasmania
<b>Habitat:</b>	Tall, open forest on a wide range of soils.
<b>Type:</b>	Evergreen tree
<b>Uses:</b>	Timber, paper pulp, oil, tea, medicinal
<b>Bed Location:</b>	Throughout zoo



**Characteristics:** Typically grow from 98 - 180 feet tall. Blue gum is one of the most extensively planted eucalyptus due to its rapid growth and adaptability to a range of conditions. It is well-suited for Mediterranean-type climates. Flowers attract bees. The flowers are white which produce abundant nectar and they are pollinated by birds, mammals and insects.

Eucalyptus species dominate the tree flora of Australia with over 700 species. Many are known as gum trees because these species exude copious sap from any break in the bark. *Eucalyptus* flowers produce a great abundance of nectar, which are an attractant to pollinators including insects, birds, bats and opossums. Flowers have numerous fluffy stamens which may be white, cream, yellow, pink or red; in bud, the stamens are enclosed in a cap known as an operculum which is composed of the fused sepals or petals or both. As the stamens expand, the operculum is forced off, splitting away from the cup-like base of the flower; this is one of the features that unite the genus. All mature eucalyptus put on an annual layer of bark, which contributes to the increasing diameter of the stems. Adapted for long dry seasons with thick, tough leaves for the retention of water and often silvery in color to stay cool. Eucalyptus leaves contain ~ 40 – 60% water. *Eucalyptus globulus* is not a eucalyptus species that the Koala prefer but the predominant species throughout the zoo.



## ACACIA or GOLDEN WATTLE

Family	Genus	Species
Fabaceae	<i>Acacia</i>	<i>longifolia</i>

<b>Range:</b>	Southeastern Australia
<b>Habitat:</b>	sandy soils mainly by the coast
<b>Type:</b>	Perennial, evergreen tree
<b>Uses:</b>	Soil erosion, food, dyes, wood
<b>Bed Location:</b>	Throughout zoo



**Characteristics:** Grows quickly reaching 7 – 10 m (23 – 32.8 feet) in 5 – 6 years. Long light green leaves and fragrant round, golden yellow flowers appear in winter to early spring along end of branches.

The genus *Acacia* contains more than 800 species around the world. More than half of the *Acacia* species grow in Australia where the tree is commonly referred to as "wattle." Many non-Australian species are thorny, whereas the majority of Australian acacias are not. They are pod-bearing, with sap and leaves typically bearing large amounts of tannins. Most *Acacia* have small, finely divided green leaflets that give the stalk a fernlike appearance. They have yellow or white flowers and dry seed-pods as its fruit. *Acacia* trees have short life spans of 15 to 30 years. Consequently, they tend to grow quickly and can reach heights in excess of 40 feet. Plants are fire resistant and may regenerate quickly after a fire.

*Acacia longifolia* is a favorite browse of the SF Zoo hoofstock and primates.