

## What are Bonsai?



In the Japanese language bonsai means *plant in a container*. Although the first plants in containers occurred in China many centuries ago, in the 1600s, the Japanese developed the practice of bonsai into the art form we know today. Bonsai can be made as small as your thumb or as large as three or four feet, depending on the desire of the bonsai artist.

### Are bonsai special dwarf trees?

If any of the bonsai in the Safari Park Bonsai Pavilion were planted in the ground, they would grow to be full-sized trees. Just as full-grown trees are outside, almost all bonsai must be kept outside to live as well.

### Where do bonsai come from?

There are many sources of bonsai. A seed or a cutting can be used, but it takes many years or decades to achieve a bonsai depending on the size desired. Specialized bonsai nurseries have pre-bonsai with a good trunk size, ready to be made into a finished bonsai. Bonsai can come from mature landscape plants in your yard or out in nature (with the proper permission). Many bonsai clubs exist and can help facilitate acquisition of bonsai material.

## How are bonsai kept small?

The bonsai process relies on restricting the growth of the plant by using a small container and pruning. The bonsai planted in a small container has a very restricted amount of space for roots to grow. When the roots fill the container, the growth of the bonsai slows and foliage size gets smaller. Fertilizer application is controlled so that the bonsai is healthy, but does not excessively grow. The foliage is pruned to maintain the shape and size. Eventually, the roots get too root bound and the bonsai must be repotted to restore health. To do this, the bonsai is removed from its container and about 50 percent of the root mass is removed and the bonsai is returned to the pot and new soil is added.



### Can a bonsai be made from any plant?

Many types of plants can be used to make bonsai, but leaf size must be small enough to look in proportion to the size of the bonsai. The bonsai process will reduce leaf size, but sometimes not enough to make a believable small tree.

### What should a bonsai look like?

Overall, a bonsai should reflect an idealized tree in nature. There are five basic bonsai styles: formal upright, informal upright, slant, cascade, and half cascade. But, in reality, there are many styles, limited only by the capability and imagination of the bonsai artist.



San Diego Zoo  
Safari Park

# Botanical Tours







**1. Olive**  
*Olea europaea*

There are many types of olive trees. *Olea europaea*, the European olive we all love to eat, is one of the better options for bonsai because of the leaf size and shape. Olives grow well in the San Diego climate. The style of this bonsai is twin trunk.



**5. Bald Cypress**  
*Taxodium distichum*

Bald cypress trees are native to the southeastern United States and are often associated with swamp areas. However, bald cypress grow very well in San Diego. Visitors to the Bonsai Pavilion often mistake this bonsai for a redwood tree because of the frond-like foliage. The style is formal upright.



**9. Olive**  
*Olea europaea*

This bonsai was donated by Cap Puliafico, who worked at the Safari Park in the early days. More than 30 years ago, he was instrumental in establishing a bonsai exhibition here. As part of his job at Safari Park he cared for the bonsai until his retirement at which time the San Diego Bonsai Club undertook responsibility for the bonsai.



**2. California Juniper**  
*Juniperus californica*

This bonsai is from the high California desert and trained to be a bonsai. California junipers are prized for their deadwood. The dark brown part on the trunk and branches is the live vein which keeps the foliage alive. This is an informal upright style. The donor of this bonsai, Mas Takanashi, is one of the original founders of the San Diego Bonsai Club.



**6. Japanese Black Pine**  
*Pinus thunbergii*

Japanese black pines are probably the most challenging bonsai to train and maintain. It takes many years to grow the trunk and to train the foliage to keep a small size. Correctly pruned, a Japanese black pine is one of the most elegant bonsai. The style is informal upright.



**10. California Juniper**  
*Juniperus californica*

This bonsai is an example of a slant style bonsai. The deadwood is the wide white part and is known as a fin because of its appearance.



**3. Lemonade Berry**  
*Rhus integrifolia*

The lemonade berry, a local native shrub, is an unusual subject for a bonsai. This bonsai was collected from an area in coastal San Diego 40 years ago just prior to the area being converted to a housing subdivision. This is the oldest bonsai in the Bonsai Pavilion at 800 years old. The age was estimated by counting growth rings on a piece of deadwood. This is a clump style bonsai.



**7. Prostrata Juniper**  
*Juniperus chinensis 'Prostrata'*

This bonsai is raft style. It is made from an upright tree by cutting off all the branches on one side of the tree then laying this side of tree down on soil. The branches on the other side of the tree are now facing up and become trees in a forest. The visual effect is a log that is laying on the ground and has trees growing from it.



**11. Japanese Maple**  
*Acer palmatum*

Japanese maple can be difficult to grow in San Diego due to the mild winters, but this example does quite well at the Bonsai Pavilion. The style is informal upright.



**4. Prostrata Juniper**  
*Juniperus chinensis 'Prostrata'*

This is an unusual Bunjin-style bonsai, which is defined as a thin trunk with minimal foliage. Many visitors wonder how it could still be alive, but prostrata junipers are very strong and durable.



**8. Foemina Forest**  
*Juniperus chinensis 'Foemina'*

This forest style bonsai is one of the most popular in the Bonsai Pavilion. The forest bonsai was donated by a bonsai artist that was legally blind, but was able to practice bonsai by touch and limited vision.



**12. Oriental Sweet gum**  
*Liquidambar orientalis*

Oriental sweet gum is a small leaved version of larger leaved *Liquidambar* trees that are commonly used around San Diego in landscapes. Oriental sweet gums make great bonsai and exhibit a multi-colored fall display. This bonsai is a good example of a formal upright style and is 40 years old.

Please Note: This specimen is at the entrance to the Bonsai Pavilion.