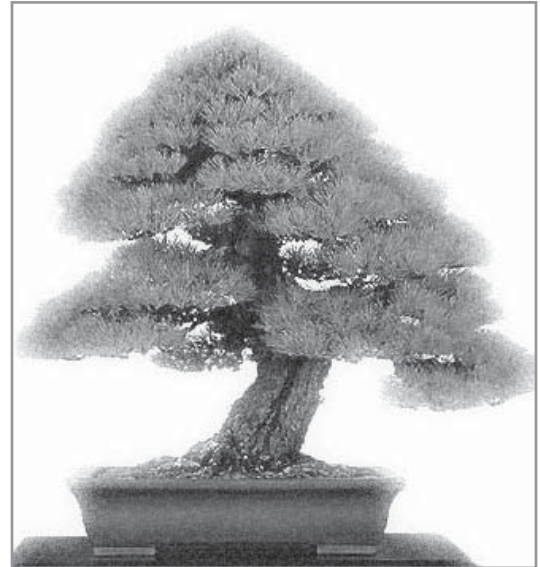




Growing & Maintaining Plants Trained in the Art of Bonsai

BONSAI (pronounced "bone-sigh") is an ancient Oriental art form developed in China over 1,000 years ago, later adopted by the Japanese in the 11th or 12th century. It became a precise art form by the 1500s with well-defined standards. By the end of the 19th century, specimens began to trickle into the West, but this method of cultivating did not become popular in America and Europe until after World War II.

"Bon" is "a tray" and "sai" is "to grow." Therefore, the word bonsai means "planting in a shallow container" and this underlines the importance of the pot. As a rule of thumb, the volume of the container should be about one third of the total volume of the trunk and top growth. Its width should be greater than its height and it must be sound. There should be no cracks and the container should be frost free. The color should be subdued and the inside should be unglazed. At the bottom, there must be at least one drainage hole.



First, put plastic mesh over the drainage hole and anchor it down with a thin layer of gravel; then, add a soil-based compost or a good potting soil. Cover the surface around the plant with moss or small stones.

Now for the plants themselves. A vast number of trees and shrubs can be grown, but types with large leaves are rarely suitable. Well-known bonsai trees and shrubs are listed below, but you can try others. The most expensive method is to buy a ready-grown bonsai, the cheapest is to dig up a seedling from the garden. Suitable bonsai-type plants include:

Evergreen Foliage:

Abies (Fir)
Cedrus (Cedar)
Juniperus (Juniper)
Picea (Pine)
Taxus (Yew)
Thuja (Arborvitae)
Pinus (Pine)

Deciduous Foliage:

Acer (Maple)
Betula (Birch)
Quercus (Oak)
Salix (Willow)
Zelkova (Grey, Bark Elm)
Ginkgo (Maidenhair Tree)
Taxodium (Bald Cypress)
Ulmus ('Jacqueline Hillier' Elm)

Flowers or Fruit:

Azalea (Azalea)
Berberis (Barberry)
Malus (Crabapple)
Pyracantha (Firethorn)
Wisteria (Wisteria)
Crataegus (Hawthorn)
Cotoneaster (Cotoneaster)

Pot, soil, plant ... now you have to look after it. Its home should be **outdoors** and if you have a collection they should be sited so that you can see them from a window. A low slatted table is best, with some protection from high winds and heavy rain. Daily watering is necessary in summer but in the winter once

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or twice a week is sufficient. Use rainwater whenever possible and include a little liquid fertilizer in spring and summer using about 1/4 the recommended amount. Misting the foliage on hot summer days prevents dehydration. A cold frame gives winter protection.

Root and stem pruning are the arts you must learn. In March, take the plant out of its pot and see if its roots have started to encircle the soil ball. If so, cut them back by about 1/3 and remove some of the old soil. For conifers this root pruning should be less drastic. Put the plant back in its pot with some fresh compost or soil and protect from strong winds until it is well-established. Keep well watered and do not feed until new growth appears. Now carefully prune the shoots ... removing the tip will stimulate branching and removing lower side shoots will create the trunk. Copper wire can be used to shape the trunk, but you must remove this wire when it starts to cut into the stem. Branches can be made to weep by hanging weights on them.

Bonsai can have a visiting spell indoors for up to four days. Place the pot in a well-lit area and mist the leaves with water every day. The art of bonsai is rather like keeping a dog ... it will have to be cared for every day and you will have to keep watch on its progress. But the rewards are GREAT for the avid gardener who enjoys a challenging hobby and who has a deep love for plants.

BONSAI ... The Horticultural Art Form

What makes a "tree in a pot" a bonsai? In order for a potted tree to qualify as a bonsai, it must contain the following features:

- health, vigor and structure as would be found in a plant of like species growing in optimum conditions
- an air of dignity and the mature appearance that comes to trees as their trunk grows thick and their bark weathers.
- a well developed and balanced limb structure
- a certain sense of balance and harmony between the trees and its container
- the overall picture should mirror its full-size counterpart in nature

Bonsai is not limited to a particular size. Small sizes can vary from a few inches in height up to fifteen inches. The medium or standard size is usually fifteen to thirty inches high, and the larger ones up to six feet.

One of the most common problems that arises in bonsai keeping is the constant need of maintenance due to the small amount of soil available in their often small and shallow pot. A healthy bonsai in spring can easily consume the moisture in its pot in a single day. Fertilizer and nutrients need to be supplied bi-weekly throughout the growing season. If you successfully grow and feed a bonsai, it will become root bound in one or two seasons and thus need repotting. Soil mixtures and drainage capabilities figure in with maintenance.

Trimming new growth is an on-going process. Feeding, root pruning and repotting are done on an as-needed basis in order to maintain the plant's size and shape. Wiring, tying and arranging limbs must be worked in as well. A good bonsai can be created in an afternoon. An extra fine bonsai usually takes years to develop.

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