

INSECTS & DISEASE

As with any tree or shrub, a stressful condition such as over watering or drying will invite pests. The best way to combat disease is to prevent it - by providing the proper growing conditions. However, when a plant is infested with aphids, mealy bugs or spider mites, use a horticultural oil or insecticidal soap as a first line of defense. Diagnose the condition and obtain a proper remedy for that particular insect or condition. Often, you may need to use a systemic insecticide to address the problem. Follow the direction on the product label.

When dealing with a root fungus, the tree has the appearance of a tree in need of water, but has wet soil. Repot IMMEDIATELY, remove as much of the old soil as possible. Look for black and, at times, mushy roots. Remove as many of the black roots as possible and soil drench with a copper sulfate solution obtained from a garden supply store. Follow the directions for the product's use.



Clubs

To learn more about your bonsai and participate in the many activities surrounding Bonsai, joining a local club is a rewarding experience. Seek out a local organization. Often times, these clubs offer beginner and intermediate classes, as well as hosting visits from nationally known Bonsai experts. Here is a chance to broaden your horizons and learn as much as possible about this fascinating and unique gardening experience.

Further Reading and References

The illustrations are by Norman Haddrick, a bonsai grower and artist living in Canada

Lesniewicz, Paul. *Bonsai The Complete Guide to Art & Technique* Blandford Press 1980

Lesniewicz, Paul. *Indoor Bonsai* Blandford Press 1985

Young, Dorothy. *Bonsai The Art and Technique* Prentice Hall 1985

Liang, Amy. *The Living Art of Bonsai* Sterling 1995

Lester, Louise, and Zane Tom. *Bonsai Styles* http://www.bonsai-bci.com/b_styles.htm

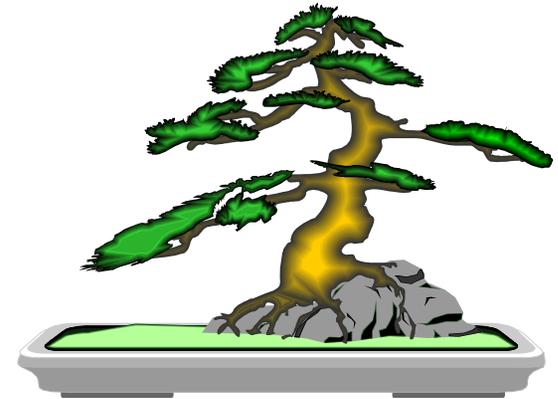
Bonsai Illustrated Guide to an Ancient Art Sunset Books and Sunset Magazine

American Bonsai Society <http://www.absbonsai.org>

Bonsai Clubs International <http://www.bonsai-bci.com>

Bonsai Societies of Florida <http://www.bonsai-bsf.com/>

Bonsai Facts



Bonsai is unique in that it combines both art and horticulture. The challenge is to create a composition that represents a tree found in nature. Various techniques are deployed to accomplish the results. The objective is to create the image of a plant which in most cases looks much older than it is. Another unique aspect of bonsai is that the composition continues to change in form. Unlike other art forms such as paintings and sculpture, Bonsai change with the seasons and continue to grow.

Bonsai had its origin in China about 2000 years ago. The Chinese word *punsai* literally translated means shallow pot and tree. The Japanese focused what they experienced in nature: a tree in a forest, a meadow, or the side of a cliff. The Japanese also created styles which included clumps and forests of trees. Bonsai became popular in the US with the immigration of Japanese as they practiced their culture. There was a swelling of interest after World War II. Soldiers returning from Japan related stories of the mysterious miniature trees – sometimes referred to as “ming” trees.

There are five basic styles of bonsai: Formal Upright, Informal Upright, Semi-cascade, Cascade, and Slant.

In addition, there are countless variations from these: clump, forest, and Banyan to name a few.

Training

Training is accomplished by a variety of methods. Most are basic and employ horticulture pruning techniques. Directional pruning is used to control which bud becomes dominant as well as the direction of growth. More severe methods such as wire (copper or copper anodized aluminum) are wrapped on a branch. The wire is then bent in the direction of the desired growth and shape. All of this is designed to create an image of an old tree in nature. Taper in the trunk and branch, a fine reticulate branching and a proper ratio of tree height to trunk width and taper all work to create a pleasing image of living art..

Basic Care

SOIL

Bonsai are planted in a soil-less medium. The mixture is sifted to remove dust which tends to block the pot drainage holes. This will result in an average size particle from 1/8" to 3/8". The mixture consists of gravel or sand, high fired clay (such as turface™ or terragreen™) and an organic mulch. The ratio of these components will vary based upon the tree and area of the country. For example, here in Florida higher humidity and greater amounts of summer rains require a more porous or rapid draining soil.

WATERING

Requirements for water will differ greatly between specie of trees. Beginner Bonsai trees often die due to overwatering. When the tree becomes stressed, water intake is reduced and the roots rot due to fungus infection. To control this situation, the watering of bonsai needs to be varied based upon needs. It is not as simple as maintaining a watering schedule of once or twice per week. Water when necessary. It is best to “feel” the soil. Place your finger and feel if the soil is wet, damp or dry and water accordingly. Allow the plant to dry between watering, do not allow the soil to become bone dry.

FERTILIZING

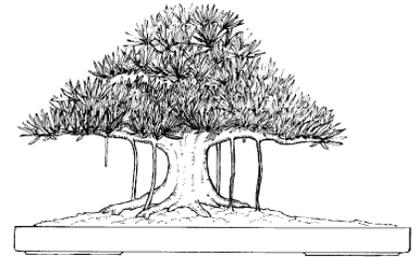
For the “average” bonsai enthusiast, fertilizing can be accomplished with any commercial water soluble product. Follow the instructions on the label to be on the safe side. There are many other methods for fertilizing made specifically for bonsai. One item to note is that fertilizing the trees should only be done during the growing season. Do not fertilize a tree for 3 to 4 weeks after transplanting.

REPOTTING

Repotting is an extremely important aspect of successfully keeping bonsai. Most horticulture techniques have the gardener repotting pot bound trees into larger containers. This allows the tree to continue to grow larger. In Bonsai, root pruning is another very important aspect, along with pinching buds. This technique allows the tree to continue to enjoy health and vitality while remaining in the small container - which is its home. Time for repotting will vary from tree specie to tree specie. More mature conifers usually need repotting every 2 to 5 years. Again, this will depend upon tree growth and soil compaction. Conifers are usually repotted in early spring when the buds are beginning to form. Pines have special requirements. It is best to consult reference books on specialty bonsai such as pine and azalea.

INDOOR BONSAI

Many tropical trees do well as bonsai. The Ficus sp., particularly, can be well adapted to bonsai. Others, such as Erethia buxifolia (Fukien-tea),



Schefflera sp. Bougainvillea sp. are great bonsai trees. Their care is similar to other trees. However, these are cold sensitive plants and cannot take even a light freeze. Tropical trees need protection from cold at about 40°F. Buttonwood (Conocarpus erectus) require cold protection at 50°F. Trees and shrubs need air movement to aid in transpiration. Since these are trees and not house plants, it is best to rotate the trees to the outside for periods during warm weather.

OUTDOOR BONSAI

Most of what the public is familiar with when it comes to Bonsai are the pine and junipers. These are the beautiful trees seen on television, movies and even in some of our parks. There are many other species of outdoor trees and shrubs that make excellent Bonsai trees. Deciduous trees make good specimens. They not only possess a lush green canopy in summer, but may exhibit beautiful fall foliage and create a lovely winter silhouette. In addition some of the deciduous such as the Crab apple (Malus sp.) will bear fruit. Keep in mind these are outdoor plants and need an outdoor environment to live. They can be brought in for very short periods of time for a display – then right back out. It is best to keep outdoor trees and shrubs in filtered sunlight or morning sun. Placement of trees will, of course, vary with area of the country. In winter, again depending upon the area of the country, outdoor plants will need to be protected from extreme cold temperatures and drying winter winds.

Silhouette