

# **Basic Bonsai Care**

Inland Empire Bonsai Society

<http://www.inlandbonsai.com/>

## **General Care and Maintenance of Bonsai**

A well-cared for bonsai can become a very rare and valuable friend. Some become, like fine works of art, priceless commodities. In recent times, some of the older Japanese bonsai have sold for over one million dollars. Of course, these trees must be properly cared for. Such care includes the correct soil mixture, watering, fertilization, and repotting when needed.

## **Where to Keep Bonsai**

It must be remembered that, unless you are keeping tropical trees, bonsai are outdoor plants. For the majority of the time, bonsai should be kept in a well-lighted place and sheltered from the hot direct rays of the summer sun. Such diverse locations as a garden, an open balcony, a patio, by a pool, or in a roof garden will allow your tree to be exposed to the atmospheric conditions - sun, wind and rain - that it needs in order to thrive. Bonsai may be brought inside the house as a decoration for a few days at a time.

In our area it is important that, with the exception of some of the pines, your bonsai be placed where it does not receive a lot of direct sunlight, especially during the hottest part of the summer. The best type of shelter from the summer sun is a screened patio, lath house, or some other shaded location that can filter the sun's rays.

During the winter, bonsai, with the exception of tropicals, must be kept outdoors. It is advisable to give them some shelter from temperature extremes and harsh drying winds. A cold frame is desirable, but your bonsai may be set on the ground in a sheltered location. In the latter case, some form of mulch, such as pine needles or ground bark, should be placed around the pot up to the base of the trunk to help insulate the root system from temperature extremes.

## **Watering Bonsai**

More trees probably die as a result of improper watering than any other single cause. Not only will the lack of water and higher temperatures cause the roots to wither and die, but air penetrating the dry soil will also make it virtually impossible for later watering to be effective. It is imperative that your bonsai receive proper watering in a timely fashion. This may mean watering once or twice a day during the hottest part of the summer. A good rule-of-thumb is to remember that bonsai should be watered before the surface soil becomes totally dry. A lightening of color of the soil surface is a good visual indication that watering is needed.

Your bonsai should be watered until water runs out of the drainage holes in the bottom of the pot. This may mean watering in two or three stages, giving the water time to soak into the soil between sprinklings. In Japan, it is said that one should water a bonsai three times; once for the top, once for the middle, and once for the bottom. A

garden hose with a fine sprayer attachment or a watering can with a fine rose are the most effective and safe methods for watering bonsai. The spray should be fine so the water has time to soak in yet does not erode the soil,

As mentioned above, in the summer your bonsai may need watering once or twice a day. In cooler seasons one may only need to water every other day, or every third day. In the winter your trees still need to be watered, but maybe only once every two or three weeks, or even once a month, depending on weather conditions and on your method of winter protection. Remember, these are only guidelines; many variables will control how often your bonsai need watering. Temperature and other weather conditions, type of tree, depth of pot, and location of your tree all will affect how often you must water.

### **Pruning and Trimming Bonsai**

One of the most important things we do to our bonsai trees is periodic pruning and trimming. It is through pruning and trimming that we attain the basic shape of our trees. A well-shaped bonsai needs to have its buds and new shoots pinched in order to keep its good shape. When styling a tree, we prune unnecessary branches and twigs. Proper pruning and pinching techniques are the subject of many books and magazine articles; one should make an effort to learn as much as possible about the subject.

### **Wiring Techniques and Other Training Methods**

Wiring a bonsai to attain a desired shape is often used in place of, or in association with, long-term pruning. Good wiring techniques permit us to train trees along almost any lines. For example, wiring is used to make a bonsai look older by bending low-hanging branches, or to create a bend in the trunk, or to eliminate one. The best material to use is either malleable copper or anodized aluminum wire, which can be purchased at most bonsai shops.

The thinnest wire that will hold a branch in the desired position is the right diameter of wire to use. It is best to not wire trees that have just been repotted; give the tree time to recover from one procedure before starting another. Wind the wire around the branch at about a 45-degree angle, just tight enough to hold the branch, but not so tight that the wire digs into the bark. The wire should be left on for six to eight months, in some cases longer and in some cases less. The wire must hold the branch in position long enough for some growth to occur so that it will retain the desired shape. However, the wire must be removed if it starts to cut into the bark. Wiring scars take a very long time to heal and can seriously affect the appearance of your bonsai.

There are other techniques that may be used to shape branches. Wires can be attached to the lip of the container and then guy wires can be attached to it. These guy wires can be attached to another branch, or to the trunk. One can even tie weights to the branches to bring them down to the desired angle.

## **Repotting Bonsai**

Bonsai must be repotted when the tree becomes root-bound because the roots have filled the pot to the point where it is difficult for water to penetrate the soil, and the tree can no longer take up nourishment. Bonsai generally need repotting every one to three years. How often any given bonsai must be repotted will depend on the type of tree, its age, the size of container, and the state of training it is in.

Repotting bonsai and trimming the roots is not a hazardous operation if it is done at the right time of the year and if one is careful not to take away too much soil from the root ball. One can safely remove one third of the total volume of soil and roots from the root ball providing it is done just before the new growth starts in the spring.

Every bonsai artist has his or her favorite soil mix. However, most will agree that it should provide for good air and water movement since bonsai are generally potted in shallow containers. As a result, most garden and potting soil is too fine. A mixture of aggregate like crushed lava, pumice, and Akadama (Japanese fired clay) works very well. Particles smaller than 1/16" and those larger than 1/2" are nearly always discarded. The particle size is generally scaled to the tree and pot so that the smaller pots will retain more water and the larger ones will drain better.

## **Procedure for Repotting Bonsai**

1. The soil should be moderately dry. Carefully take the tree out of the container.
2. Untangle the roots from the root ball mass carefully.
3. Using a pointed stick, like a chopstick, pick away the soil from the sides and bottom of the root ball. Remove approximately one third of the root ball mass, being careful not to disrupt the soil from around the trunk of the tree.
4. Carefully trim off the exposed roots with a sharp pair of scissors.
5. Prepare the container, covering the drainage holes with screen and, if necessary, put wires in place to secure the tree to the pot.
6. Using the proper soil mixture for the tree (a mixture of 60% lava rock, 20% pumice, and 20% Akadama is an acceptable basic mixture), place enough soil in the container so that
7. Place the tree into the container and locate it in the proper position.
8. Add enough soil mixture to provide a foundation bed for the tree's roots to sit in.
9. Secure the tree to the pot with the pre-threaded wire, twisting the ends from opposite ends of the pot so they hold the trunk in place. Try to locate the wire around the trunk so it will not be visible when the rest of the soil mixture is added.

10. Add soil mixture to fill around the sides of the root ball. when the tree is placed in the container the top surface of the soil will be even with, or slightly below, the edge of the pot.
11. Using a chopstick, work the soil in around the root ball to ensure there are no air pockets. Do not pack the soil down.
12. After the soil has been worked in and smoothed off, the soil must be watered until water runs out of the drainage holes. It is a good idea to use a mixture of vitamin B1 or Superthrive in this initial watering.

After repotting, the bonsai should be placed in a sheltered location and protected from direct sun and strong breezes for two to three weeks. Make sure the soil does not dry out during this period; mist the foliage from time to time. After the recovery period, the tree may be placed in its normal location.

### **Tools**

Although many bonsai artists have an impressive collection of tools, only a few beyond your mind, eye, and hands are necessary. Only one of the tools listed below is a specialized tool for bonsai – the others are often used for other purposes around the home and garden.

1. A good pair of bypass cutters will work for most branch pruning. Smaller ones are best for most bonsai but, just as in gardening, matching the cutter to the branch is good practice.
2. Concave cutters are a specialized tool used in bonsai to cut branches very close to the trunk or a larger branch. They leave a slightly concave cut that will heal with little or no swelling. The 8" (200 mm) size is good for beginners.
3. A sharp pair of narrow scissors are used to trim small twigs and branches as well as to cut off individual leaves.
4. Chopsticks are great for untangling roots, settling soil during repotting, and any other chore where your fingers are too big.
5. Wire cutters are used to cut wire. Standard diagonal cutters will work, but the ones designed for bonsai provide more leverage when cutting wire off a branch.
6. Sieves are used to prepare soil for repotting. They can be made from window screen and hardware cloth. Their purpose is to remove the very fine particles from your mixture so they don't cling to and clog the roots.

## Sources for Plants and Supplies

1. Local nurseries and garden centers. These are good sources for young, inexpensive trees that can be turned into bonsai.
2. Unwanted trees and shrubs can be collected from your own, or a friend's yard. One can sometimes find a fairly old and gnarled small tree or shrub that would make an excellent bonsai.
3. **Bonsai Northwest**, 5021 South 144th St., Seattle, WA. 98168, (206) 242-8244, <http://www.bonsainw.com/>. Trees (finished bonsai, pre-bonsai, and nursery stock), Pots, Wire, Tools, Books.
4. **Evergreen Gardenworks**, <http://www.evergreengardenworks.com/>. Trees (particularly starter stock), excellent set of articles.
5. Trees collected from the wild, with the landowner's permission of course.
6. Cuttings taken from mature trees or from your own bonsai-in-training can be a good way to start new plants. This allows you to select from trees with desirable characteristics.
7. Air layers taken from a large or mature tree. This method can produce a very nice bonsai in a relatively short time.
8. Trees started from seed. This takes many years to produce a tree of any appreciable size, but one has total control of the training process right from the start.

## Recommended Reading

### Magazines:

***Bonsai Today***, Stone Lantern Publishing Co., PO Box 70, Passumpsic, VT 05861, <http://www.stonelantern.com/bonsaitoday.html>, \$48.00 per year

The American Bonsai Society (Includes subscription to ***Journal of The American Bonsai Society***) PO Box 351604, Toledo, OH 43635-1604, <http://www.absbonsai.org/>, \$30.00 per year

***International Bonsai***, International Bonsai Arboretum, PO Box 23894, Rochester, NY 14692-3894, <http://www.internationalbonsai.com/>, \$30.00 per year

Bonsai Clubs International, (Includes subscription to ***Bonsai Magazine***) 2636 W. Mission Rd. #277 Tallahassee, Fl. 32304, <http://www.bonsai-bci.com/> \$36.00 per year

### Books:

***Bonsai Techniques I*** by John Yoshio Naka  
***Bonsai Techniques II*** by John Yoshio Naka  
Bonsai Institute of California, P.O. Box 6268, Whittier, Ca. 90609

***The Japanese Art of Miniature Trees and Landscapes***, by Yuji Yoshimura and Giovanna M. Halford, Charles E. Tuttle Co., Inc.

***Bonsai Survival Manual***, Colin Lewis, Published by Storey Publishing

***Bonsai, Illustrated Guide to an Ancient Art***, Sunset Books, Lane Publishing Co.

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